Academic Calendars

2020 – 2021

**Fall Quarter 2020**
- Quarter begins: September 28
- Instruction begins: October 1
- Veterans Day holiday: November 11
- Thanksgiving holiday: November 26–27
- Instruction ends: December 11
- Common final examinations: December 12–13
- Final examinations: December 14–18
- Quarter ends: December 18
- Christmas holiday: December 24–25
- New Year’s holiday: December 31–January 1
- Winter campus closure: TBD

**Winter Quarter 2021**
- Quarter begins: January 4
- Instruction begins: January 4
- Martin Luther King, Jr. holiday: January 18
- Presidents’ Day holiday: February 15
- Instruction ends: March 12
- Common final examinations: March 13–14
- Final examinations: March 15–19
- Quarter ends: March 19

**Spring Quarter 2021**
- Quarter begins: March 24
- César Chávez holiday: March 26
- Memorial Day holiday: May 31
- Instruction ends: June 4
- Common final examinations: June 5–6
- Final examinations: June 7–11
- Quarter ends: June 11
- Commencement ceremonies: June 11–13

**Summer 2021**
- Summer session begins: June 21
- Independence Day holiday: July 5
- Labor Day holiday: September 6
- Summer session ends: September 10

2021– 2022

**Fall Quarter 2021**
- Quarter begins: September 20
- Instruction begins: September 23
- Veterans Day holiday: November 11
- Thanksgiving holiday: November 25–26
- Instruction ends: December 3
- Common final examinations: December 4–5
- Final examinations: December 6–10
- Quarter ends: December 10
- Christmas holiday: December 23–24
- New Year’s holiday: December 30–January 31
- Winter campus closure: TBD

**Winter Quarter 2022**
- Quarter begins: January 3
- Instruction begins: January 3
- Martin Luther King, Jr. holiday: January 17
- Presidents’ Day holiday: February 21
- Instruction ends: March 11
- Common final examinations: March 12–13
- Final examinations: March 14–18
- Quarter ends: March 18

**Spring Quarter 2022**
- Quarter begins: March 23
- César Chávez holiday: March 25
- Memorial Day holiday: May 30
- Instruction ends: June 3
- Common final examinations: June 4–5
- Final examinations: June 6–10
- Quarter ends: June 10
- Commencement ceremonies: June 10–12

**Summer 2022**
- Summer session begins: June 20
- Independence Day holiday: July 4
- Labor Day holiday: September 5
- Summer session ends: September 9

Online Publications

This UCLA General Catalog is published annually online. See the Registrar’s website for current detailed information about registration, enrollment, fees, deadlines, updated course descriptions, and other academic information. Courses offered each term can be viewed on the Schedule of Classes.
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2020-21
UCLA® General Catalog

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Cover Portals represent the variety of perspectives through which students experience UCLA, and offer a glimpse into all that makes up the university: instruction, volunteerism, athletics, science, media arts, performance, relaxation, and physical space and landmarks that house this institution.

Title page UCLA campus at moonrise, Westwood, Los Angeles, California. Aerial perspective looking east toward downtown Los Angeles, taken from the western hillside residential dormitories on campus. Photo by Reed Hutchinson.

The UCLA General Catalog is published annually in PDF and HTML formats. Every effort has been made to ensure the accuracy of the information presented in the UCLA General Catalog. However, all courses, course descriptions, instructor designations, curricular degree requirements, and fees described herein are subject to change or deletion without notice. Department websites referenced herein are published independently and may not reflect approved curricula and courses information. Consult this Catalog for the most current, officially approved courses and curricula.

Other information about UCLA may be found in materials produced by the schools of Arts and Architecture; Dentistry; Education and Information Studies; Engineering and Applied Science; Law; Management; Medicine; Music; Nursing; Public Affairs; Public Health; and Theater, Film, and Television. Current graduate program information, including complete text for officially approved graduate programs and requirements, is available on the Graduate Division website.

Language of Instruction

UCLA is a premier American public research institution, and courses at UCLA are taught in the English language unless otherwise noted in the course description (for example, foreign language courses).

UCLA Accreditation

UCLA is accredited by the Western Association of Schools and Colleges (WASC) Senior College and University Commission; and by numerous special agencies. More information about UCLA accreditation is available at the UCLA Academic Planning and Budget accreditation web page.

University of California, Los Angeles

Los Angeles, California 90095-1361
Main telephone: 310-825-4321 (campus operator)
Speech- and hearing-impaired access: TTY 310-825-2833

For complete department and school address information, see the campus directory. For mailing address formats, see address standards for UCLA mail.
From the Chancellor

This Catalog describes the almost endless academic choices available to you at UCLA. Choose from 5,000 courses each term, 140 bachelor programs, 132 master’s and professional programs, 128 doctoral and professional programs, and 97 minors as you build a course of study that suits your interests and aspirations. As a world-class research university with strengths in disciplines from the arts to the sciences, UCLA offers you a remarkable range of academic possibilities. Additionally, more than 70 percent of our undergraduate classes have fewer than 30 students—so you can learn in smaller settings and get to know your professors and classmates.

UCLA is also a welcoming place for students from diverse backgrounds. Those admitted to our freshman class for 2020–21, for example, represent all 50 U.S. states and 116 countries. Like most Bruins, they have a drive for knowledge and are determined to make a difference wherever they go.

Our faculty of more than 4,700 is made up of renowned scholars who are highly regarded as leaders in their fields. At UCLA, we are proud that undergraduates, in addition to graduate students, have opportunities to study with top professors and conduct research under their guidance.

This Catalog includes opportunities that offer priority enrollment for lower-division students. Among these are Fiat Lux seminars, which are small classes in a broad range of subjects; clusters, which engage students in yearlong, team-taught interdisciplinary study of timely topics; and advanced research opportunities.

UCLA is entering its second century stronger than ever. I know it will remain a vibrant community of forward-looking achievers, who think outside traditional academic boundaries and share an exuberant sense of possibility to improve the world. We have accomplished so much in our first 100 years, and I look forward to seeing you continue this legacy of innovation throughout your time on this campus and far beyond.

I invite you to explore UCLA beyond the contents of this Catalog. Visit us on campus, or online.

Gene D. Block
Chancellor
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Majors and Degrees

College of Letters and Science

African American Studies Department
  African American Studies ............................ BA, MA
African Studies Interdepartmental Program
  African Studies ..................................... MA
American Indian Studies Interdepartmental Program
  American Indian Studies ............................ BA, MA
Anthropology Department
  Anthropology ........................................ BA, BS, MA, PhD
Archaeology Interdepartmental Program
  Archaeology .......................................... MA, CPhil, PhD
Art History Department
  Art History .......................................... BA, MA, PhD
Asian American Studies Department
  Asian American Studies ............................. BA, MA
Asian Languages and Cultures Department
  Asian Humanities .................................... BA
  Asian Languages and Cultures .................... MA, CPhil, PhD
  Asian Languages and Linguistics .................. BA
  Asian Religions ...................................... BA
  Chinese ............................................... BA
  Japanese ............................................. BA
  Korean ................................................ BA
  Teaching Asian Languages ........................ MA
Atmospheric and Oceanic Sciences Department
  Atmospheric and Oceanic Sciences ............... BS, MS, CPhil, PhD
  Atmospheric and Oceanic Sciences/Mathematics .... BS
  Climate Science ..................................... BS
Bioinformatics Interdepartmental Program
  Bioinformatics ...................................... MS, PhD
Chemistry and Biochemistry Department
  Biochemistry ........................................ BS
  Biochemistry, Molecular and Structural Biology .... MS, CPhil, PhD
  Chemistry .......................................... BS, MS, CPhil, PhD
  Chemistry/Materials Science ...................... BS
  General Chemistry .................................. BS
Chicana and Chicano Studies Department, César E. Chávez
  Chicana and Chicano Studies ....................... BA, MA, PhD

Classics Department
  Classics .............................................. MA, CPhil, PhD
  Classical Civilization .............................. BA
  Greek .................................................. BA, MA
  Greek and Latin ..................................... BA
  Latin .................................................. BA, MA
Communication Department
  Communication ....................................... BA, MS, PhD
Comparative Literature Department
  Comparative Literature ............................ BA, MA, CPhil, PhD
Computational and Systems Biology Interdepartmental Program
  Computational and Systems Biology ............... BS
Conservation of Archaeological and Ethnographic Materials Interdepartmental Program
  Conservation of Archaeological and Ethnographic Materials .... MA
  Conservation of Material Culture ................. MS, PhD
Earth, Planetary, and Space Sciences Department
  Earth and Environmental Science ................. BA
  Engineering Geology ................................ BS
  Geochemistry ...................................... MS, CPhil, PhD
  Geology ............................................ BS, MS, CPhil, PhD
  Geophysics ......................................... BS
  Geophysics and Space Physics ..................... MS, PhD
East Asian Studies Interdepartmental Program
  East Asian Studies ................................. MA
Ecology and Evolutionary Biology Department
  Biology .............................................. BS, MS, CPhil, PhD
  Ecology, Behavior, and Evolution ................. BS
  Marine Biology ..................................... BS
Economics Department
  Applied Economics ................................. MAE
  Business Economics ................................ BA
  Economics .......................................... BA, MA, CPhil, PhD
English Department
  American Literature and Culture ................... BA
  English ............................................... BA, MA, CPhil, PhD
Environment and Sustainability, Institute of the Center for Interdisciplinary Instruction
  Environment and Sustainability ..................... MS, PhD
  Environmental Science ............................. BS
  Environmental Science and Engineering .......... DEnv
French and Francophone Studies Department
French .............................................. BA
French and Francophone Studies .... MA, CPhil, PhD
French and Linguistics ....................... BA

Gender Studies Department
Gender Studies ................................ BA, MA, PhD

Geography Department
Applied Geospatial Information Systems and Technologies .................. MAGIST
Geography ................................... BA, MA, CPhil, PhD
Geography/Environmental Studies .... BA

Germanic Languages Department
German ........................................... BA
Germanic Language ......................... MA, CPhil, PhD
Nordic Studies ................................. BA
Scandinavian ................................ MA
Scandinavian Languages and Cultures .................. BA

Global Studies Interdepartmental Program
Global Studies ................................. BA

History Department
History .......................................... BA, MA, CPhil, PhD

Individual Field of Concentration
Individual Field of Concentration ........ BA, BS

Indo-European Studies Interdepartmental Program
Indo-European Studies .......... MA, CPhil, PhD

Integrative Biology and Physiology Department
Physiological Science ..................... BS, MS

International and Area Studies Interdepartmental Program
African and Middle Eastern Studies .... BA
Asian Studies ................................. BA
European Studies ............................ BA
Latin American Studies ................. BA

International Development Studies Interdepartmental Program
International Development Studies .......... BA

Italian Department
Italian ........................................... BA, MA, CPhil, PhD
Italian and Special Fields ................. BA

Latin American Studies Interdepartmental Program
Latin American Studies ................. MA

Labor Studies Interdepartmental Program
Labor Studies ................................. BA

Linguistics Department
Applied Linguistics ......................... BA
Linguistics ................................. BA, MA, CPhil, PhD
Linguistics and Anthropology ........... BA

Mathematics Department
Applied Mathematics ........................ BS
Data Theory ...................................... BS
Financial Actuarial Mathematics ......... BS
Mathematics ................................. BS, MA, MAT, CPhil, PhD
Mathematics/Applied Science ........... BS
Mathematics for Teaching ............... BS
Mathematics of Computation ........... BS

Mathematics/Economics Interdepartmental Program
Mathematics/Economics ...................... BS

Microbiology, Immunology, and Molecular Genetics Department
Microbiology, Immunology, and Molecular Genetics .................. BS, MS, PhD

Molecular Biology Interdepartmental Program
Molecular Biology ............................ MS, PhD

Molecular, Cell, and Developmental Biology Department
Molecular, Cell, and Developmental Biology .................. BS, MA, CPhil, PhD

Molecular, Cellular, and Integrative Physiology Interdepartmental Program
Molecular, Cellular, and Integrative Physiology .................. PhD

Near Eastern Languages and Cultures Department
Ancient Near East and Egyptology ........ BA
Arabic ........................................ BA
Iranian Studies ............................... BA
Islamic Studies .............................. MA, CPhil, PhD
Jewish Studies ............................... BA
Middle Eastern Studies ................. BA
Near Eastern Languages and Cultures ... MA, CPhil, PhD

Neuroscience Interdepartmental Program
Neuroscience ................................. BS

Philosophy Department
Philosophy ...................................... BA, MA, CPhil, PhD

Physics and Astronomy Department
Astronomy and Astrophysics ............ MS, MAT, PhD
Astrophysics ................................. BS
Biophysics ..................................... BS
Physics

Political Science Department
Political Science

Psychology Department
Cognitive Science
Psychobiology
Psychology

Slavic, East European, and Eurasian Languages and Cultures Department
Central and East European Languages and Cultures
Russian Language and Literature
Russian Studies
Slavic, East European, and Eurasian Languages and Cultures

Social Science Interdepartmental Program
Social Science

Society and Genetics, Institute for
Center for Interdisciplinary Instruction
Human Biology and Society

Sociology Department
Sociology

Spanish and Portuguese Department
Hispanic Languages and Literatures
Portuguese
Portuguese and Brazilian Studies
Spanish
Spanish and Community and Culture
Spanish and Linguistics
Spanish and Portuguese

Statistics Department
Applied Statistics
Data Theory
Statistics

Study of Religion Interdepartmental Program
Study of Religion

David Geffen School of Medicine

Computational Medicine Department
Biomathematics
Clinical Research

Human Genetics Department
Genetic Counseling
Human Genetics

Medicine Schoolwide Program
Medicine

Microbiology, Immunology, and Molecular Genetics Department
Microbiology, Immunology, and Molecular Genetics

Molecular and Medical Pharmacology Department
Molecular and Medical Pharmacology

Molecular, Cellular, and Integrative Physiology Interdepartmental Program
Molecular, Cellular, and Integrative Physiology

Neuroscience Interdepartmental Program
Neuroscience

Physics and Biology in Medicine Interdepartmental Program
Physics and Biology in Medicine

Graduate School of Education and Information Studies

Education Department
Education
Educational Administration
Education and Social Transformation
Special Education

Information Studies Department
Information Studies
Library and Information Science

Henry Samueli School of Engineering and Applied Science

Bioengineering Department
Bioengineering

Chemical and Biomolecular Engineering Department
Chemical Engineering

Civil and Environmental Engineering Department
Civil Engineering

Computer Science Department
Computer Engineering
Computer Science and Engineering

Electrical and Computer Engineering Department
Computer Engineering
Electrical and Computer Engineering
Engineering Schoolwide Programs

Engineering ................................. MEng, MS, Engr
Engineering — Aerospace ..................... MS
Engineering — Computer Networking ........ MS
Engineering — Electrical ........................ MS
Engineering — Electronic Materials ................ MS
Engineering — Integrated Circuits ................ MS
Engineering — Manufacturing and Design .... MS
Engineering — Materials Science ................ MS
Engineering — Mechanical ........................ MS
Engineering — Signal Processing and Communications . . MS
Engineering — Structural Materials ................. MS

Materials Science and Engineering Department
Materials Engineering ............................ BS
Materials Science and Engineering .................. MS, PhD

Mechanical and Aerospace Engineering Department
Aerospace Engineering .......................... BS, MS, PhD
Manufacturing Engineering ........................ MS
 Mechanical Engineering ............................. BS, MS, PhD

Herb Alpert School of Music

Ethnomusicology Department
Ethnomusicology ............................... BA, MA, CPhil, PhD

Global Jazz Studies Interdepartmental Program
Global Jazz Studies ................................ BA

Music Department
Music ................................................ BA, MA, MM, DMA, CPhil, PhD
Music Composition .............................. BA
Music Education ................................. BA
Music Performance .............................. BM

Musicology Department
Music History and Industry ....................... BA
Musicology ......................................... BA, MA, CPhil, PhD

John E. Anderson Graduate School of Management

Management Department
Business Administration ......................... MBA, EMBA, FEMBA, GEMBA
Business Analytics ............................... MS
Financial Engineering ............................ MFE
Management ....................................... MS, CPhil, PhD

Jonathan and Karin Fielding School of Public Health

Biostatistics Department
Biostatistics ........................................ MS, PhD

Community Health Sciences Department
Community Health Sciences ..................... MPH-HP, MS, PhD

Environmental Health Sciences Department
Environmental Health Sciences ................. MS, PhD

Epidemiology Department
Epidemiology ....................................... MS, PhD

Health Policy and Management Department
Health Policy and Management ................ EMPH, MS, PhD

Molecular Toxicology Interdepartmental Program
Molecular Toxicology ............................ PhD

Public Health Schoolwide Programs
Public Health ........................................ MPH, DrPH

Meyer and Renee Luskin School of Public Affairs

Public Affairs Schoolwide Programs
Public Affairs ....................................... BA

Public Policy Department
Public Policy ....................................... MPP

Social Welfare Department
Social Welfare ..................................... MSW, PhD

Urban Planning Department
Urban and Regional Planning ..................... MURP
Urban Planning ....................................... PhD

School of the Arts and Architecture

Architecture and Urban Design Department
Architectural Studies ............................. BA
Architecture ......................................... MArch, MA, PhD
Architecture and Urban Design ................ MS

Art Department
Art ................................................ BA, MFA

Design/Media Arts Department
Design/Media Arts ................................ BA, MFA

Individual Field
Individual Field .................................... BA
World Arts and Cultures/Dance Department
- Culture and Performance MA, PhD
- Dance BA
- Choreographic Inquiry MFA
- World Arts and Cultures BA

School of Dentistry
Dentistry Department
- Dental Surgery DDS
Oral Biology Section
- Oral Biology MS, PhD

School of Law
Law Department
- Law LLM, JD, SJD
- Legal Studies MLS

School of Nursing
Nursing Department
- Nursing BS, MS, MSN, PhD
- Nursing Practice DNP

School of Theater, Film, and Television
Film, Television, and Digital Media Department
- Film and Television BA, MA, MFA, CPhil, PhD

Individual Field
- Individual Field BA

Theater Department
- Theater BA, MFA
- Theater and Performance Studies CPhil, PhD

Undergraduate Minors and Specializations

Minors
College of Letters and Science
- African American Studies
- African and Middle Eastern Studies
- African Studies
- American Indian Studies
- Ancient Near East and Egyptology
- Anthropology
- Applied Developmental Psychology
- Arabic and Islamic Studies
- Armenian Studies
- Art History
- Asian American Studies
- Asian Humanities
- Asian Languages
- Atmospheric and Oceanic Sciences
- Biomedical Research
- Brain and Behavioral Health
- Central and East European Studies
- Chicana and Chicano Studies
- Classical Civilization
- Cognitive Science
- Community Engagement and Social Change
- Comparative Literature
- Conservation Biology
- Digital Humanities
- Disability Studies
- Earth and Environmental Science
- East Asian Studies
- English
- Environmental Systems and Society
- Ethnomusicology
- European Studies
- Evolutionary Medicine
- Food Studies
- French
- Gender Studies
- Geochemistry
- Geography
- Geography/Environmental Studies
Geology
Geophysics and Planetary Physics
Geospatial Information Systems and Technologies
German
Global Health
Global Studies
Greek
Hebrew and Jewish Studies
History
History of Science, Technology, and Medicine
International Migration Studies
Iranian Studies
Israel Studies
Italian
Labor Studies
Latin
Latin American Studies
Lesbian, Gay, Bisexual, Transgender, and Queer Studies
Linguistics
Literature and Environment
Mathematical Biology
Mathematics
Mathematics for Teaching
Mexican Studies
Middle Eastern Studies
Neuroscience
Philosophy
Pilipino Studies
Portuguese and Brazilian Studies
Professional Writing
Russian Language
Russian Literature
Russian Studies
Scandinavian
Science Education
Social Thought
Society and Genetics
South Asian Studies
Southeast Asian Studies
Spanish
Spanish Linguistics
Statistics
Structural Biology
Study of Religion
Systems Biology
Graduate School of Education and Information Studies
Education Studies
Henry Samueli School of Engineering and Applied Science
Bioinformatics
Environmental Engineering
Herb Alpert School of Music
Music Industry
Musicology
John E. Anderson Graduate School of Management
Accounting
Entrepreneurship
Jonathan and Karin Fielding School of Public Health
Public Health
Meyer and Renee Luskin School of Public Affairs
Gerontology
Public Affairs
Urban and Regional Studies
School of the Arts and Architecture
Visual and Performing Arts Education
School of Theater, Film, and Television
Film, Television, and Digital Media
Theater

Computing Specializations
These departments in the College of Letters and Science offer a computing specialization to some or all majors. See the individual department section for details.

Chemistry
Communication
Ecology and Evolutionary Biology
Linguistics
Mathematics
Mathematics/Economics
Molecular, Cell, and Developmental Biology
Psychology
Sociology
Graduate Concurrent and Articulated Degrees

Inquiries about concurrent and articulated degree programs should be directed to graduate advisers in the departments and schools involved. Students should contact Graduate Admissions/Student and Academic Affairs for information on designing articulated programs.

Concurrent Degrees

Concurrent degree programs allow students to reduce the number of courses required for two degrees, since some courses may apply to both degrees.

- African American Studies Interdepartmental MA/Law JD
- African Studies Interdepartmental MA/Public Health MPH
- American Indian Studies Interdepartmental MA/Law JD
- Architecture MArch/Urban Planning MURP
- Asian American Studies Interdepartmental MA/Public Health MPH
- Asian American Studies Interdepartmental MA/Social Welfare MSW
- Community Health Sciences MPH/Urban Planning MURP
- Education MA, PhD, MEd, or EdD/Law JD
- Environmental Health Sciences MPH/Urban Planning MURP
- Latin American Studies Interdepartmental MA/Urban Planning MURP
- Management MBA/Computer Science MS
- Management MBA/Dentistry DDS
- Management MBA/Latin American Studies Interdepartmental MA
- Management MBA/Law JD
- Management MBA/Library and Information Science MLIS
- Management MBA/Medicine MD
- Management MBA/Nursing MSN
- Management MBA/Public Health MPH
- Management MBA/Public Policy MPP
- Management MBA/Urban Planning MURP
- Philosophy PhD/Law JD
- Public Health MPH/Law JD
- Public Health MPH/Public Policy MPP
- Public Health MPH/Social Welfare MSW
- Public Policy MPP/Law JD
- Public Policy MPP/Medicine MD
- Social Welfare MSW/Law JD
- Social Welfare MSW/Public Policy MPP
- Urban Planning MURP/Law JD

Articulated Degrees

Articulated degree programs permit no credit overlap; students must complete degree requirements separately for each degree.

- Latin American Studies Interdepartmental MA/Education MEd in Curriculum
- Latin American Studies Interdepartmental MA/Library and Information Science MLIS
- Latin American Studies Interdepartmental MA/Public Health MPH
- Medicine MD/Graduate Division health science major PhD
- Oral Biology MS or PhD/Dentistry DDS or Certificate
- Public Health MPH/Medicine MD
About UCLA

Few universities in the world offer the extraordinary range and diversity of academic programs that students enjoy at UCLA. Leadership in education, research, and public service make UCLA a beacon of excellence in higher education, as students, faculty members, and staff come together in a true community of scholars to advance knowledge, address societal challenges, and pursue intellectual and personal fulfillment.

As a public research university, the mission of UCLA is to create, disseminate, preserve, and apply knowledge to better society. Based on a foundation of learning and teaching, the mission also focuses on discovery, creativity, innovation, and civic engagement.

UCLA administration is led by its chancellor, provost, vice chancellors and vice provosts, and deans of the divisions and schools. Its Student Affairs division oversees programs and services that support student academic and personal success. Its Graduate division oversees recruitment and admissions, funding and appointments, and maintenance of high-quality standards in graduate programs. Through the Academic Senate, faculty share in the operation and management of UCLA.

UCLA is comprised of the College of Letters and Science—with its humanities, life sciences, physical sciences, social sciences, and undergraduate education divisions—and 12 professional schools: School of the Arts and Architecture; School of Dentistry; Graduate School of Education and Information Studies; Henry Samueli School of Engineering and Applied Science; School of Law; John E. Anderson Graduate School of Management; David Geffen School of Medicine at UCLA; Herb Alpert School of Music; School of Nursing; Meyer and Renee Luskin School of Public Affairs; Jonathan and Karin Fielding School of Public Health; and School of Theater, Film, and Television.

Education

The National Research Council Committee to Assess Research-Doctorate Programs evaluates the quality of the faculty in 212 American research universities approximately every 15 years. Of the 62 doctorate degree disciplines studied in the 2011 evaluation, 33 UCLA academic departments ranked among the top 10 in the country and 12 ranked among the top 20.

Distinguished faculty members at UCLA include Nobel prizewinners, Guggenheim fellows, Sloan fellows, and Fulbright scholars, as well as numerous members of the National Academy of Sciences and the American Academy of Arts and Sciences. In fact, UCLA consistently places among the leading universities nationwide in the number of these prestigious awards granted to its faculty members.

This remarkable pool of talent is shared across the College and 12 professional schools. Undergraduate and graduate degree programs are offered by the College and by schools focused on engineering, fine arts, media, nursing, performing arts, and public affairs. The other professional schools offer graduate degree programs and undergraduate minors.

Undergraduates may earn Bachelor of Arts and Bachelor of Science degrees in one of 132 disciplines; graduate students may earn one of 130 master/professional and 128 doctorate/professional degrees.

Academic programs undergo continuous review and evaluation to maintain their excellence, and new degree programs are added as they are approved by the Academic Senate or the Regents.

Research

Pushing the boundaries of the known, UCLA researchers—faculty members and students, both graduate and undergraduate—venture every day into uncharted worlds from the molecular to the galactic.

Whether tracing the roots of urban decay, pioneering new drug therapies for cancer, or revealing a black hole at the center of our galaxy, research at UCLA is advancing the frontiers of knowledge.
Among the leading research universities in the world, in 2018-19 UCLA received $1.27 billion in extramural grants and contracts to support its research. Each year it hosts hundreds of postdoctoral scholars who share its facilities.

UCLA laboratories have seen major breakthroughs in scientific and medical research. Its study centers have helped foster understanding among the various cultures of the world. And its ongoing pursuits of new knowledge in vital areas continue to improve the quality of life for people around the world.

Faculty members teach both undergraduate and graduate courses and, through their research, create knowledge as well as transmit it. At UCLA, students are taught by the people making the discoveries. They exchange ideas with faculty members who are authorities in their fields and, even as undergraduate students, are encouraged to participate in research to experience firsthand the discovery of new knowledge.

Service

As a public university, serving the community is one of its greatest commitments UCLA makes. Undergraduate and graduate programs, research activities, community outreach programs, and grass-roots participation by students, faculty, staff, and alumni help to forge a partnership between UCLA and the entire Los Angeles region.

With the Ronald Reagan UCLA Medical Center, UCLA furthers its tradition of medical outreach and assures the highest quality of care to Los Angeles and the world. The School of Dentistry, with clinics on campus and in Venice, offers free dental care and treatment to those in need at community health fairs. The Rape Treatment Center—located at the UCLA Medical Center, Santa Monica—offers 24-hour care to victims. Faculty and students in the Fielding School of Public Health work in communities around the world to address disparities underlying differences in the health status of individuals, and the School of Nursing offers care to the poor and homeless through its nurse-managed health center at the Union Rescue Mission. UCLA also supports K-12 enhancement programs such as the Music Partnership Program in the Herb Alpert School of Music, which funds UCLA students to be academic and musical mentors for at-risk youth.

Students can get involved in the community in many different ways. The UCLA Volunteer Center coordinates year-round programs and annual events, such as UCLA Volunteer Day where more than 6,500 Bruins perform service work at over 40 community partner sites across Los Angeles. Bruin-Corps tutors under-performing youth in disadvantaged communities.

As UCLA gives to the community, Los Angeles gives something back. UCLA arts and cultural programs, for example, attract more than half a million people each year, drawn by everything from world-class acts performing at Royce Hall to screenings of classic films from the School of Theater, Film, and Television archives. These relationships create opportunities for partnerships and growth that ensure the pre-eminence of UCLA in the twenty-first century and beyond.

History of UCLA

In 1880—with just 11,000 inhabitants—the pueblo of Los Angeles convinced the state government to establish a normal school (teachers college) in Southern California. Enthusiastic citizens contributed between $2 and $500 to purchase a site; and on August 29, 1882, the Los Angeles Branch State Normal School welcomed its first students in a Victorian building that had been erected on the site of an orange grove.

By 1914 Los Angeles had grown to a city of 350,000, and the school moved to new quarters—a Hollywood ranch off a dirt road that later became Vermont Avenue. In 1919 the school became the Southern Branch of the University of California, and offered two years of instruction in letters and science. Third- and fourth-year courses were soon added; the first class of 300 students was graduated in 1925, and two years later the Southern Branch had earned its new name: University of California at Los Angeles. In 1958, at was replaced by a comma and the official name became University of California, Los Angeles.

Continued growth mandated a site that could support a larger campus, and in 1927 ground was broken in the chaparral-covered hills of Westwood. The four original buildings—Royce Hall, College Library, Chemistry Building, and Physics-Biology Building—formed a lonesome cluster in the middle of 400 empty acres. The campus hosted 5,500 students its first term in 1929. The UCLA master’s degree was established in 1933 and the doctorate in 1936. UCLA was fast becoming a full-fledged university that offered advanced study in almost every field.

Following World War II, UCLA began a period of spectacular growth: in 25 years its enrollment tripled to 27,000 students. The campus undertook what would become a $260 million building program that included residence halls, parking structures, laboratories, more classrooms, service buildings, athletic and recreational facilities, and a teaching hospital that is now one of the largest and most highly respected in the world. In the late 1950s and 1960s, UCLA was at the center of many milestones: the first open-heart surgery in the western U.S. was performed at its medical
center; the first of 10 NCAA men’s basketball championships was won; and it became the first ARPANET node, heralding the birth of the Internet.

The rest of the twentieth century, through the opening of the twenty-first, was peppered with notable UCLA events: Nobel prizes awarded to multiple faculty; breakthroughs in treatments for cancer, brain aneurysms, and organ transplants; explosive growth in research grants; more than 30 Oscars awarded to creative alumni; completion of a new medical center; expansion of campus housing to accommodate nearly all incoming freshmen; and becoming the first university to win 100 NCAA team championships.

At the start of the 2010s, UCLA began construction on a series of new residence halls with the goal of expanding guaranteed on-campus housing to all students. In 2016, the Herb Alpert School of Music became the 12th professional school at UCLA and first independent music school in the UC system. UCLA celebrated its centennial in 2019-20, raising $5.49 billion toward student scholarships, faculty support, research programs, and campus facilities. Today, UCLA is home to over 45,700 students and 4,300 faculty members. With 215 campus buildings, classes are held in more than 85 facilities. As UCLA passes its 100th anniversary, it remains firmly rooted in Westwood but its reach is beyond borders, with programs and collaborations that span the country, the globe, and even outer space.

University of California System

UCLA is part of the University of California (UC) system, which traces its origins to 1868 when Governor Henry H. Haight signed the Organic Act that provided for the first California “complete university.” Classes began the next year at the College of California in Oakland. In 1873 the first Berkeley campus buildings were completed, and the university moved into its new home. The following June, bachelor’s degrees were conferred on 12 graduates.

Today, the University of California is one of the largest and most renowned centers of higher education in the world. Its 10 campuses span the state, from Davis in the north to San Diego in the south. In between are Berkeley, San Francisco, Merced, Santa Cruz, Santa Barbara, Los Angeles, Riverside, and Irvine. All campuses adhere to the same admission guidelines and high academic standards, yet each has its own distinct character and academic individuality. Riverside, for example, excels in the plant sciences and entomology; Davis has a large agricultural school and the only UC veterinary medicine program; San Diego offers excellent oceanography and marine biology programs; and San Francisco is devoted exclusively to the health sciences. Among the campuses are six medical schools and four law schools, as well as schools of architecture, business administration, education, engineering, and many others.

The UC campuses have a combined enrollment exceeding 285,000 students, over 75 percent of them California residents. About one-fifth study at the graduate level. Some 150 laboratories, extension centers, and research and field stations strengthen teaching and research while supplying public service to California and the nation. The collections of over 100 UC libraries on the 10 campuses are surpassed in size in North America only by the U.S. Library of Congress collection.

The UC faculty is internationally known for its distinguished academic achievements. On its 10 campuses the University of California has 29 living Nobel laureates, and membership in the National Academy of Sciences is the largest of any university in the country.

The UC system is governed by a Board of Regents whose regular members are appointed by the Governor of California. In addition to setting general policy and making budgetary decisions for the UC system, the Regents appoint the President of the University of California, the 10 chancellors,
and the directors and deans who administer the affairs of the individual campuses and divisions of the University of California. The Regents delegate authority in academic matters to the Academic Senate, which determines academic policy for the University of California as a whole. The Senate, composed of faculty members and certain administrative officers, determines conditions for admission and granting of degrees, authorizes and supervises courses and curricula, and advises UC administrators on budgets and faculty appointments and promotions. Local divisions of the universitywide Academic Senate determine academic policy for each campus. Students also participate in policymaking at campus and system levels.

Campus Life

Just six miles from the ocean, UCLA lies in one of the most attractive areas of Southern California. It is bordered on the north by the protected wilderness of the Santa Monica Mountains and on the south by Westwood Village. Besides lecture halls and classrooms, campus facilities include libraries, studios, theaters, and a planetarium; athletic fields, famed Pauley Pavilion, and recreation/exercise space; gardens and outdoor spaces accented by the Inverted Fountain and Janss Steps; the Hill, home to campus residence halls and common spaces; and its renowned medical center.

Unique Setting

UCLA is nestled in the hills of Westwood, with the Romanesque architecture of its early buildings a backdrop for diverse campus settings. Bruin Walk continually echoes with the chatter of students and vendors, but nearby, the botanical gardens provide a serene escape. While a hip-hop band energizes lunchtime crowds in Bruin Plaza, a classical recital may be taking place in Schoenberg Music Building, and students contemplating a Rodin or Lachaise in the Murphy Sculpture Garden may be unaware of a political rally organizing in Meyerhoff Park. With its traditional appearance and temperate climate, it is not unusual to find campus locations being used for filming television and movies and hosting large events.

To give a feel for the dynamic atmosphere at UCLA, tours for prospective undergraduates are offered by Undergraduate Admission.

Large Campus with a Comfortable Feel

The general campus population, some 41,803 students, is enriched by an additional 3,982 in the health sciences schools of dentistry, medicine, nursing, and public health. While such numbers sound daunting, UCLA offers orientation sessions and innovative academic assistance programs to help acclimate new students. Through a range of services and social programs, new students quickly meet people with common interests in their academic departments, residence halls, or clubs and organizations. Even athletic events help to cement relationships as the campus comes together to celebrate Bruin victories.

Large lecture groups exist, especially in introductory courses; however, 85 percent of lower-division lecture classes in 2018-19 had under 200 students, and UCLA is striving to further reduce class size. Large lecture classes typically include discussion sections of about 25 students, or smaller seminars and laboratory classes. There is an overall ratio of one faculty member for approximately 18 students.

Most UCLA faculty members set aside office hours for students and appreciate the opportunity for informal conversation. Professors are often aided by graduate student teaching assistants (TAs).

Dynamic Student Body

Students at UCLA pride themselves on academic excellence. The fall quarter 2019 entering freshman class had an average high school GPA of 4.41, with an average SAT Reasoning Test composite score of 1,385 out of a possible 1,600.

One of the highest UCLA priorities is to advance the diversity of its students, faculty, staff, and administrators. The UCLA student population—nearly equally divided between men and women—yields the wide range of opinion and perspective essential to a great university.

Although most students are from California, they come from all 50 states and 138 foreign countries to study at UCLA. Ethnic minorities comprise 73.0 percent of the
undergraduates and 67.0 percent of the graduate student population, and international students and scholars presently number over 12,000, making this one of the most popular American universities for students from abroad.

Retention and Graduation
Retention and graduation rates in undergraduate programs at UCLA are consistently among the highest in the nation. At least 97 percent of all students entering as freshmen and 95 percent of all students entering as transfers regularly return to enroll at UCLA for the second academic year and beyond.

For entering freshmen, 81.7 percent graduate within four years, and 91.4 percent within six years. The average time to degree is 12 or fewer quarters (i.e., four or fewer years). For entering transfer students, 70.2 percent graduate within two years and 94 percent of all entering transfer students eventually graduate from UCLA.

More information on campus statistics is available from Academic Planning and Budget.

Academic Programs
UCLA has a tradition of advancing higher education and the common good through excellence in scholarship, research, and public service. Academic excellence, faculty distinction, and a comprehensive curriculum are hallmarks of the UCLA experience. The College of Letters and Science and 12 graduate and professional schools present an extraordinary richness and diversity of teaching programs.

Academic programs offered at UCLA span the breadth and depth of over 200 disciplines and areas of study. Lecture, discussion, laboratory, research, and creative courses are supplemented by seminars, honors programs, specialized freshman clusters, internships, and education abroad opportunities. Instruction takes place in many unique venues, including specialized classrooms, computer and scientific laboratories, performance and studio spaces, and off-campus settings. Students and faculty members themselves mirror the cultural and racial diversity of Los Angeles. Academic programs are described in detail in the Curricula and Courses chapter.

The International Education Office, Summer Sessions, UCLA Extension, and UCLA International Institute offer academic and professional resources to UCLA and the greater Los Angeles community, as well as to the international community.

Study Abroad
Study abroad and student exchange are exciting and broadening experiences that enrich any educational curriculum. The International Education Office (IEO) works to facilitate international education by serving as the campuswide portal for the development and administration of study abroad and student exchange activity. It supplies assistance to academic units seeking to develop study abroad programs, and it collaborates with the Academic Senate and departments to ensure academic oversight of study abroad programs. The IEO also coordinates student advising services for undergraduate and graduate students interested in studying abroad.

The IEO administers several programs, including the UC Education Abroad Program (UCEAP), Summer Travel Study, Non-UC Programs, and various student exchange agreements.

Education Abroad Program
The UC Education Abroad Program (UCEAP) offers short- and long-term study programs in cooperation with over 115 host universities and colleges in more than 42 countries throughout the world. Participating students remain registered at their home campuses while studying abroad and receive full academic credit for their work. With careful planning, study abroad should not delay progress toward graduation. While on EAP, students are eligible for financial aid.

Summer Travel Study
Summer Travel Study offers short-term summer programs on five continents. Summer Travel Study programs offer UC credit, the promise of an exciting summertime adventure, and intensive learning experiences taught by distinguished UCLA faculty members. Over 17 academic departments offer Summer Travel Study programs that include
from 8 to 16 quarter units of UC credit. Financial aid is available for qualified UC students. Registration begins in November for the following summer on a first-come, first-served basis. Summer Travel Study is open to all students at any academic level. There is no grade-point average requirement to participate.

Non-UC Programs

Students may also study abroad through other universities and programs not affiliated with UCLA. The IEO strongly recommends that all students considering non-UC programs contact the IEO early in the planning process about UCLA policies on planned academic leave (PAL), transfer credit, financial support, and more. UC financial aid is not available for study abroad on non-UC programs.

Summer Sessions

UCLA offers various ways to earn UCLA credit during the summer—academic courses, summer institutes, travel study, and more. Hundreds of courses from over 70 departments are offered in three-, six-, eight-, nine-, and 10-week sessions. Summer Institutes offer an innovative approach to teaching and learning that combines UCLA coursework with practical training in real-world situations, preparing students for their future careers. Some programs are offered specifically for advanced high-school students, allowing them an opportunity to experience the academic rigor of UCLA. Summer Travel Study allows students to study various subjects as part of an exciting and challenging travel experience. All Summer Sessions offerings can be explored online.

Although visiting students are welcome to enroll, admission to summer sessions does not constitute admission to UCLA in either undergraduate or graduate standing. Students who wish to attend UCLA in regular academic terms must follow admission procedures described in the Undergraduate Study and Graduate Study chapters.

Regularly enrolled UCLA undergraduate students may attend summer sessions for full unit and grade credit. Summer session coursework is recorded on the UCLA transcript, and grades earned are computed in the grade-point average. Students should check with a college or school counselor about applying these courses toward degree requirements, and about any limitations the college or school may impose on coursework completed in summer sessions. UC financial aid is available to qualified UCLA students.

Regularly enrolled UCLA graduate students may, with department approval, take courses offered in summer sessions for credit toward a master’s or doctorate degree; consult a graduate adviser in advance about this possibility. Summer session courses may also satisfy the academic residence requirement for master’s or doctorate degrees.

Unlike enrollment in regular terms, students may attend another college institution for credit while they are enrolled in summer sessions. Registration information is available from the Summer Sessions office.

UCLA Extension

With over 84,000 adult student enrollments each year, UCLA Extension is one of the largest university continuing education programs in the world. It is designed to bring the benefits of UCLA—its scholars, research, and resources—to the community and the state as a whole.

Many of the 5,500 UCLA Extension classes are innovative and experimental in content, format, and teaching methods. Credit and noncredit courses are offered in nearly every academic discipline, in many interdisciplinary areas, and in emerging fields.

In addition, Extension offers special programs each term on topical issues as well as those of ongoing public concern. Many noncredit Extension courses offer the opportunity to earn Continuing Education Units (CEUs), widely used for relicensure and other professional/career-related purposes.

Although registering for Extension courses does not constitute admission to UCLA, degree credit earned through Extension may apply toward the UCLA bachelor’s or master’s degree; consult a College or school counselor or graduate adviser before enrolling. For more information, refer to UCLA Extension under Transfer Credit in the Academic Policies chapter.

UCLA International Institute

The UCLA International Institute promotes interdisciplinary education and research on world regions and global issues. Its more than 30 centers and programs foster innovative research and offer educational opportunities on virtually every region of the world. The institute seeks to internationalize UCLA curricula and enable students to graduate as global citizens. Every fall, it leads a popular all-campus celebration of International Education Week.

The institute offers six undergraduate majors including global studies, international and area studies, and international development studies; as well as ten undergraduate minors, including global health; and three graduate programs. These academic programs annually enroll nearly 1,000 students. Together with its centers, the institute serves the entire campus through a wide range of academic events, scholarships, and grants. It acts as a gateway to the world for UCLA and the global city of Los Angeles, hosting free public events, research conferences, cultural programs, and K-12 outreach. The institute also brings together faculty from the College, professional schools, and research
centers across the UCLA campus on collaborative global and regional reserve initiatives.

In addition to its 19 area-based research centers—including its newest center, the Promise Armenian Institute—the institute also houses the Burkle Center for International Relations, Center for the Study of International Migration, Center for World Languages, Center for Buddhist Studies, Fulbright Enrichment Program, and International Visitors Bureau, among other units. The U.S. Department of Education has designated the centers focused on the Near East and Southeast Asia as National Resource Centers. The National Heritage Language Resource Center is the nation’s first specialized center for heritage language teaching.

Research Programs

At any given time, more than 6,000 funded research programs are in progress at UCLA. Interdisciplinary Organized Research Units, research centers, institutes, and laboratories focus on key research in a specific area.

Organized Research Units

Organized Research Units (ORUs) are campuswide research programs. Members come from more than one department and usually from more than one school, college, or division.

American Indian Studies Center

The American Indian Studies Center (AISC) serves as an educational and research catalyst. It includes a library, postdoctoral fellowship programs, a publishing unit that produces books and a quarterly journal, and a student/community relations unit. AISC is one of four ORUs overseen by the Institute of American Cultures (IAC).

Asian American Studies Center

The Asian American Studies Center (AASC) seeks to increase knowledge and understanding of the experiences of Asian and Pacific Islander peoples in America, and promotes the development of material resources related to Asian American studies. The center includes a library, publications unit, student/community projects unit, and postdoctoral fellowship programs. AASC is one of four ORUs overseen by the Institute of American Cultures (IAC).

Brain Research Institute

The Brain Research Institute (BRI) has one of the largest programs for neuroscience research and education in the country, with approximately 300 scientists from nearly 30 departments involved in every aspect of neuroscience research from molecular organization to human behavior. The BRI offers facilities with new technologies for research and training; and sponsors affinity groups, conferences, and symposia to strengthen ties among neuroscientists. Public service activities include an elementary-and-secondary-school outreach program and a joint educational program with UCLA Extension.

Center for European and Russian Studies

The Center for European and Russian Studies (CERS) develops and coordinates teaching and research on Russia and the successor states of the former Soviet Union—and western European countries—through conferences, lectures, seminars, and academic exchange programs with European and Russian institutions. It also funds advanced instruction in languages such as Czech, Hungarian, Romanian, Polish, and Serbian/Croatian, and offers fellowships to graduate students in European area studies.

Center for Medieval and Renaissance Studies

The Center for Medieval and Renaissance Studies (CMRS) supports the research activities of some 125 faculty members in 24 academic disciplines dealing with the development of civilization between A.D. 300 and 1650. Programs include appointing visiting professors, organizing conferences, and supporting departments in inviting lecturers. The center sponsors two journals: Viator, with emphasis on intercultural and interdisciplinary studies; and Comitatus, with articles by graduate students and recent PhD graduates.
Center for Seventeenth- and Eighteenth-Century Studies

The Center for Seventeenth- and Eighteenth-Century Studies organizes scholarly programs and workshops, publishes conference results, provides long- and short-term fellowships to students and scholars, offers graduate research assistantships and master classes, and organizes public programs and classical music concerts.

The center administers the William Andrews Clark Memorial Library, located in the West Adams neighborhood of Los Angeles, that specializes in seventeenth- and eighteenth-century British works. The library also has a renowned collection centering on Oscar Wilde and his era, and significant holdings of modern fine printing and Western Americana.

Center for the Study of Women

The Center for the Study of Women (CSW) draws on the expertise of more than 200 faculty members from 10 professional schools and 34 departments. To facilitate faculty research, the center organizes conferences and lecture series on feminist theory, administers research grants, and offers an affiliation for research and visiting scholars. The center sponsors working groups; produces calendar-of-events posters; and hosts graduate programs and an annual graduate student research conference.

Chicano Studies Research Center

The Chicano Studies Research Center (CSRC) promotes the study and dissemination of knowledge about the experience of people of Mexican descent and other Latinos in the U.S. The center supports interdisciplinary and collaborative research and the analysis, understanding, and articulation of issues critical to the development of Chicano and Latino communities in the U.S. It seeks to establish and maintain relationships with communities with similar academic and research interests at the state, national, and international levels. The center also includes a library, academic press, and grant fellowship programs. CSRC is one of four ORUs overseen by the Institute of American Cultures (IAC).

Cotsen Institute of Archaeology

The Cotsen Institute of Archaeology (CIoA) studies and seeks to understand the human past through artifacts, analysis of field data, and the creation of archives. The institute—the only one of its kind in the U.S.—coordinates facilities for more than 30 researchers, and many graduate students and volunteers, in 11 associated academic departments. Facilities include the Ceramics Research Group collections, Cotsen Digital Archive, Lithic Analysis Research Group collections, Moche Archive, Rock Art Archive, and many laboratories such as the Channel Islands Laboratory, East Asian Laboratory, Human Origins Laboratory, and Zooarchaeology Laboratory. It publishes the findings of scholars from UCLA and other archaeology centers and supplies a forum for the public presentation of archaeological discoveries and advances.

Crump Institute for Molecular Imaging

The Crump Institute for Molecular Imaging (CIMI) brings together physical, biomathematical, chemical, biological, and clinical scientists and students to merge the principles of imaging with those of molecular and cellular biology, genetics, and biochemistry. The imaging domains range from the molecular organization of viruses and cellular subunits to the biological processes of organ systems in the living human. A major focus is the development and use of imaging technologies to collect, analyze, and communicate digital data. The institute has research and educational programs for visiting scientists, postdoctoral scholars, and PhD graduate students that include the development of multimedia computer-based learning technologies.

Gustave E. von Grunebaum Center for Near Eastern Studies

The von Grunebaum Center for Near Eastern Studies (CNES) coordinates research and academic programs related to the Near East. It supports the degree program in African and Middle Eastern Studies. Center resources include the largest faculty, one of the most comprehensive library holdings, and the richest variety of Near and Middle Eastern studies courses of any institution in the Western Hemisphere. The center conducts publication, community outreach, and scholarly exchange programs.

Institute for Research on Labor and Employment

The interdisciplinary research program of the Institute for Research on Labor and Employment (IRLE) studies employment relationships including labor markets, labor law, labor and management relations, equal employment opportunity, occupational safety and health, and related issues. Its UCLA Labor Center offers social policy and employment relations programs to the public, unions, and management. The academic unit of the institute oversees the Labor and Workplace Studies minor.

Institute of Geophysics and Planetary Physics

The Institute of Geophysics and Planetary Physics (IGPP) is a multicampus research unit of the University of Califor-
nia; the branch at UCLA researches climate dynamics, geo-
physics, geochemistry, space physics, biochemistry, and
biology. Research topics include the nature of the Earth,
moon, and other planetary bodies; global and regional
environmental change; the origin of terrestrial life; dynami-
cal properties of the sun and solar wind; and the nonlinear
dynamics of complex systems. Facilities include analytical
laboratories in geochemistry, meteoritics, glaciology,
petrology, geochronology, archaeology, and the origins of
life; laboratories for experiments in fluid dynamics and high-
pressure physics; developmental laboratories for instrumen-
tation in space physics and seismology; and computational
laboratories for large-scale numerical modeling.

**Intellectual and Developmental Disabilities Research Center**

The Intellectual and Developmental Disabilities Research
Center (IDDRC) supplies laboratories and clinical facilities
for research and training in intellectual and developmental
disabilities. Interdisciplinary activities range from anthropol-
ogical studies to molecular aspects of inherited metabolic
diseases.

**James S. Coleman African Studies Center**

The Coleman African Studies Center (ASC) coordinates
research on and teaching about Africa in the humanities,
social sciences, and natural sciences, as well as in the
schools of Arts and Architecture; Education and Informa-
tion Studies; Law; Medicine; Public Affairs; Public Health;
and Theater, Film, and Television. The center sponsors
public lectures, seminars, publications, and academic
exchanges with African institutions, and an outreach service
to the Southern California community.

**Jules Stein Eye Institute**

The Stein Eye Institute is one of the best-equipped centers
for research and treatment of eye diseases in the world. This
comprehensive facility is dedicated to the preservation of
vision and prevention of blindness, the care of patients with
eye disease, and education in the broad field of ophthalmol-
ogy. Out-patient, inpatient, and surgical treatments are
available.

The Doris Stein Eye Research Center houses clinical facilities
as well as new research and training programs concentrat-
ing on major eye diseases worldwide.

The Edie and Lew Wasserman Eye Research Center houses
outpatient surgery clinics; faculty offices; and refractive,
oculoplastic, and cataract services.

**Latin American Institute**

The Latin American Institute (LAI) is a major regional,
national, and international resource on Latin America and
hemispheric issues. The institute sponsors and coordinates
research, academic and public programs, and publications
on Latin America in the humanities, social sciences, and
professional schools; and links its programs and activities
with developments in the field and in other institutional
settings. By combining instruction, research, and service—
and by encouraging multidisciplinary and interdisciplinary
approaches—the institute promotes the use of UCLA Latin
American resources for the benefit of the campus, the
broader community, and the public at large.

**Molecular Biology Institute**

The Molecular Biology Institute (MBI) promotes molecu-
lar biology research and teaching at UCLA, with emphasis
on genomics, proteomics, and chemical biology. The insti-
tute houses the laboratories of 200 faculty members from
30 UCLA departments and the Institute for Genomics and
Proteomics, as well as the administration of the Molecular
Biology Interdepartmental PhD Program and the Graduate
Programs in Bioscience consortium.

**Plasma Science and Technology Institute**

The Plasma Science and Technology Institute (PSTI) is
dedicated to research of plasma physics, fusion energy, and
the application of plasmas in other disciplines. Students,
professional research staff, and faculty members study basic
laboratory plasmas, plasma-fusion confinement experi-
ments, fusion engineering and nuclear technology, com-
puter simulations and the theory of plasmas, space plasma
physics and experimental simulation of space plasma phe-
nomena, advanced plasma diagnostic development, and
laser-plasma interactions. They also study the use of plasma
in applications ranging from particle accelerators to the
processing of materials and surfaces used in microelectron-
ics or coatings.

**Ralph J. Bunche Center for African American Studies**

The Bunche Center for African American Studies (CAAS)
conducts and sponsors research on the African American
experience, supports the African American studies curricu-
luum, publishes research results, and sponsors community
service programming. CAAS is one of four ORUs overseen
by the Institute of American Cultures (IAC).
The UCLA-DOE Institute for Genomics and Proteomics, funded through a Department of Energy (DOE) contract, conducts research in bioenergy, carbon capture, microbial genomics, and structural and functional studies of organisms and their constituents. Institute faculty members have joint appointments in academic departments and teach at both undergraduate and graduate levels. Major facilities include a biomedical cyclotron; advanced scanning equipment; and macromolecular crystallization, nuclear magnetic resonance, protein expression, and X-ray crystallography facilities.

**Galleries and Museums**

Museums, galleries, and gardens offer eclectic resources ranging from the ancient to the avant-garde, helping to make UCLA the leading arts and cultural center in the West.

**Fowler Museum at UCLA**

The Fowler Museum at UCLA is internationally known for the quality of its collections. They encompass the arts and material culture of much of the world, with particular emphasis on West and Central Africa; Asia and the Pacific; and the Americas, past and present. It supports UCLA instruction and research and sponsors major exhibitions, lecture programs, and symposia. The museum is open to the public Wednesday through Sunday.

**Grunwald Center for the Graphic Arts**

Housed in the UCLA Hammer Museum, the Grunwald Center for the Graphic Arts holds a distinguished collection of over 45,000 prints, drawings, photographs, and artists’ books, including nearly 10,000 works from the prestigious Armand Hammer Daumier and Contemporaries Collection. A study and research facility for the benefit of students and the community, the center’s permanent holdings include significant European and American examples from the fifteenth century to the present. It is particularly noted for its collection of German Expressionist prints and works on paper by Matisse and Picasso, as well as the Richard Vogler Cruikshank Collection and the Frank Lloyd Wright Collection of Japanese prints. The center is open only by appointment.

**Franklin D. Murphy Sculpture Garden**

Situated on a picturesque five-acre expanse that spans the heart of north campus, the Murphy Sculpture Garden contains a collection of over 70 major works by Arp, Butterfield, Calder, Falkenstein, Hepworth, Lachaise, Lipchitz, Matisse, Moore, Noguchi, Rodin, Smith, Zuniga, and many other late nineteenth- and early twentieth-century masters. All works in this distinguished collection are private gifts to UCLA. Tours may be arranged.

**Meteorite Collection and Gallery**

UCLA has the largest collection of meteorites on the West Coast and the fifth largest in the U.S. Many of the most
important meteorites are displayed in the Meteorite Gallery located in 3697 Geology. The collection and gallery are a major resource for cosmochemical research and the teaching of planetary science.

**New Wight Gallery**

The New Wight Gallery is an exhibit space for visual arts, including student and faculty exhibitions, housed in 1100 Broad Art Center.

**UCLA Hammer Museum**

The Hammer Museum regularly presents its collection of impressionist and post-impressionist paintings by such artists as Monet, Pissarro, Sargent, Cassatt, and Van Gogh. The museum organizes and presents major changing exhibitions devoted to examinations of historical and contemporary art in all periods. Cultural programming—including children’s performance and storytelling series, music, poetry readings, and lunchtime art talks—are presented throughout the week.

**Libraries**

The UCLA Library, a campuswide network of libraries serving programs of study and research in many fields, is among the top 10 academic research libraries in North America. The total collections number more than 12 million volumes, 100,000 current serial titles, 950,000 e-books, and 700 subscription databases.

Reference librarians are available in all library units to answer questions about using online systems and to provide assistance with reference and research topics.

Students locate and identify materials through web-based library information systems. The UCLA Library catalog contains records for all its holdings and other campus collections, including the Archive Research and Study Center of the Film and Television Archive, Chicano Studies Research Center Library, Ethnomusicology Archive, Social Science Data Archive, Instructional Media Collections and Services, and William Andrews Clark Memorial Library. It also includes library item location and circulation status.

Other available catalogs include the UC Libraries Catalog (Melvyl), WorldCat, Center for Research Libraries, Online Archive of California, numerous abstracting and indexing databases, and gateways to other systems. The Melvyl Catalog contains information on library holdings at all 10 UC campuses.

While continuing to develop and manage collections of traditional printed materials, the UCLA Library also makes a number of digital resources available for campus use through the library site. These include electronic reserves and electronic journals, texts, reference resources, periodical indexes, and abstracts.

**Arts Library**

Housed in 1400 Public Affairs Building, the Arts Library has more than 300,000 books on architecture, architectural history, art, art history, design, fashion and costume, film, television, photography as fine art, studio art, theater, urban design, and allied disciplines. It also contains the Elmer Belt Library of Vinciana, a special collection of rare books and incunabula about Leonardo da Vinci and related materials in Renaissance studies. Performing Arts Special Collections, housed in the Young Research Library, contain noncirculating materials including the Artists’ File; archival records of major Southern California motion picture studios and television production companies; scripts from film, television, and radio; animation art; personal papers of writers, directors, and producers; photographs and production stills; and posters, lobby cards, press kits, and West Coast theater playbills.

**Charles E. Young Research Library**

The Young Research Library (YRL) primarily serves graduate research in the humanities, social sciences, education, public affairs, government information, and maps. Most of its collections are arranged in open stacks. The building also houses reference, circulation, graduate reserve, and periodicals services and the Microform and Media Service, with microcopies of newspapers, periodicals, and other materials. UCLA Library Special Collections contains rare books and pamphlets, primarily in the humanities, social sciences, and visual arts, from the fifteenth to twentieth century; Univer-
sity Archives; early maps and atlases; early California newspapers; manuscript collections; transcripts of oral history; ephemera; microfilm; tape recordings; prints; paintings; and drawings, including original architectural drawings.

**Eugene and Maxine Rosenfeld Management Library**

Located in the Anderson Graduate School of Management complex, the **Rosenfeld Management Library** houses materials on accounting information systems, arts management, business history, corporate history, entrepreneurship, finance, general management and management theory, industrial relations, international and comparative management, management information systems, management strategy and policy, marketing, operations, research, production and operations management, public/not-for-profit management, and real estate.

**Hugh and Hazel Darling Law Library**

The **Darling Law Library** collects published case decisions, statutes, and codes of the federal and state governments of the U.S. and other common law jurisdictions, legal treatises and periodicals in Anglo-American and international law, and appropriate international and comparative law holdings. The Law Library reports to the dean of the School of Law. It contains over 600,000 print volumes and over 35,000 electronic titles.

**Louise M. Darling Biomedical Library**

The **Darling Biomedical Library**, located in the Center for Health Sciences, serves all the UCLA health and sciences departments and schools and the Ronald Reagan UCLA Medical Center. Its collections focus on materials related to medicine, nursing, dentistry, public health, physiological sciences, biology, molecular biology, chemistry, biochemistry, zoology, plant sciences, psychology, and life sciences, as well as rare works in the history of health and life sciences, botanical illustration, and Arabic and Persian medical manuscripts. It contains over 683,778 print volumes and thousands of journal subscriptions.

**Music Library**

The collections of the **Music Library** in the Schoenberg Music Building include books, music scores, sheet music, video and sound recordings, microforms, and interactive media on Western music history and criticism; world music styles, cultures, and traditions; and music theory, aesthetics, philosophy, and organology. Performing Arts Special Collections, housed in the Young Research Library, include rare printed and manuscript books, scores, and opera librettos; personal papers of prominent Southern California composers, performers, and writers on music; and archives of film, television, and radio music.

**Powell Library**

**Powell Library** features collections and services in support of the undergraduate curriculum in the College of Letters and Science (humanities and social, life, and physical sciences). Course reserve materials—including books, articles, audiotapes, homework solutions, lecture notes, and Academic Publishing Service Readers—are available for loan. The **Campus Library Instructional Computing Commons** (CLICC), located on the first floor of Powell Library, gives
students access to computers and multimedia equipment; and Night Powell offers study space in a late-night reading room. There are Inquiry Laboratories with research assistance and Undergraduate Writing Center services.

Richard C. Rudolph East Asian Library

Located in the Young Research Library, the Rudolph East Asian Library collects Chinese, Japanese, and Korean language materials in the humanities and social sciences. The collection is particularly strong in Japanese Buddhism, religion, Chinese and Japanese fine arts, Chinese archaeology, premodern history and classical literature on both China and Japan, and Korean literature and religion.

Science and Engineering Library

The Science and Engineering Library (SEL) collections on engineering, mathematics, and the physical sciences are housed in two separate locations. SEL/Boelter in Boelter Hall houses materials on aeronautics, astronomy, and atmospheric sciences; bioengineering; chemical, civil, electrical, environmental, manufacturing, mechanical, and nuclear engineering; computer science and electronics; energy technology; mathematics; metals and materials; pollution; and statistics. SEL/Geology in the Geology Building houses materials on geology, geophysics, geochemistry, space physics, planetary science, regional geology, paleobiology, micropaleontology, invertebrate paleontology, ore deposits, geomorphology, hydrology, chemical oceanography, and all U.S. Geological Survey publications of western U.S. state geological surveys.

Special Archives and Collections

In addition to the extensive collections of the UCLA Library, a rich array of other information resources is independently managed by individual UCLA departments and centers.

Cultural Center Collections

The Bunche Center for African American Studies Library and Media Center contains materials reflecting the African American experience in the social sciences, arts, and humanities. The American Indian Studies Center Library houses a collection on American Indian life, culture, and state of affairs in historical and contemporary perspectives.

The Asian American Studies Center Library/Reading Room features Asian American and Pacific Islander resources. Materials related to Chicano and Latino cultures are housed in the Chicano Studies Research Center Library. The William Andrews Clark Memorial Library contains rare books, manuscripts, and other noncirculating materials on English culture (1641 to 1800). The English Reading Room features a noncirculating collection of British and American literature, literary history, and criticism.

Film and Television Archive

The Film and Television Archive is the world’s largest university-based collection of motion pictures and broadcast programming. The archive holdings of over 350,000 motion pictures, 160,000 television programs, and 27 million feet of newsreel footage serve the UCLA community and national and international constituencies.

The Motion Picture Collection is the country’s largest collection after the Library of Congress. Among its outstanding collections are 27 million feet of Hearst Metrotone News film dating back to 1919. Other noteworthy holdings include studio print libraries from Twentieth-Century Fox, Paramount Pictures, Warner Brothers, Sony/Columbia Pictures, Republic Pictures, RKO, New World Pictures, and Orion Pictures. Special collections document the careers of William Wyler, Hal Ashby, Tony Curtis, Rosalind Russell, Stanley Kramer, Cecil B. DeMille, Harold Lloyd, Charlton Heston, Rock Hudson, and other persons of prominence in the American film industry.
The **Television Collection** is the nation’s largest university-based collection of television broadcast materials. Its titles include kinescopes, telefilms, and videotapes spanning television history from 1946 to the present, with emphasis on drama, comedy, and variety programming. A special collection of over 100,000 news and public affairs programs is also maintained.

The archive exhibition program presents evening screenings and discussions that focus on archival materials, new work by independent filmmakers, and international films.

The **Archive Research and Study Center** (ARSC) in Powell Library offers on-site viewing of the Film and Television Archive collections, and research consultation to students, faculty, and researchers.

### Instructional Media

**Instructional Media Collections and Services**, located in Powell Library, is the central UCLA resource for collection and maintenance of educational and instructional media. Materials from the collection are loaned to regularly scheduled UCLA classes and may be rented by organizations and individuals from the campus community and beyond. Staff members monitor compliance with UCLA and UC guidelines and federal copyright law governing the use of video recordings. Reference books from educational and feature-film distributors are available. Staff members assist in researching media on any subject and obtaining materials from outside sources.

The **Instructional Media Laboratory** offers access to course- or textbook-related audio, interactive, and video programs. Students, assigned by faculty members to study specific supplementary materials, may learn at their own pace and time.

### Other Collections

The **Ethnomusicology Archive** houses over 150,000 sound and audiovisual recordings of folk, ethnic, and non-Western classical music. The **Social Science Data Archive** contains a collection of statistical databases for the social sciences. The UCLA Lab School **Gonda Family Library** features contemporary materials for children from kindergarten through junior high school and adult works on children’s literature.

### Parks, Reserves, and Natural Science Resources

The geography of Southern California is conducive to research in the natural sciences. This diverse region is a natural laboratory supported by numerous UCLA resources for study.

#### Biological Collections

The **Biological Collections** of the Ecology and Evolutionary Biology Department include marine fishes from the Eastern Pacific and Gulf of California; and birds and mammals primarily from the Western U.S., Canada, Mexico, and Central America. The department also maintains a more limited collection of amphibians, reptiles, and fossil vertebrates.

#### Division of Laboratory Animal Medicine

The **Division of Laboratory Animal Medicine** is responsible for the procurement, husbandry, and general welfare of animals required for teaching and investigative services. It also administers the campus veterinary medical and husbandry programs.

#### Mildred E. Mathias Botanical Garden

The **Mathias Botanical Garden** is a living museum with one of the most important botanical collections in the U.S. With specimens from all over the world, the seven-acre expanse on south campus is home to over 3,000 types of plants in a wide range of environments. The botanical garden also has a research herbarium containing 180,000 dried plant specimens. School and community group tours are available, as are individual guided tours.

#### Stunt Ranch Santa Monica Mountains Reserve

The University of California founded the UC Natural Reserve System (NRS) in 1965 to preserve undisturbed natural areas representing the state’s vast ecological diversity for students, teachers, and researchers from public and private educational institutions to use as outdoor classrooms and living laboratories. The **Stunt Ranch Santa Monica Mountains**
Reserve, administered by the Los Angeles campus, officially joined the UC NRS in November 1995. The 310-acre site is a 40-minute drive from UCLA and includes fine examples of chaparral and oak woodland ecosystems. The reserve lends itself to programs that focus on the natural ecosystems and issues of resource management in the urban/wildland interface. Undergraduate and graduate courses in the departments of Anthropology; Earth, Planetary, and Space Sciences; Ecology and Evolutionary Biology; Geography; Physics and Astronomy; and the Institute of the Environment and Sustainability utilize Stunt Ranch and other NRS sites.

**UCLA Health System**

Consisting of Ronald Reagan UCLA Medical Center; UCLA Medical Center, Santa Monica; Resnick Neuropsychiatric Hospital at UCLA; UCLA Mattel Children’s Hospital; and the UCLA Medical Group, with wide-reaching primary- and specialty-care offices, UCLA Health is among the most comprehensive and advanced health care systems in the world, and is consistently ranked among the top hospitals in the nation and the West.

From its level-one trauma center and intensive-care units to The BirthPlace Westwood, the Ronald Reagan UCLA Medical Center on campus is equipped with the latest medical advances to provide world-class patient care. The UCLA Medical Center, Santa Monica is home to the UCLA Rape Treatment Center, which serves as a national model for the treatment of rape victims and their families.

**Student Services**

Like a small city, UCLA has its own police department and fire marshal, an equivalent to the phone company, health center, corner restaurants, and shops. Hundreds of services for the campus community facilitate academic and personal endeavors.

**Study Services**

From academic advising to advanced computer support, UCLA study services give students the tools they need to achieve academic success.

**Academic Counseling**

Many sources of academic counseling are available. Faculty advisers and counselors in the College and each school help students with major selection, program planning, academic difficulties, degree requirements, and petitions.

Advisers in each department counsel undergraduates concerning majors offered and their requirements, and possible career and graduate school options (see the College and Schools and Curricula and Courses chapters). In addition, graduate advisers are available in each department to assist prospective and currently enrolled graduate students.

**Computer Laboratories**

Student computer laboratories are supported through the Campus Library Instructional Computing Commons (CLICC), a collaborative effort of the Humanities Technology, Social Sciences Computing, Center for the Advancement of Teaching, and Powell Library. Some 15 computer laboratories are available throughout the campus, each with computers, peripherals, software, and services that cater to specific areas of study. See the departments listed above or Information Technology Services IT resources for more information.

**Course Readers**

ASUCLA Course Reader Solutions supplies custom course readers for faculty in both print and e-book formats, obtaining copyright authorizations each year. The office is located in the Textbooks department on the A level of Ackerman Union.
Course Websites

The Instructional Enhancement Initiative (IEI) assures that all UCLA undergraduate nontutorial courses offer an individual course website for faculty members, teaching assistants, and enrolled students. The sites facilitate the distribution of supplementary course materials, lecture notes, homework assignments, research links, and electronic communication, including virtual office hours and class bulletin boards for interactive question-and-answer sessions. Instructors decide which of these online capabilities are best suited to their course websites. Many course websites are available through the Common Collaboration and Learning Environment (CCLE).

Disabilities and Computing Program

The Disabilities and Computing Program (DCP) supplies adaptive technology and information-access support and services to students, faculty, and staff with disabilities. Applications include voice input, Braille, large print, screen-reading software, and learning disability software. Consulting and training for individuals and departments are available. The program also offers Web accessibility evaluations and guidelines.

Internet

UCLA IT Services is the campus Internet service provider for UCLA students, faculty, and staff; and a vehicle for accessing campus network communication services. Bruin OnLine services include access to the campus backbone network and the Internet, e-mail accounts, Google Apps for UCLA, Box, and personal web hosting. Limited wireless Internet access is available on campus to anyone with a wireless enabled laptop or mobile device. Utility software can be downloaded from the IT Support Services website. Help desk services are available.

MyUCLA

MyUCLA is the easiest way for students to gain real-time access to their academic, financial, and personal records. The site is designed with an intuitive visual interface to walk students through procedural steps. MyUCLA offers a large number of services. Students use the Class Planner to create plans prior to enrollment and are able to share these plans with counselors. MyUCLA also allows students to check enrollment appointments; view real-time enrollment counts; find classes and enroll; exchange or drop classes; change units and grade type; and view their study list, which includes information on class meeting times, final examinations, classmates, gradebook, textbooks, and class websites. MyUCLA is used to declare candidacy and nonattendance, view Degree Audits, order transcripts and diplomas, change address information, view term grades and calculate grade-point average, find information on holds, order commencement tickets, access BruinBill and tax information, view financial aid awards and notices, and access UCLA Google e-mail accounts. The MyUCLA Message Center contains a database of answers and allows students to correspond with campus departments. MyUCLA also links to important communications regarding registration and UCLA policies. Other features include notifications; voting in student association elections; personal calendar and event reservations; and links to UCLA online resources. Students can access MyUCLA from Sunday noon through Tuesday 1 a.m., and Tuesday through Saturday from 6 a.m. to 1 a.m. the next day, including holidays. MyUCLA Features contains a full list of features.

Health and Safety Services

Arthur Ashe Student Health and Wellness Center

The Arthur Ashe Student Health and Wellness Center in Westwood Plaza is a full-service medical clinic available to all registered UCLA students. Most services are subsidized by registration fees, and a current BruinCard is required for service. Its clinical staff of physicians, nurse practitioners, and nurses is board certified. It offers primary care, specialty clinics, and physical therapy. The center has its own laboratory and radiology sections. It operates the Bruin

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Health Pharmacy and U See LA Optometry in nearby Ackerman Union. Visits, core laboratory tests, X-rays, and preventive immunizations are all prepaid for students with the University of California Student Health Insurance Plan (UCSHIP).

The cost of services received outside the Ashe Center, such as emergency room services, is each student’s financial responsibility. Students are required to purchase medical insurance either through the UCLA-sponsored UCSHIP or other plans that provide adequate coverage. Adequate medical insurance is a condition of registration. See Registration in the Undergraduate Study and Graduate Study chapters.

Contact the Ashe Center for specific information on its primary care, women’s health, immunization, health clearance, optometry, travel medicine, and mind-body clinics, as well as dental care available to students at discounted rates. For emergency care when the Ashe Center is closed, students may obtain treatment at the Ronald Reagan UCLA Medical Center emergency room on a fee-for-service basis.

Mental Health Services

Services for mental health range from routine counseling and psychotherapy to crisis counseling.

Counseling and Psychological Services

Counseling and Psychological Services (CAPS) offers short-term personal counseling and psychotherapy in 221 Wooden Center West, 310-825-0768.

Psychologists, clinical social workers, and psychiatrists assist with situational stresses and emotional problems from the most mild to severe. These may include problems with interpersonal relationships, academic stress, loneliness, difficult decisions, sexual issues, anxiety, depression, or other concerns affecting the personal growth of students.

In addition, Campus Assault Resources and Education (CARE) counselors—individuals who provide information, support, and resources for members of the UCLA community who have been raped, sexually assaulted, stalked, or involved in a dating or domestic violence incident—can discuss options and alternatives, help identify and assist in contacting the most appropriate support services, and answer any questions that may arise.

Service is confidential and available to regularly enrolled students. Students are seen individually by appointment or may choose from a number of groups offered each term. Emergency and walk-in counseling is also available.

Student Safety and Security

For police, fire, or medical emergencies, call 911 from any campus phone. For nonemergency information, call UCLA Police at 310-825-1491.

UCLA EMERGENCY NUMBERS

<table>
<thead>
<tr>
<th>Service</th>
<th>Phone Number</th>
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</thead>
<tbody>
<tr>
<td>Police, Fire, or Medical Emergency</td>
<td>911</td>
</tr>
<tr>
<td>UCLA Medical Center Emergency Room (24 hours)</td>
<td>310-825-2111</td>
</tr>
<tr>
<td>UCLA Counseling and Psychological Services (24 hours)</td>
<td>310-825-0768</td>
</tr>
<tr>
<td>UCLA Police (24 hours)</td>
<td>310-825-1491</td>
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The police department offers a free evening escort service every day of the year from dusk to 1 a.m. Uniformed community service officers (CSOs)—specially trained UCLA students—walk students, staff, faculty, and visitors between campus buildings, local living areas, and Westwood Village.

The free UCLA Safe Ride service—formerly Evening Van Service—offers a safe, accessible, and convenient mode of transportation around campus at night. Vans transport students between 26 locations on and off campus, Monday through Thursday from 7 p.m. to 12 a.m. Pick-up and drop-off locations are selected from an available list on the TapRide app.

UCLA Campus Assault Resources and Education (CARE) Prevention and Education Services—including workshops, self-defense classes, counseling, and referrals—increase physical and psychological preparedness and heighten awareness of the complex issues of rape, sexual assault, and relationship violence.
UCLA Consultation and Response Team (CRT) is a group of professional staff members charged with responding to reports of students in distress, with representatives from the College, Dean of Students, Counseling and Psychological Services, Residential Life, and UCLA Police.

The Center for Prehospital Care offers cardiopulmonary resuscitation (CPR) and basic emergency care courses, which can be organized most days and times.

The Office of Environment, Health, and Safety (EH&S) works to reduce workplace hazards on campus and to promote safety at all levels of the UCLA community. EH&S is a consulting resource for UCLA departments and personnel who want to learn how to make the workplace safe. It handles requests for safety information and training, regulatory interpretation and applicability, approval for potentially hazardous procedures, resolution of safety problems, and surveillance and monitoring of persons and workplaces.

Associated Student Services

Founded when UCLA opened in 1919, Associated Students UCLA (ASUCLA) delivers services to the campus community through student government, student media, and services and enterprises. Every registered UCLA student is a member of ASUCLA.

Student Government

Many facets of student life at UCLA are sponsored or organized by student government. Getting involved in the decision-making process is rewarding and offers avenues of expression students may not find in other aspects of their university experience.

Graduate Students Association

The Graduate Students Association (GSA) is the official organization representing UCLA graduate and professional students in academic, administrative, campus, and statewide areas. GSA appoints or elects graduate student members to important campus organizations and committees including the Student Fee Advisory Committee and Academic Senate committees. It sponsors graduate student orientation; the Graduate Student Resource Center and Graduate Writing Center; and various graduate student journals, programs, and social events, including the Melnitz Movies film program.

Undergraduate Students Association

Undergraduate student government is embodied in the Undergraduate Students Association (USA). Its governing body, the Undergraduate Students Association Council (USAC), is comprised of elected officers as well as appointed administrative, alumni, and faculty representatives. Every UCLA undergraduate student is a member of USA.

USA activities offer services to the campus and surrounding communities, and give students the opportunity to participate in and benefit from multiple programs. For example, its programs tutor youths and adults, address health needs of ethnic communities, combat poverty and homelessness, and better the environment.

Campus Events

Each year approximately 40,000 students, faculty, and staff attend programs of the Campus Events Commission (CEC), including a film program, speakers program, and performances by dozens of outstanding entertainers.

The Speakers Program brings entertainers, politicians, and literary figures to campus and presents two annual awards—the Jack Benny Award for comedic excellence and the Spencer Tracy Award for outstanding screen performance. Speakers and awardees have included notables as varied as Bill Gates, Whoopi Goldberg, and Tom Hanks.

The Concert Program brings new and popular performing artists like Rage Against the Machine or A Tribe Called Quest to UCLA for free and affordably priced concerts.

The Cultural Affairs Commission sponsors art exhibits in the Kerckhoff Hall Art Gallery, the JazzReggae Festival, Bruin Bash, Hip Hop Congress, and Worldfest.

Publications, Web, and Broadcast Media

Student publications and media offer a training ground for aspiring writers, journalists, photographers, and media managers while serving the communication needs of the campus community. Most publications offices are in Kerckhoff Hall. Information and applications are available online.

Daily Bruin

The Daily Bruin, with a circulation of 9,000, is one of the largest daily newspapers in Los Angeles. As the principal outlet for campus news, the Bruin is published each weekday of the academic year (once a week during the summer) and is distributed free from kiosks around campus and local areas. Students work as reporters, editors, designers, photographers, videographers, and radio reporters, as well as advertising sales representatives and marketing account executives. New staff members are welcome every quarter.

Newsmagazines

Seven print newsmagazines reflecting the diversity of the campus community are published each term. Al-Talib, Fem, Ha’Am, La Gente, Nommo, OutWrite, and Pacific Ties deal
respectively with issues relevant to the Muslim; feminist; Jewish; Chicano, Latino, and Native American; African American; lesbian, gay, bisexual, transgender, and queer; and Asian communities. Each includes news and features on political and cultural affairs both on and off campus. Prospective staffers are welcome.

Online Media
Student Media supports the Bruinwalk.com community portal. Features include UCLA professor reviews, used book trading, reviews of apartments near UCLA, and a campus calendar.

UCLAradio
UCLAradio broadcasts live over the Internet and features college alternative, hip-hop, jazz, and world music. It also covers select Bruin football, basketball, and baseball games and airs a lineup of sports talk shows. Studios are in Ackerman Union; all positions, including on-air, news staff, and advertising representatives, are open to students.

Yearbook
The UCLA yearbook, BruinLife, is one of the largest student publication efforts on campus. It contains photographs and information on undergraduate students, graduating seniors, athletic teams, fraternities and sororities, and campus activities. Students who would like to participate may contact the yearbook staff.

Restaurants
ASUCLA operates more than a dozen restaurants and 10 coffee houses on campus, assuring a range of eating options from Italian to sushi. From the residence halls to the student union, a restaurant is never far. Hours vary, especially during summer and holidays. Locations of all the restaurants are posted online.

UCLA Store
The UCLA Store has six locations on campus. Author signings, sales, and other special events are announced in the Daily Bruin or on the UCLA Store site.

The UCLA Store—Ackerman Union has eight departments. Textbooks carries required and recommended texts for most undergraduate and many graduate courses, and operates a buyback service so students can sell used texts. BookZone offers reference books and a wide selection of titles in literature, science, history, and technical disciplines, including those by faculty authors. Computer Store carries personal computers, peripherals, accessories, and software at low academic prices. Essentials offers school and office supplies, including printer consumables. BearWear specializes in UCLA emblematic merchandise. Fast Track carries active sportswear and accessories for men and women. Beautique stocks makeup, Clinique skin care, and fashion accessories. Market is a convenience store, with snacks, health and beauty aids, gifts, and greeting cards. Ashe-Center-operated U See LA Optometry and Bruin Health Pharmacy are also in Ackerman Union.

UCLA Store—Health Sciences specializes in books and supplies for students in dentistry, medicine, nursing, public health, and related areas. UCLA Store—Lu Valle Commons carries art supplies and books, as well as textbooks and supplies for all on-campus Extension courses and selected academic programs (architecture and urban design, art, design, film, information studies, law, management, public policy, social welfare, theater, urban planning). North Campus Shop, South Campus Shop (Court of Sciences), Energy Zone (Wooden Center) and Hill Top Shop in Sunset Village are convenience store locations.

Other Services and Enterprises
ASUCLA oversees a variety of other services ranging from a post office to a hair salon. Most are located in Ackerman Union.

Students preparing to graduate can use the Campus Photo Studio for their senior yearbook portraits. Graduation Etc. sells and rents caps, gowns, and hoods for degree ceremonies; and offers announcements, diploma mounting, and other graduation-related products and services.

Bruin Custom Print offers copying; binding; and banner, poster, and t-shirt printing. The shop streamlines the process involved in printing custom specialty products that need UCLA licensing and trademark clearance.
Student Life Services

From housing to transportation, basic student needs are facilitated by services designed to enhance all aspects of student living.

Banking

Automated teller machines representing several major banks are located in Ackerman Union, and near restaurants and shops around campus.

The University Credit Union has an office in West Los Angeles and a branch office in Ackerman Union.

BruinCard

The UCLA BruinCard is a mandatory campuswide identification card that can electronically confirm student status and eligibility for services. Supportive photo identification—such as a driver’s license or state ID, passport, or military ID—is required when the card is issued.

The primary BruinCard benefit is convenience. It is a versatile card that serves the following functions: confirmation of student status; ID card for faculty, staff, and students; residence hall access and meal card; laundry, library, and recreation card; debit card (if activated) for purchases at campus stores and restaurants on and off campus; and discounted access to Santa Monica and Culver City bus lines.

Students with an outstanding financial, academic, or administrative hold may not receive BruinCard services until the hold is released by the initiating office. Information on outstanding holds and initiating offices is available on MyUCLA.

The BruinCard center is located in 123 Kerckhoff Hall. See BruinCard to check account balance, make deposits, view recent transactions, and report lost or stolen cards.

Bruin Resource Center

The Bruin Resource Center (BRC) in the Student Activities Center can help students navigate the campus and its many services by directing them to the correct office or personnel to meet their specific needs.

The center offers services to all UCLA students, including specialized services for transfer and re-entry students, students who are transitioning out of foster care, student parents, and veterans. Additional offerings include workshops and academic courses to help students develop practical skills and knowledge to succeed at UCLA.

The BRC also houses the Veterans Resource Office, which offers services specifically designed to assist students who are U.S. armed forces veterans or current military members.

Career Center

The UCLA Career Center, located in the Strathmore Building, offers career planning and support free to all UCLA students.

Career Planning and Exploration

Career advisers offer assistance in exploring career options, evaluating graduate and professional school programs, and developing skills to conduct a successful job search. In addition, advisers can offer information on internship opportunities and how to develop a professional network. A variety of workshops are offered year-round to help students become career-ready.

Employment Assistance

Students looking for part-time, temporary, or seasonal employment to help finance their education and develop their skills, can find listings through Handshake. Handshake is an online platform that connects UCLA students with thousands of internships, jobs, and career opportunities.

Students can sign up to participate in on-campus interviews for internships and jobs. Annual career fairs and special events offer additional opportunities to meet employers.

Center for Accessible Education

The Center for Accessible Education (CAE) in A255 Murphy Hall offers academic support services to regularly enrolled students with documented permanent or temporary disabilities in compliance with Section 504 of the Rehabilitation Act of 1973, the Americans with Disabilities Act (ADA) of 1990, and UC and UCLA policies. Services include campus orientation and accessibility, notetakers, reader service, sign-language interpreters, registration assistance, test-taking facilitation, special parking assistance, real-time captioning, assistive listening devices, on-campus transportation, adaptive equipment, support groups and workshops, tutorial referral, special materials, housing appeals, referral to the Disabilities and Computing Program, and processing of California Department of Rehabilitation authorizations. There is no fee for any of these services. All contacts and assistance are handled confidentially.

For information, see Disabilities and Computing Program under Study Services.

Central Ticket Office

Tickets for UCLA events are available at the Central Ticket Office (CTO) in the James West Alumni Center. As part of its service, the CTO offers students with current BruinCards discount tickets to campus athletic and cultural events and local movies. Students may also purchase tickets to off-
campus events through Ticketmaster, as well as student discount tickets for Los Angeles-area buses.

**Child Care**

UCLA Early Care and Education (ECE) operates three accredited child care centers near UCLA and student housing. Care is available for children two months to six years old at most centers. Fees depend on the age of the child. A limited number of state grants and partial scholarship subsidies is available for eligible student families.

University Parents Nursery School is a UCLA-affiliated, parent-participation, multicultural cooperative school for two- through five-year-old children of UCLA students, faculty, and staff. It is located in the University Village Child Care Complex.

**Dean of Students/Student Conduct**

The Office of the Dean of Students in Murphy Hall helps students, either directly or by referral, with whatever needs they might have. Direct services include general counseling; sending emergency messages to students; and assisting in understanding UCLA and UC policies and procedures, including grievance procedures regarding student records, discrimination, and student debts.

The office publishes official notices in the Daily Bruin at various times during the year. Such notices are important, and all students are held responsible for the information in them.

The Student Conduct office administers campus discipline and enforces the standards of citizenship that students are expected to follow at UCLA. Standards involve complying with the policies and regulations governing this campus and being aware that violation of those policies or regulations can result in disciplinary action. Refer to Student Conduct Policies in Appendix A for more information.

**International Student Services**

International student services, based in Bradley International Hall, offer support for the UCLA international community, particularly for nonimmigrant students. An online orientation program helps international students become familiar with visa regulations, campus life at UCLA, and life in the U.S. Programs throughout the year allow them to share viewpoints with American students and the community.

**Dashew Center for International Students and Scholars**

The Dashew Center for International Students and Scholars assists students with questions about immigration, employment, government regulations, financial aid, academic and administrative procedures, cultural adjustment, and personal matters. The center seeks to improve student and community relationships; helps international students with language, housing, and personal concerns; and sponsors cultural, educational, and social programs. The center offers visa assistance for faculty members, researchers, and postdoctoral scholars.

**Lesbian Gay Bisexual Transgender Campus Resource Center**

The Lesbian Gay Bisexual Transgender Campus Resource Center in the Student Activities Center offers education, information, and advocacy services for the UCLA community. The center offers support groups, educational workshops, training seminars, and social activities; and maintains a library of 4,000 books, periodicals, and films. The staff provides confidential assistance and support to students, faculty, and staff who feel they have experienced harassment or discrimination or who wish to connect to the campus LGBTQ community.

**Office of Ombuds Services**

The Office of Ombuds Services responds to issues and concerns from students, staff, faculty, and administrators. Acting impartially, ombudspersons may investigate unresolved conflicts or facilitate the resolution of problems for which there are no established guidelines; and may also, where possible and when requested, assist in resolving an issue through mediation (including sexual harassment cases). The office is located in the Strathmore Building.

**Parking and Commuter Services**

Parking permits, ridesharing, and other commuting alternatives and services are offered through UCLA Transportation.

**Commuter Services**

Commuter programs offer information to help students get to and from campus without driving a car. These programs also help students use the extensive Los Angeles-area public transit network.

Students can use a trip planning tool to determine the best route to campus, or find a carpool or vanpool nearby. Nearly 150 vanpools commute to UCLA from 80 Southern California communities, with full- and part-time riding opportunities. The Bruin Commuter Club offers special benefits and incentives to eligible UCLA students who ride public transit, a UCLA vanpool, or a carpool.

Bruin Bike Share makes public bicycles available to students on a short-term basis for use on and around campus and
Westwood Village. Students may also rent a car by the hour through Zipcar.

**Parking Permits**

Parking at UCLA requires a permit. The Bruin ePermit is paperless, and uses a vehicle’s license plate as its parking permit.

Students must be registered for the current term to apply for parking, and permits are not guaranteed. Parking offers are prioritized according to parking availability and school. Within each category, carpools have priority, and carpool permits are offered at a discounted rate. All carpool members must qualify under the carpool parking requirements. Students must reapply for parking each term.

Students living within ZIP code 90024 pay the residence hall parking rate. Students living in campus residence halls (excluding Regents Scholars) who have off-campus jobs, and commuter students who have extenuating circumstances, must complete an exemption application and supply supporting documents.

Effective winter quarter 2019, disabled students apply for parking in person at the UCLA Transportation lobby. This applies to students with permanent and short-term disabilities who have a DMV-issued disabled person placard or license plate.

**Post Offices**

Campus mail is handled by UCLA Mail, Document, and Distribution Services (MDDS), which offers full-service document processing and delivery for the campus community. ASUCLA operates a U.S. Postal Service express post office on A Level in Ackerman Union. MDDS operates a U.S. Postal Service contract post office in Wilshire Center off campus.

**Residential Services**

UCLA Housing is the best guide for finding the right kind of accommodation for different lifestyles and budgets. It includes detailed information about the different residence options, dining plans, support and extracurricular programs, and an online housing application.

**On-Campus Housing**

Many students, especially those in their first year, choose to live on campus. Besides the convenience, campus living is a good way to meet other people and to find out about social and academic activities. Four residence halls, four deluxe residence halls, two residential suites, and five residential plazas accommodate over 11,000 undergraduate students. All on-campus housing buildings are coed and within walking distance to classrooms. New freshman and transfer students who are admitted for fall quarter and apply on time are guaranteed housing. Graduate student housing is also available.

Rooms in undergraduate residences are furnished and usually shared between two or three students. Meals are served daily at residential restaurants, and students may choose from a variety of meal plans.

Students apply for on-campus housing, by posted deadlines, at the My Housing website. Students who apply for winter or spring quarter are assigned housing on a space-available basis in the order their applications are received. Per-person rates for the academic year vary depending on housing type. See housing rates for current rates.

The Office of Residential Life is responsible for student conduct in residence halls and suites. Its professional and student staff members can counsel students on residential problems.

Sponsored by Residential Life, Living Learning Communities offers students with similar interests an opportunity to live together and participate in programs according to their academic, social, and personal needs and interests. Students can live in communities as varied as gender, sexuality, and society; sustainable living; global health; and various cultures.

**Off-Campus Housing**

Within walking distance of campus, UCLA maintains nine undergraduate off-campus apartment buildings for full-time, single transfer, and upper-division students. Apartments vary from singles to three-bedroom units, with bedrooms usually shared by two or three students. Not all types of apartment spaces are available to entering students. Virtual tours are available online.

Married, single-parent, and single graduate students are accommodated in six off-campus apartments; some are located within walking distance of campus, others about five miles from campus and served by a campus shuttle. Apartments include furnished and unfurnished studio and one-, two-, and three-bedroom units. Assignment to several apartments is by wait list; students must be accepted to UCLA to apply.

Many of the fraternities and sororities at UCLA own chapter houses. Complete information and membership requirements are published by Fraternity and Sorority Life.

**Student Legal Services**

Through Student Legal Services in Murphy Hall, currently registered students with legal problems or questions about their legal rights can get assistance from attorneys or law students under direct supervision of attorneys. They help students resolve legal problems, including those related to
landlord/tenant relations; accident and injury problems; criminal matters; domestic violence and harassment; divorces and other family law matters; automobile purchase, repair, and insurance problems; health care, credit, and financial aid issues; consumer problems; and UCLA-related issues. Assistance is available only by appointment.

Veterans Affairs Services
The veterans affairs benefits officer provides assistance with benefit information, waivers, enrollment certification, and coordinating transitions to and from active duty. For more information, see Registrar’s veteran services.

Part of the Bruin Resource Center, the Veterans Resource Office (VRO) helps veterans navigate UCLA and furnishes mentoring, guidance on educational benefits, and tools to succeed academically and personally through a variety of programs and services.

Student Activities
The opportunities to participate in extracurricular activities at UCLA are virtually unlimited, and are a good way for students to expand their horizons beyond classroom learning.

Clubs and Organizations
Joining a club or organization is a great way to meet other students with shared interests and to get involved in campus life.

Community Programs Office
The UCLA Community Programs Office (CPO) houses student-initiated community service projects that offer educational, legal, social, medical, and academic services to underserved communities in Southern California; seven student-initiated outreach projects that seek to improve the number of students from local underserved areas who attend colleges and universities; and five student-initiated retention projects that seek to ensure that all students who enter UCLA actually graduate. CPO programs foster a multicultural and ethnically diverse environment at UCLA.

Office of Fraternity and Sorority Life
Fraternities and sororities have been at UCLA since the early 1920s. Today UCLA is home to more than 70 national and local Greek-letter organizations that make up one of the largest Greek systems on the West Coast.

The Office of Fraternity and Sorority Life (FSL) interprets UCLA policies, procedures, and regulations, and acts as a liaison between established Greek organizations and UCLA. It coordinates Greek-letter social organizations that participate in programs such as the Greek Leadership Conference, Greeks against Sexual Assault (GASA), Greek Week, new member forums, dating expectations programs, intramural tournaments, and UCLA-sponsored programs.

Office of Residential Life
The Office of Residential Life hosts True Bruin Welcome and the Common Book experience, and brings a variety of programs to the Hill to build a sense of community and offer social enrichment.

Student Organizations, Leadership, and Engagement
UCLA has over 1,000 different organizations recognized by Student Organizations, Leadership, and Engagement (SOLE)—more than are found on almost any other university campus in the country. Organizations registered with SOLE include political, recreational, community service, cultural, academic, religious, and residential clubs. It only takes three people to start a new club if their interests are not already represented. SOLE also handles complaints of misconduct against officially recognized student organizations.

Performing Arts
Concerts, dance recitals, and theater productions are all part of exceptional programs offered by the Ethnomusicology; Film, Television, and Digital Media; Music; Theater; and World Arts and Cultures/Dance departments, and by the Center for the Art of Performance at UCLA.

Center for the Art of Performance
Since 1937, the Center for the Art of Performance (CAP) at UCLA has been a premier West Coast showcase for world-class performing artists and ensembles as well as innovative new work in dance, music, theater, and performance art. The center presents more than 200 public concerts and events each year, often sponsoring debut performances of new works by major artists. Through the center, the campus hosts a varied and active performance program, ranging from regular concerts by the Los Angeles Chamber Orchestra to events with The Symphonic Body UCLA, Contra-Tiempo, Peter Sellars, Cassandra Wilson, Anoushka Shankar, Afro Latin Jazz Orchestra, Randy Newman, Bojofondo, Buddy Guy, and Young Jean Lee’s Theater Company. Subject to availability, discount tickets are offered to students, faculty, and staff.

Department Events
The Ethnomusicology Department offers students the opportunity to perform in various world music and jazz
ensembles that give concerts listed in the department schedule of events.

The Film, Television, and Digital Media Department features student-directed films and television programs throughout the year, and the Theater Department presents a series of major productions to the general public. The School of Theater, Film, and Television annual Design Showcase West features rising entertainment designers; its week-long Film Festival celebrates film, digital media, animation, screenwriting, and acting that spans performance art to the classics.

The Music Department features performances by ensembles ranging from music theater to opera. Its Gluck Outreach Program and Music Partnership Program reach out to the community through free performances throughout Los Angeles and Southern California.

The World Arts and Cultures/Dance Department presents events and concerts involving department faculty members, guest artists, and students. Student performances include MFA concerts, an undergraduate and graduate student-produced concert, and the Senior Concert/Colloquium. Students also perform in more informal programs, such as the end-of-term student works festival or Pau Hana, that feature many world dance forms.

Recreation

To help students learn new skills, meet people with similar interests, relieve stress, and increase fitness, UCLA Recreation (UREC) oversees programs from intramural sports to outdoor adventures.

Intramural and Club Sports

The UCLA intramural sports program consists of team, dual, and individual sports competition in tournament or league play. Over 7,000 participants compete throughout the year in various sports activities ranging from basketball to water polo. UCLA students and recreation membership holders are eligible. Varying skill levels are offered in almost all activities, and the emphasis is on friendly competition.

Club sports offer students the chance to organize, coach, or participate in sports that fall beyond the scope of intramurals but are not offered at the varsity level. Coed teams exist in archery, badminton, boxing, Brazilian jiu-jitsu, climbing, cycling, dragon boat, equestrian, fencing, figure skating, golf, gymnastics, judo, kendo, powerlifting, quidditch, running, sailing, ski and snowboard, squash, swim, table tennis, taekwondo, tennis, track and field, triathlon, water skiing, wrestling, and wushu. Separate men's and women's teams exist in basketball, lacrosse, rugby, soccer, ultimate, volleyball, and water polo. There are also men's teams in baseball, ice hockey, and rowing; and women's teams in beach volleyball, field hockey, and softball.

Outdoor Adventures

Outdoor adventures offer students the chance to get away and enjoy the wonders of local and distant mountains and waterways. Activities designed for beginning to experienced outdoors people include bike rides, challenge course, camping, rock climbing, scuba diving, windsurfing, canoeing, kayaking, and hiking.

Class Programs

Noncredit instructional classes in arts, dance, fitness sports, golf, kayaking, martial arts, outdoor adventures, rock wall, rowing, sailing, standup paddling, surfing, swimming, tennis, water aerobics, windsurfing, yoga, and a variety of group fitness programs are offered for beginning and intermediate levels. Private lessons in arts, dance, martial arts, sports, aquatics, and other activities are also available. Fitness is offered either as a recreation class or on a drop-in basis.

Facilities

For registered students who prefer independent recreation and exercise, UREC offers access to many facilities. The John R. Wooden Recreation and Sports Center has multiple gymnasias; basketball, volleyball, and badminton courts; handball/racquetball/squash courts; a weight training facility, rock climbing wall, exercise/dance and martial arts studios; and a games lounge. The Bruin Fitness Center, located on the Hill, and Kinross Recreation Center, located in Westwood, offer closer-to-home exercise options for undergraduate and graduate students respectively. Sunset Canyon Recreation Center offers activities in an outdoor park setting that features a 50-meter swimming pool, 25-yard family pool, picnic/barbecue areas, play fields, outdoor amphitheater, six lighted tennis courts, sand volleyball court, two multipurpose sports courts, and various meeting rooms and lounges, as well as a challenge course. The UCLA Marina Aquatic Center offers sailing, windsurfing, kayaking, rowing, surfing, and other activities. Students also have the use of Pauley Pavilion, Drake Stadium, Hitch Basketball Courts, Sycamore Tennis Courts, Los Angeles Tennis Center, intramural field, Student Activities Center, and Kaufman Hall for recreational sports and activities.

Sports and Athletics

UCLA Athletics plays a major role in the UCLA mission to furnish a well-rounded education both in and out of the classroom. UCLA continues to live up to its reputation as a national leader in intercollegiate sports. The first school to
win 100 National Collegiate Athletic Association (NCAA) championships, UCLA currently ranks second in the U.S. with 118. In 2018-19, UCLA men’s and women’s athletic programs placed 6th in the Directors Cup national all-around excellence survey; men placed in the top 10 three times and women six times over the nine years in the Capital One Cup. In the 23-year history of the USA Today survey, the men’s program placed first 11 times; the women’s program placed first five times in the final nine years. UCLA was the first university in the country to win five NCAA men’s and women’s championships in a single year (1981-82). UCLA competes as the Bruins, in colors of blue and gold.

UCLA also has produced a record number of professional athletes such as Kareem Abdul-Jabbar, Troy Aikman, Arthur Ashe, Eric Karros, Reggie Miller, Corey Pavin, Jackie Robinson, and Natalie Williams; and Olympians such as medalists Gail Devers, Ann Meyers Drysdale, Lisa Fernandez, Jackie Joyner-Kersee, Karch Kiraly, Dot Richardson, Peter Vidmar, and Natasha Watley.

**Athletic Facilities**

The major indoor arena at UCLA is the famed Pauley Pavilion, which seats approximately 13,800 for UCLA basketball, volleyball, and gymnastics events. It was the site of the 1984 Summer Olympics gymnastics competition. The adjacent Drake Stadium is the site of UCLA soccer and track and field competitions, and of many outdoor events including the 1991 U.S. Olympic Festival. The Spieker Aquatics Center is home to the UCLA water polo, swimming, and diving teams. The Los Angeles Tennis Center, a 5,800-seat outdoor tennis stadium and clubhouse, was the site of the 1984 Olympic tennis competition. Easton Softball Stadium, which seats 3,100, is the home of the women’s softball team. The Morgan Intercollegiate Athletics Center houses the UCLA Athletic Hall of Fame and the actual personal den of Coach John Wooden. Off-campus facilities include Jackie Robinson Stadium for varsity baseball and the renowned Rose Bowl in Pasadena, home of the UCLA football team.

**Intercollegiate Sports**

UCLA Athletics is a member of the Pac-12 Conference.

Men’s teams have won an overall total of 75 NCAA titles—second highest in the nation—including 19 in volleyball, 16 in tennis, 11 in basketball, 11 in water polo, eight in track and field, four in soccer, two each in golf and gymnastics, and one each in baseball and swimming. Students can participate on the varsity level in baseball, basketball, cross country, football, golf, soccer, tennis, track and field, volleyball, and water polo.

Women’s teams have won an overall total of 43 NCAA titles—second highest in the nation—including 12 in softball, seven in water polo, seven in gymnastics, five in track and field, four in volleyball, three in golf, two each in beach volleyball and tennis, and one in soccer. Students can participate on the varsity level in baseball, beach volleyball, cross country, golf, gymnastics, rowing, soccer, softball, swimming and diving, tennis, track and field, volleyball, and water polo.

**UCLA Alumni Association**

Through 85 years of serving the UCLA community, the UCLA Alumni Association has more than 92,000 members, making it one of the largest alumni groups in the nation. Whether a person is a recent graduate, a pioneer Bruin, or somewhere in between, membership in the Alumni Association is the best way to stay connected to UCLA and its growing excellence.

Membership dues enable the Alumni Association to serve as an advocate on campus and to play the vital role of guardian of the value of every UCLA degree. Dues also support student programs such as Beat SC Bonfire and Rally, I Love UCLA Week, Locks of Love, Dinners for 12 Strangers, Spring Sing, Alumni Day, senior events, career events, and the scholarship program.

The association offers many benefits and services, including alumni career and travel services. Members make friends, pursue lifelong learning, save money, and make a difference. UCLA graduates, Bruin parents, and friends of UCLA are invited to take advantage of all the association has to offer. Offices are in the James West Alumni Center.
Undergraduate Study

Undergraduate students at UCLA can earn bachelor degrees in 140 majors in the College of Letters and Science and seven professional schools: Graduate School of Education and Information Studies; Henry Samueli School of Engineering and Applied Science; Herb Alpert School of Music; Meyer and Renee Luskin School of Public Affairs; School of the Arts and Architecture; School of Nursing; and School of Theater, Film, and Television.

In addition to its record of academic excellence, UCLA offers undergraduate students an extraordinary opportunity to participate in undergraduate research, internships and community service, a variety of undergraduate programs and seminars, and prepares the next generation for leadership roles after graduation.

Shared Governance

Undergraduate degree programs, courses, and requirements are governed by the Undergraduate Council; College and school faculty executive committees; and committees for general education, Writing II, and diversity requirements.

Undergraduate Council

The Undergraduate Council is a standing committee of the UCLA Academic Senate. The council is responsible for the establishment of policy and standards for undergraduate education at UCLA, recommends to the Legislative Assembly programs that lead to new degrees, and delegates authority to College and school faculty executive committees.

Undergraduate Education Division

Led by the senior dean of the College and vice provost for undergraduate education of the university, the division is a campuswide advocate for undergraduate education. Among its goals are to enrich the quality of the academic experience of undergraduate students, help students find meaningful pathways to timely degree completion, and prepare students for life after college. The division oversees the general education curriculum and offers programs including Fiat Lux seminars, cluster courses, and New Student and Transition Programs; as well as the Academic Advancement Program, College Honors programs, Center for Undergraduate Research, and Center for Community Learning.

Undergraduate Admission

Undergraduate Admission
1147 Murphy Hall
310-825-3101

Prospective undergraduate students should give careful thought to adequate preparation in reading, writing, mathematics, laboratory sciences, languages, visual and performing arts, and other subject areas related to a degree objective or major. To be competitive, UCLA applicants need to present an academic profile much stronger than that represented by the minimum UC admission requirements.

Undergraduate Admission invites prospective students to visit UCLA for individual or group tours of the campus. Reservations are required.

Application for Admission

Prospective students apply for admission to UCLA for the fall quarter by completing the UC Application for Admission and Scholarships.

One application is used for all nine UC campuses with undergraduate programs. Students apply to one UC campus with a nonrefundable application fee; an additional fee is charged for each additional campus. Students may only apply to one College or school at UCLA.

When to Apply

All majors and programs in the College of Letters and Science; Graduate School of Education and Information
Studies; Henry Samueli School of Engineering and Applied Science; Herb Alpert School of Music; Meyer and Renee Luskin School of Public Affairs; School of the Arts and Architecture; School of Nursing; and School of Theater, Film, and Television are open for fall quarter. The application filing period is November 1 through 30 of the prior year. See applying for UCLA admission for up-to-date information on application procedures.

Admission Notification

The UC Application Center sends e-mail notices to acknowledge receipt of applications. Subsequently, UCLA Undergraduate Admission notifies students of the admission decision. Fall-quarter freshman applicants are notified in late March; transfer applicants are notified in late April.

Students who are offered admission are asked to submit a Statement of Intent to Register and a Statement of Legal Residence. A nonrefundable deposit, also required at this time, is applied to the student services fee as long as students register in the term to which they are admitted.

Entrance Requirements

Entrance requirements established by the University of California follow the guidelines set forth in the California Master Plan for Higher Education, which requires that the top 12.5 percent of the state’s high school graduates be eligible for admission to the University of California. Requirements are designed to ensure that all eligible students are adequately prepared for university-level work.

Fulfilling the minimum admission requirements does not assure admission to UCLA. Admission is based on demonstrated high scholarship in preparatory work going well beyond the minimum eligibility requirements. Honors-level high school, and Advanced Placement, International Baccalaureate, and transferable college courses are good preparation regardless of the desired major. UCLA offers admission to those students with the best overall academic preparation, viewed in the context of applicants’ academic and personal circumstances, extracurricular and volunteer experiences, and the overall strength of the UCLA applicant pool. For details, see undergraduate admission.

Admission as a Freshman

Students are considered freshman applicants if they have not enrolled in a regular session of any college-level institution since graduation from high school. Students who attend summer session immediately following high school graduation are still considered freshman applicants.

Minimum Admission Requirements

To be considered for admission as a freshman, students must meet the subject, grade-point average (GPA), and examination requirements.

Subject Requirement

The subject requirement, sometimes called A to G requirements, is a sequence of high school academic courses required for admission to the University of California. Each course must be completed with a grade of C or better. The requirement consists of 15 year-long courses, with 11 completed prior to the beginning of twelfth grade. These are the minimum requirements; students should exceed these requirements whenever possible.

A. History/Social Science. Two years of history/social science, including one year of world history, cultures, and historical geography; and one year of U.S. history, or one-half year of U.S. history and one-half year of civics or American government

B. English. Four years of college-preparatory English composition and literature, integrating extensive reading of classic and modern literature and content-rich works of nonfiction; frequent writing, from brainstorming to final paper; and practice listening and speaking with different audiences. No more than one year of ESL-type courses can be used to meet this requirement

C. Mathematics. Three years of college-preparatory mathematics, including or integrating the topics covered in elementary and advanced algebra and two- and three-dimensional geometry. Mathematics courses completed in the seventh and/or eighth grades and approved integrated mathematics courses may be used to meet part or all of this requirement

D. Laboratory Science. Two years of laboratory science that supply fundamental knowledge in two of the following: biology, chemistry, and physics; or one year of either biology, chemistry, or physics, and one year of interdisciplinary science, integrated science, or Earth and space sciences

E. Language Other than English. Two years of the same language—or coursework equivalent to the second level of high school instruction—including emphasis on speaking and understanding, development of awareness and understanding of the cultural context around the target language, practice with reading and composition, and instruction on grammar and vocabulary. Language courses taken in seventh and/or eighth grade may be used to meet part or all of this requirement. American Sign Language and classical languages such as Greek and Latin are acceptable
F. Visual and Performing Arts. One year-long visual and performing arts course selected from dance, drama/theater, music, or visual art

G. College Preparatory Electives. One year (two semesters), in addition to those required in A through F, or one year (two semesters) approved in the elective category

Subject Requirement Summary
- A. History/Social Science 2 years
- B. English 4 years
- C. Mathematics 3 years
- D. Laborotory Science 2 years
- E. Language Other than English 2 years
- F. Visual and Performing Arts 1 year
- G. College Preparatory Electives 1 year

Grade-Point Average Requirement
California residents are eligible for admission to the University of California with a 3.0 grade-point average; nonresidents are eligible with a 3.4 GPA. Minimum eligibility does not guarantee admission to UCLA.

Examination Requirement
All freshman applicants must submit scores from either the ACT with Writing test, the SAT Reasoning Test (last administered in January 2016), or the SAT with Essay test. Only the highest scores from a single sitting are used for admission consideration.

The tests, which are part of the review process, should be taken by December of the senior year. Students should request that test results be sent directly to UCLA.

Admission Selection
UCLA selects students using a carefully designed holistic evaluation process that takes into account an applicant’s achievements, both academic and nonacademic, in the context of the opportunities available. Among other factors, holistic evaluation specifically considers academic grade-point average; performance on standardized tests; the quality, quantity, and level of coursework taken; sustained participation in activities that develop academic and intellectual abilities; leadership and initiative; employment and personal responsibilities; and overcoming life challenges related to personal or family situations.

Because admission requirements and selection criteria may change, freshman applicants should see freshman admission process for the most complete and up-to-date information.

Admission as a Transfer Student
Students are considered transfer applicants if they have enrolled in a regular fall, winter, or spring session at another college or university or in college-level extension courses. (This does not include attending a summer session immediately following high school graduation.) Students may not disregard their college record and apply for admission as a freshman.

In accordance with the California Master Plan for Higher Education, first preference is given to California community college applicants. Applicants transferring from other UC campuses are next in priority, followed by applicants transferring from other colleges and universities. Each applicant receives a comprehensive evaluation, integrating all available information. Students attaining senior standing are generally not admitted.

Academic criteria are as follows: junior-level standing (60 semester/90 quarter transferable units completed) by the end of the spring term before transfer, grade-point average in transferable courses, significant preparation for the major, completion of the English composition and mathematics requirements, and progress toward completion of the Intersegmental General Education Transfer Curriculum (IGETC), another UC campus general education requirements, or UCLA general education requirements.

Because admission requirements and selection criteria may change, transfer applicants should see transfer admission for the most complete and up-to-date information.

Intercampus Transfers
Undergraduate students registered in a regular session at any UC campus (or those previously registered who have not since registered at any other school) may apply for transfer to another campus. Submit the UC Application for Transfer Admission and Scholarships with the required application fees. The filing periods and admission requirements are the same as those for new applicants. Students who have attended another UC campus and wish to be considered for admission to UCLA must have been in good standing when they left that campus. Intercampus transfers are not automatic; students must compete with all other applicants and must meet UCLA transfer admission requirements.

Transfer Credit and Credit by Examination
UCLA awards unit credit to transfer students for certain courses completed at other regionally accredited colleges and universities. To be accepted for credit, the courses must be comparable to those offered at UCLA, as determined by Undergraduate Admission. All courses that meet the criteria are used in determining eligibility for admission.
To convert semester units into quarter units, multiply the semester units by 1.5. For example, 12 semester units × 1.5 = 18 quarter units.

College credit for examinations given by national testing services is generally not allowed, except for the AP Examinations given by the College Board and the International Baccalaureate higher-level examinations. See transfer credit for more information.

International Applicants

To be considered for admission to the University of California, international students must have completed secondary school with a superior average in academic subjects and have earned a certificate of completion that would enable them to be admitted to a university in the home country.

The application for admission, copies of official certificates, and detailed records of all secondary schools attended should be submitted as early as possible after the filing period opens. This allows time for the necessary correspondence and, if students are admitted, to obtain passport visas.

English Language Proficiency

Students whose native language is not English must have sufficient command of English to benefit from instruction at UCLA. First-year undergraduate students who have not otherwise satisfied the Entry-Level Writing requirement and who have not taken the Analytical Writing Placement Examination (AWPE) by the time they enter UCLA must take the AWPE in their first term at UCLA. Results of the AWPE are reviewed to determine whether students should take English as a second language (ESL) courses to fulfill the Entry-Level Writing requirement. If held for the ESL requirement, students must complete the requirement by taking the designated credit-bearing courses.

In addition, students are advised to take the Test of English as a Foreign Language (TOEFL) as a preliminary means of testing their ability. Test results should be sent directly to UCLA Undergraduate Admission.

Second Bachelor’s Degree

By policy, second bachelor’s degrees are not generally granted.

Registration

Registrar’s Office
1113 Murphy Hall
310-825-1091, option 6

Registration consists of paying fees and enrolling in classes.

1. Registration fees and other UCLA charges are due the 20th of each month. BruinBill accounts can be viewed through MyUCLA.

2. Enrollment in classes is completed through MyUCLA. Students must complete both processes by the established deadlines to be officially registered for the term.

Paying Fees

Details on fee payment, enrollment procedures, and deadlines are on the Registrar’s website.

Electronic Billing

BruinBill accounts are administered electronically (e-bill) through MyUCLA. Financial activity is displayed for the current term, as well as account activity for the last 24 months. Students can pay their BruinBill account electronically using an electronic check with no fee; or with American Express, Discover, MasterCard, and VISA credit cards with a fee.

Annual Undergraduate Fees

Although the exact cost of attending UCLA varies, there are some fees that all UCLA students must pay. UCLA does not charge on a per-unit basis for undergraduate students in regular academic terms.
Each entering and readmitted student is required to submit a Statement of Legal Residence. Students classified as non-residents of California must pay nonresident supplemental tuition in addition to registration fees. Legal residents of California are not required to pay nonresident supplemental tuition. For a definition of residence and nonresidence, see Appendix A.

The Student Services Fee covers student expenses such as counseling, facilities, registration, graduation, and health services. The fee is charged whether or not students make use of these services.

**Instructional Enhancement Initiative Fee**

The instructional enhancement initiative (IEI) fee supports technology in undergraduate education. The fee helps support course websites and online tools, computer laboratories, and software.

**Course Materials and Services Fees**

The College of Letters and Science and each school are authorized to assess course materials and services fees. Some of these fees are assessed based on actual enrollment at the end of the fourth week of classes. Students are responsible for ensuring that all study list errors and omissions are corrected prior to the end of the second week. All students in a course with an approved course materials and services fee are assessed the fee, regardless of major. The fee is nonrefundable. Students who are approved to add a course after the third week of instruction are required to pay the course materials and services fee for the entire term.

Fee amounts are available on the Registrar’s course fees web page.

**Miscellaneous Fees**

Miscellaneous fees include charges for late registration fees payment. Late fees also apply if students file their study list late or do not pay BruinBill balances on time. Fees are charged if any check is returned by a bank for any reason. Charges are assessed for most petitions and other special requests. Study list, document and service, transcript-related, and degree and diploma fees are published on the Registrar’s website.

**Student Health Insurance Fee**

All undergraduate students are automatically assessed for and enrolled in the University of California Student Health Insurance Plan (UCSHIP) as a condition of registration at UCLA. Continued enrollment in a qualified health insurance plan is mandatory during all registered terms. UCHIPS covers medical, vision, dental, and behavioral health services. The UCHIPS fee is billed each term along with other UCLA fees. UCHIPS fulfills all requirements mandated for a qualified health insurance plan as defined by the University of California. The Ashe Student Health and Wellness Center is the primary health-care provider for UCHIPS, and where all nonemergency medical care is initiated.

Nonregistered students (those who withdraw, or are on approved leave or planned academic leave) may have access to UCHIPS services under certain conditions. Contact the Ashe Center to learn more.

**UCSHIP Waiver**

Students may waive UCHIPS if they maintain active enrollment in a qualified health insurance plan that meets all established requirements, apply for a waiver within established deadlines each term, and correctly complete the online waiver form. Students are responsible for providing complete and accurate information. Third-party individuals may not waive UCHIPS for a student. Waivers must be submitted before the term fees payment deadline. Deadlines are strictly enforced, and no refunds are issued after the deadline. For more information, see the Ashe insurance web page.

**Fee Refunds**

Students who formally withdraw from UCLA may receive partial refunds of fees. For more information, see Withdrawal in the Academic Policies chapter. Consult the Registrar’s refunds web page for policy details and specific refund deadlines for each term.

**Fee Waiver Requests**

Late registration, processing, and penalty fees are waivable on request in writing to the office assessing the fees only if they were incurred through the fault of UCLA, or because a student suffered sudden and debilitating injury or accident.

**Reduced Fee Programs**

UCLA recognizes the need for part-time study in special circumstances. Undergraduate resident students—when properly approved by the dean of their College/school for enrollment in 10 or fewer units—may be eligible for a one-half reduction in tuition. The reduction is based on total units enrolled as of Friday of the third week of classes. Students should contact their College or school for eligibility requirements. Students must file a Fee Reduction Request with the academic dean’s office by Friday of the second week.
Except for these qualified and approved part-time students, there is no reduction in tuition, or in student services; Ackerman Student Union; Wooden Center; student programs, activities, and resources complex (SPARC); or Undergraduate Students Association fees.

Undergraduate nonresident students with College or school approval for enrollment in 10 units or fewer pay only half the nonresident supplemental tuition fee. Students must file a Fee Reduction Request with the College or school office by Friday of the second week of classes for the applicable term.

Full-time UC employees may apply for a reduction of tuition and the student services fee at their campus human resources office. Students who use the part-time fee reduction may not also use the UC employee reduction.

Fees Notice
All fees are subject to change without notice by the Regents. Current academic year fees and updated information is available on the Registrar’s fees web page.

Class Enrollment
New students should see an academic counselor before enrolling in classes (counseling is required in the Henry Samueli School of Engineering and Applied Science). Counselors help new students select courses and formulate a schedule tailored to their academic interests or degree objectives.

New Student Orientation takes new students through a step-by-step process designed to ensure that they enroll in an effective program.

Enrollment
Students enroll in classes through MyUCLA during assigned times—called enrollment appointments—when they are allowed to enroll. The Class Planner feature allows students to create class plans prior to enrollment, share plans with counselors, and quickly add classes during their enrollment appointment. Students use the Find a Class or Section feature to search the Schedule of Classes and add available classes to their class plan or study list.

MyUCLA is also used to view enrollment appointments; drop classes; change grade type and number of units; exchange classes; and view the study list, which includes information on class meeting times, final examinations, classmates, grades, textbooks, and class websites. For more information, see Registrar’s study list and enrollment policies web pages.

For classes that require written approval or specialized processing, students may enroll in person Monday through Friday from 9 a.m. to 4 p.m. at 1113 Murphy Hall.

Study List
A study list is the record of courses in which a student is enrolled for the term. At 11:59 p.m. on Friday of the second week of instruction the study list of enrolled courses becomes official, and all wait lists are eliminated. Students should verify their study list through MyUCLA after each enrollment transaction. Students are responsible for all courses and the grading basis as listed on MyUCLA, and cannot receive credit for courses not listed.

After Friday of the second week, most changes to the official study list can be made with a fee through MyUCLA. Some changes require an Enrollment Petition along with approval signatures.

See the Registrar’s study list web page for deadlines and complete instructions.

Errors or omissions should be corrected before the College or school deadlines for changes by petition. Unapproved withdrawal from or neglect of a course entered on the study list results in a failing grade.

Wait List
Some departments establish wait lists for classes that are full. If a student in the class drops, the seat is filled by a student on the wait list. Students can check enrollment status through MyUCLA. Position on a wait list does not indicate enrollment. Students on a wait list should not assume they will be added to a class.

Wait lists are maintained through Friday of the second week of instruction unless a department deletes them earlier.
Concurrent Enrollment
Concurrent enrollment—defined as taking courses during regular sessions for credit at UCLA and, at the same time, at a non-UC institution, including UCLA Extension—is not permitted except in extraordinary circumstances; and no credit is given for such courses unless the approval of the UCLA College or school has been obtained by petition prior to enrollment.

Intersegmental Cross-Enrollment Program
Undergraduate students enrolled in any campus of the California community colleges, the California State University, or the University of California may enroll without formal admission in a maximum of one course per academic term at a campus of either of the other systems at the discretion of the appropriate campus authorities on both campuses on a space-available basis per the California Education Code sections 66755 and 66756 (amended by California Senate Bill 361 passed in 1999). Enrollment in pre-college courses is excluded.

UCLA students qualify for intersegmental cross-enrollment if they meet all the following requirements:

1. Complete at least one term at UCLA as a matriculated student
2. Enroll for a minimum of 6 units for the current term
3. Earn a grade-point average of 2.0 (C) for work completed
4. Pay appropriate tuition and fees at UCLA for the current term
5. Complete appropriate academic preparation as determined by the host campus
6. Have California resident status

Obtain a concurrent enrollment application from the College or school. An administration fee is charged for each academic term such enrollment is requested.

Intercampus Visitor Program
Undergraduate students enrolled at one campus of the University of California may have the opportunity to attend another UC campus for one quarter or semester on the Intercampus Visitor Program. Students should observe the application deadlines. Applications are reviewed by a student’s College or school.

Simultaneous UC Enrollment
Undergraduate students may enroll simultaneously in courses offered by another UC campus. Eligible students must be registered (fees paid), in good standing, and enrolled in at least 12 units at UCLA. Students may simultaneously enroll in no more than one UC host-campus course not to exceed 6 units. Before attending the host campus, both campuses must give approval. Approval to enroll simultaneously on another UC campus does not guarantee credit toward specific degree or general education requirements. Application of host-campus courses to UCLA graduation requirements is determined by the College or school. Details are on the application form. Obtain applications and directions for submitting forms from the following offices:

School of the Arts and Architecture
Office of Student Services, 2200 Broad Art Center

Graduate School of Education and Information Studies
Office of Student Services, 1002 Moore Hall

Henry Samueli School of Engineering and Applied Science
Office of Academic and Student Affairs, 6246 Boelter Hall

College of Letters and Science
College Academic Counseling, A316 Murphy Hall

Herb Alpert School of Music
Office of Student Affairs, 1642 Schoenberg Music Building

School of Nursing
Student Affairs Office, 2-147 Factor Building

Meyer and Renee Luskin School of Public Affairs
Student Services Office, 3250 Public Affairs Building

School of Theater, Film, and Television
Student Services Office, 103 East Melnitz Building

Henry Samueli School of Engineering and Applied Science
Office of Academic and Student Affairs, 6246 Boelter Hall

College of Letters and Science
College Academic Counseling, A316 Murphy Hall

Meyer and Renee Luskin School of Public Affairs
Student Services Office, 3250 Public Affairs Building

Herb Alpert School of Music
Office of Student Affairs, 1642 Schoenberg Music Building

School of Nursing
Student Affairs Office, 2-147 Factor Building

Meyer and Renee Luskin School of Public Affairs
Student Services Office, 3250 Public Affairs Building

School of Theater, Film, and Television
Student Services Office, 103 East Melnitz Building

The application is also available on the Registrar’s simultaneous enrollment web page.
Immunization Requirements

UCLA requires that all incoming students be vaccinated against or show immunity to multiple infectious diseases consistent with guidelines of the American College Health Association, California Department of Public Health, and U.S. Centers for Disease Control and Prevention (CDC). These requirements help protect the health of students and the entire campus community. Students submit their immunization history to the Ashe secure patient portal. See immunization requirements for more information.

Financial Support

Financial Aid and Scholarships
A129J Murphy Hall
310-206-0400

The priority deadline for filing all undergraduate financial aid applications for the regular academic year is March 2. Applications received after the deadline are considered late, and limited aid is offered.

The Financial Aid Handbook is available on the Financial Aid and Scholarships forms and publications web page.

Application for Financial Aid

Students do not need to come from low-income families to qualify for financial aid. However, those who apply for need-based aid—including grants, loans, work study, and some scholarships—must demonstrate financial need, which is defined as the difference between the cost of attending UCLA and the amount that they and their families should be able to contribute.

Financial aid is not available for international students.

Students attending UCLA summer sessions, summer travel programs, summer institutes, or UC cross-campus summer programs and in need of financial aid must submit a summer financial aid application in addition to the Free Application for Federal Student Aid (FAFSA). Summer applications are available on MyUCLA (in the Finances and Jobs section).

To qualify for aid, students must also comply with Financial Aid standards for satisfactory academic progress as defined in Appendix A.

Free Application for Federal Student Aid

To evaluate financial need, all citizen and permanent resident students who apply for aid must provide financial information on the Free Application for Federal Student Aid (FAFSA). If students are financially independent according to the federal financial aid guidelines, their own financial circumstances are analyzed rather than those of their parents. UCLA expects that students and their families bear as much of the cost of a student’s education as their circumstances permit.

The information reported on the FAFSA is used to apply for all federally funded programs, funds administered by UCLA, and the Cal Grant program administered by the California Student Aid Commission. Loans that are not need based are also available to all students who complete the FAFSA.

Students should complete the FAFSA online by March 2. To ensure that UCLA receives FAFSA information, students should enter federal school code 001315 in the appropriate search field.

California Dream Act Application

Students who are not citizens or permanent residents but who are eligible for Assembly Bill 540 nonresident fee waivers may be eligible to qualify for scholarships, UCLA grant aid, and additional state aid if they complete a California Dream Act application. The priority filing deadline for the Dream application is March 2.

Prospective Student Scholarships

In addition to using the FAFSA and Dream Act application to apply for aid, prospective students who apply to UCLA with the UC Application for Admission and Scholarships may use the admission application to apply for undergraduate scholarships. Once admitted, students may fill out the Financial
Aid and Scholarships undergraduate scholarship application to broaden their scholarship opportunities.

Continuing Student Scholarships

Continuing students can access and submit the annual Financial Aid and Scholarships undergraduate scholarship application. Students are able to submit the application year round, although early submission is advisable. The Scholarship Resource Center can also help with a thorough search for outside scholarships.

Types of Financial Aid

The four basic types of aid are scholarships, grants, loans, and work-study employment. The Financial Aid and Scholarships office usually offers a combination of different award types to most applicants.

Aid can be merit based—awarded on the basis of standards such as academic achievement; or need based—awarded on the basis of financial need as determined by the financial aid application. Scholarships managed by the Financial Aid and Scholarships office are based on merit and need. Grants, loans, and work study are generally need based.

Scholarships

The undergraduate scholarship program at UCLA rewards academic excellence and assists with the expenses of an undergraduate education.

Scholarship awards range from $100 to $10,000 per year, and require the student to submit a new scholarship application on an annual basis. Financial need is not required for most scholarships at UCLA.

Entering students apply for scholarships on the UC Application for Admission and Scholarships. Once admitted to UCLA, new students have the opportunity to add additional information to their scholarship profile, to allow various departments across campus to consider them for other scholarships that may open throughout the academic year. Continuing students are encouraged to submit the scholarship application as early as May 1 each year. However, applications are accepted year-round.

In addition to applying for UCLA scholarships, students are encouraged to apply for outside scholarship funding through search engines such as UCLA Scholarship Resource Center, Cappex, Chegg, College Board, Fastweb, NICHE, Peterson’s, SallieMae, Scholarship Monkey, and UNIGO.

Regents Scholarships

One of the highest honors conferred on an undergraduate student is the Regents Scholarship, which is awarded for four years to students entering from high school and for two years to entering juniors. A UCLA faculty committee selects Regents Scholars on the basis of exceptional academic achievement and promise. Scholars receive a yearly honorarium if they have no financial need. Scholars who establish financial need by filing the FAFSA or California Dream Act application receive a combination of grants and scholarships to cover the amount of their need. Regents Scholars also receive special privileges.

Alumni Scholarships

Since 1936, UCLA Alumni have supported Bruins through merit-based scholarships. The Alumni Scholarships Program is open to all eligible students.

Alumni scholarships are awarded through an application screened by alumni volunteers; final selection is made by Financial Aid and Scholarships. By completing one application, students are considered for several scholarships offered through the alumni program. Students need not be related to UCLA alumni to apply. Alumni scholars’ benefits include getting involved in campus events and organizations, building leadership skills, access to leadership development programs and academic enrichment services, and networking with UCLA alumni.
Prospective first-year and transfer students apply through the UCLA prospective undergraduate scholarship application. Applications open in early January each year and close a few weeks before admission decisions are released. Initial award offers are distributed within one to two weeks of admission decisions. Applicants who do not receive an offer before the Statement of Intent to Register deadline may still receive one during the summer.

**Merit-Based Scholarships for Prospective Students**

Financial awards for prospective first-year students range from $6,000 to $20,000 over four years; for prospective transfer students, $6,000 over two years. Applicants must attend UCLA beginning the fall quarter immediately after the application cycle. To maintain eligibility, students submit a compliance agreement, complete 30 hours of renewal service, and attend an alumni event.

**Need-Based Scholarships for Alumni Scholars**

Awarded alumni scholars may receive up to $5,000 each year in need-based aid, in addition to their merit award, by submitting information on the Free Application for Federal Student Aid (FAFSA) or California Dream Act application, and receiving a need-based financial aid package.

Incoming scholars receive this aid automatically, based on their FAFSA or Dream Act application. Continuing scholars apply for a Wasserman alumni grant using the continuing student undergraduate scholarship application. Continuing scholars must also meet several enrollment and grade criteria.

**Merit-Based Scholarships for Seniors**

The True Bruin Distinguished Senior Award (TBDSA) is awarded to deserving students who exemplify the True Bruin values of integrity, excellence, accountability, respect, and service. Recipients receive a one-time scholarship of up to $5,000. The scholarship is open to any UCLA senior—not just current alumni scholars—who meets eligibility requirements. Seniors apply for the TBDSA using the fall undergraduate scholarship application.

For more information, see Alumni Association scholarships.

**ROTC Scholarships**

ROTC scholarships are awarded on a competitive basis to U.S. citizens regardless of parents’ income. Scholarships supply tuition, a book allowance, fees, and a tax-free monetary allowance during the academic year. Scholarship applications and information are available online for the Air Force, Army, and Navy/Marine Corps. Completed four-year scholarship applications should be submitted by December 1 (Air Force), January 31 (Navy/Marine Corps), or February 28 (Army) of the year preceding college matriculation. Two- (Army and Navy/Marine Corps) and three-year scholarship applications are also available, and are considered when received.

**Grants**

Grants are need-based awards that do not need to be repaid as long as the student maintains eligibility. Depending on funding availability and awarding policy, a financial aid package may include some of the grants listed here.

**Federal Pell Grants**

Federal Pell Grants are based on exceptional need. They are awarded to undergraduate students who are U.S. citizens or eligible noncitizens and who have not earned a bachelor's degree. Students who file the FAFSA are automatically considered for a Pell Grant. Eligibility is determined by the federal government. Award amounts depend on a student’s Estimated Family Contribution (EFC) and whether enrollment is full time or below. Awards are reduced for students enrolled less than full time.

**Cal Grants A and B**

California residents who attend at least half-time are eligible to apply for a California Student Aid Commission Cal Grant award. The FAFSA or California Dream Act Application and GPA Verification Form are the official applications for these programs. Cal Grant A awards assist low- and middle-income students with tuition and fee costs. Eligibility is based on need and grade-point average. Cal Grant B awards are intended to assist low-income and disadvantaged students with living expenses, books, supplies, and transportation costs. First-year awards may also cover registration fee costs. Renewal award recipients receive registration fee assistance. New awards are limited to students who have completed no more than one full-time semester or two full-time quarters or 16 semester units of part-time study or the equivalent. Students awarded Cal Grant B receive only the stipend portion in their first year. Amounts are subject to change based on the California budget process. If tuition and school services fees increase, CAL Grant fee-paying award will increase correspondingly. Awards are reduced for students enrolled less than full time.

**University Grants**

University grants offer financial assistance from state funds to eligible applicants who meet the FAFSA or Dream Act application priority deadline. Awards range from $100 to over $25,000 and are based on student need. All undergraduate students who are U.S. citizens, eligible noncitizens, or noncitizens eligible for AB 540 waivers and who apply on time are considered. University grant eligibility is subject to
availability of funding. Grants may be exhausted before the end of the academic year. Awards are reduced for students enrolled less than full time.

**University Grants to Purchase UCSHIP**

These grants are based on need, and awarded to on-time FAFSA and California Dream Act applicants to cover the cost of the University of California Student Health Insurance Plan (UCSHIP). Students who waive UCSHIP are not eligible for these grants.

**Federal Supplemental Educational Opportunity Grants**

Federal Supplemental Educational Opportunity Grants (FSEOG) are awarded to undergraduate students with financial need. Awards range from $100 to $4,000. Recipients must be U.S. citizens or eligible noncitizens. Preference is given to Pell Grant and Cal Grant recipients. Only on-time, grant-eligible FAFSA applicants are considered.

**Loans**

Loans allow students to postpone paying some of the costs of their education until they have completed school. A financial aid offer includes a long-term, low-interest loan. Borrowers must realize their commitment and responsibility to repay according to repayment schedules. Before accepting a loan, students should assess their total educational debt and ability to repay after graduation. UCLA makes every effort to assist students during the repayment of their obligation; but UCLA services, including registration and the release of official transcripts, are withheld if the loan becomes delinquent. Seriously delinquent accounts are referred to a professional collection agency for action.

All first-time borrowers must complete a debt management session at [student loans](#) before funds are released. Parent and graduate PLUS borrowers whose loans are approved on appeal or with an endorser are also required to complete a mandatory counseling session at [federal student aid](#) in addition to the debt management session.

All loan recipients must complete an exit interview with the Loan Services Office, A227 Murphy Hall, before leaving UCLA for any reason. This interview helps students understand their loan agreement and their rights and responsibilities. If students fail to participate in an exit interview, UCLA places a hold on their academic records and registration materials. Exit information is mailed to students by the Loan Services Office after receipt of notification of separation from UCLA.

**William D. Ford Federal Direct Loan Program**

**Direct Loans**

Direct loans are low-interest subsidized and unsubsidized loans financed by the U.S. Department of Education. Subsidized direct loans are awarded to undergraduate students who have demonstrated financial need. Interest rates are fixed, and adjusted annually by the U.S. Department of Education; contact Financial Aid and Scholarships for additional information. Interest accrues immediately after students graduate or drop below half-time enrollment. Repayment begins six months after students leave school or drop below half-time enrollment.

Unsubsidized direct loans are available to undergraduate, graduate, and professional students who are U.S. citizens or eligible noncitizens regardless of income. Interest accrues from the date of disbursement, but students can avoid the extra costs of accrual by making regular interest payments while in school.

**Direct PLUS Loans**

Direct PLUS loans are designed to help graduate students, and parents of undergraduate students, meet the total cost of education. Graduate students and parents may be eligible to borrow up to the cost of education for the academic year, less any other financial aid received. This loan is available only to borrowers who do not have adverse credit histories. The interest rate is fixed, and adjusted annually by the U.S. Department of Education. Contact Financial Aid and Scholarships for information on current interest rates. Borrowers may want to consult a tax adviser to see if the interest is tax deductible.

**Private Loans**

Private loans are available to students who have received the maximum award amounts under the Direct Loan Program and require additional funding. These loans are sponsored by banks and private lending institutions. Interest rates and re-payment schedules vary. These loans must be certified by the Financial Aid and Scholarships office before funds can be disbursed. A list of private lenders that UCLA borrowers have used in the past is available at Financial Aid publications.

**Short-Term Loans**

Students need not be receiving financial aid to apply for a short-term loan. They may borrow up to $200 for immediate emergency needs; the amount is repayable on the 20th of the month following the month in which the loan was made. To qualify, applicants must be registered UCLA students with satisfactory loan repayment records. Applications are available from the Loan Services Office, A227 Murphy Hall.
Work-Study Program

The Federal Work-Study Program (FWS) is intended to stimulate and promote part-time student employment, particularly for students from low-income families who are in need of earnings to pursue their studies.

Under FWS, the federal government pays a portion of the student’s wage and the employer pays the balance. Through this program, students may work up to 20 hours per week for UCLA, government agencies, or public and private nonprofit agencies. Students employed through FWS supply essential services to UCLA and community, and have the opportunity to hold jobs that may relate to their educational objectives or enable them to gain valuable work experience.

Majors and Degrees

Students may choose from 140 majors in a wide variety of disciplines offered through the undergraduate degree programs of the College of Letters and Science; Graduate School of Education and Information Studies; Henry Samueli School of Engineering and Applied Science; Herb Alpert School of Music; Meyer and Renee Luskin School of Public Affairs; School of the Arts and Architecture; School of Nursing; and School of Theater, Film, and Television. For a complete list of major programs and degrees, see the Majors and Degrees chapter.

Planning a Major

New students should obtain academic counseling before enrolling in classes at UCLA. Counselors can help new students formulate degree objectives based on interests, abilities, and career goals. As students begin to decide on a major, counselors can help them start fulfilling College or school requirements as well as the department requirements necessary for completion of the degree program.

Changing Majors

Changing majors requires the approval of the department of the new major. Changing majors involving a change in College or school requires the approval of the College or school. To change majors, obtain a Program Change Petition online or at the department office.

Capstone Majors and Programs

Capstones are designed to be the culmination of a UCLA undergraduate experience. Capstones range from yearlong sequences of courses or tutorials to a single seminar, and from honors theses to comprehensive seminar projects or internships. They may be based in tutorials, laboratories, advanced courses, or seminars, and may include either individual or team-based projects. Requirements vary among the college and schools. Capstone majors and programs are identified throughout the Curricula and Courses chapter. See capstone initiatives for more information.

Capstone Options

Four types of capstone options represent different expectations for student engagement and independence. Some students might complete capstones of more than one type. For example, having completed an advanced seminar, a student might decide to engage in independent study or an honors project.
Honors Thesis or Project
In a multi-term program, students conduct independent research, laboratory, writing, or other work guided or mentored by faculty. The program culminates in a formal thesis or project that can be granted department honors.

Individual Major
Highly motivated students who find that no single major accommodates their specific interest in a given subject may propose their own major. Proposals are designed with faculty guidance and sponsorship, and thoroughly examined for cogency, completeness, and academic merit.

Individual Project
Students may propose an individual project or paper as the culmination of an upper-division contract course they create with their instructors.

Senior Seminar or Advanced Project
Students may enroll in an advanced senior seminar or project course that requires a comprehensive term paper, performance, or product design.

Learning Outcomes
Learning outcomes describe what students should know, be able to do, and value by the end of their undergraduate educational program. There are four types of outcomes: attitude/value, behavior, knowledge, and skill. They define degree-program goals through focus on student experience and achievement, and allow faculty to evaluate whether students have mastered those goals. Each degree program establishes its own learning outcomes, develops methods for assessment, and uses the results to enhance and improve student learning. Outcomes also help inform prospective and current students about a program’s purpose and value. See learning outcomes for more information.

Degree Requirements
As soon as they are accepted for admission to UCLA, new students should learn the requirements necessary to receive a bachelor’s degree and begin planning an appropriate program of study. All undergraduate students must satisfy UC requirements, College or school requirements, and department requirements.

University Requirements
The University of California has established two requirements that all undergraduate students must satisfy in order to graduate: Entry-Level Writing or English as a Second Language (ESL), and American History and Institutions. It is each student’s responsibility to see that these requirements are fulfilled.

Entry-Level Writing
Because proficiency in English composition is so important to successful performance in many courses, Entry-Level Writing is the only requirement for graduation that students must satisfy before entering UCLA or during their first year in residence. They may meet this requirement by one of the following methods:

- Score 3, 4, or 5 on one of the College Board Advanced Placement Examinations in English
- Score 5, 6, or 7 on one of the International Baccalaureate Higher Level English A Examinations, or score 6 or 7 on one of the International Baccalaureate Standard Level English A Examinations
- Score 680 or better on the SAT Evidenced-Based Reading and Writing
- Score 680 or better on the SAT Reasoning Test, Writing (last administered in January 2016)
- Score 30 or better on the ACT English Language Arts test
- Score 30 or better on the ACT Combined English/Writing test (last administered in June 2015)
- Present transfer credit for an acceptable college-level course in English composition (passed with a grade of C or better) at another institution
- Receive a composite score of 8 or higher on the University of California Analytical Writing Placement Examination (all freshmen from California high schools should have taken the examination during the month of May before they enrolled; others take an examination at UCLA early in their first term)

If students do not meet the requirement in one of the ways described above, Academic Senate regulations require them to enroll in a course determined by performance on the Analytical Writing Placement Examination as early as possible during their first year in residence. Each course must be taken for a letter grade and passed with a grade of C or better. Students receiving a final grade of C– or worse must repeat the course during their next term in residence.

The Entry-Level Writing requirement must be satisfied before enrolling in any course that satisfies the Writing I requirement (English Composition 3, 3D, 3DS, 3E, 3SL). For more information, see Entry-Level Writing.

English as a Second Language
All entering UCLA undergraduate students whose native language is not English and who have not otherwise satis-
fied the English as a Second Language (ESL) requirement, or who are directed to do so by UCLA Undergraduate Admission, are required to take either the **Analytical Writing Placement Examination** (AWPE) for first-year undergraduate students or the **English as a Second Language Placement Examination** (ESLPE) for transfer students. Neither the Test of English as a Foreign Language (TOEFL) nor any other English proficiency test can be submitted or accepted in lieu of the AWPE or ESLPE. Students may take the AWPE or ESLPE once only. Unauthorized retakes of the examinations result in an invalid examination score.

First-year undergraduate students who have not otherwise satisfied the Entry-Level Writing requirement and who have not taken the AWPE by the time they enter UCLA must take it in their first term at UCLA. Results of the AWPE are reviewed to determine whether students should complete the ESL requirement prior to satisfying the Entry-Level Writing requirement. If held for the ESL requirement, students must complete the requirement by taking the designated credit-bearing courses.

Transfer students who have completed the Writing I and Writing II equivalent courses at their transfer institution may still be held for the UCLA ESL requirement at the discretion of UCLA Undergraduate Admission. This includes, but is not limited to, all students who received a grade below B in either of these equivalent courses. Transfer students held by UCLA Undergraduate Admission to the ESL requirement must take the ESLPE prior to or during the term in which they are to register. Failure to sit for the ESLPE results in a hold on student records. Depending on the ESLPE results, students may be required to successfully complete one or more credit-bearing courses in the English Composition series.

Students must begin taking courses during their first term in residence at UCLA and must complete each course in sequence with a grade of C or better (C– or a Passed grade is not acceptable). All units are applied toward graduation but cannot be applied toward general education requirements.

**American History and Institutions**

The American History and Institutions requirement is based on the principle that a U.S. citizen attending an American university should understand the history and public institutions of the U.S. under the federal and state constitutions. Candidates for a bachelor’s degree must satisfy the American History and Institutions requirement by one of the following methods:

- Complete a year-long course in American history or American government, or a one-year combination of both, in high school with an average grade of B or better
- Complete any one of the following UCLA courses with a grade of C or better, or a grade of Passed:
  - Asian American Studies M171D
  - Chicana and Chicano Studies M159A, M159B, CM182, M183
  - Economics 183
  - Gender Studies M147B, M147D
  - Study of Religion M142C
  - Equivalent courses completed in UCLA Extension or at another college institution, and accepted by the Board of Admissions, may be used to fulfill the requirement
  - Present a satisfactory result of the requirement, by examination, as administered at another college or university within the state
  - Score 500 or better on the SAT Subject Test in U.S. History
  - Score 3, 4, or 5 on the College Board Advanced Placement Test in American History

Candidates for an instructional credential, but not for a degree, must take one of the following courses: History 143A, 143B, Political Science 145B, or 145C.

Students attending UCLA on an F-1 or J-1 visa may petition for exemption from this requirement by showing proof of temporary residence in the U.S.

**College or School Requirements**

The College and each school with undergraduate programs establish their own degree requirements. These generally include a unit requirement that defines the total number of units to be completed; scholarship requirement that defines a minimum grade-point average; residence requirement that defines the amount of study that must be undertaken in residence at the UCLA campus; and course requirements that may include general education courses, reading and composition courses, foreign language courses, and core courses for the field of study. See the **College and Schools** chapter for details on requirements set by the College and by each of the schools.

**Department Requirements**

Each department or interdepartmental program sets its own degree requirements in addition to those established by the College or school. Department requirements generally include preparation for the major, which are lower-division courses designed to prepare students for advanced study;
and the major, which are upper-division course requirements. Requirements for each department are listed in the Curricula and Courses chapter.

Degree Policies
Students are responsible for degree policies and regulations as described in the Academic Policies chapter.

Undergraduate Research

Undergraduate Research Centers
The Undergraduate Research Centers (URC) assist students in the humanities, arts, social sciences, and behavioral sciences (URC Humanities, Arts, and Social Sciences, A334 Murphy Hall) and in science, engineering, and mathematics (URC Sciences, 2121 Life Sciences) by supporting scholarly, critical, and creative research. The centers offer mentoring and tutorials, manage the Student Research Program (SRP), and administer summer research programs, academic year research programs, research stipends, and scholarships. They also sponsor two student-run publications—the Undergraduate Science Journal and the Aleph humanities and social sciences journal; organize campuswide conferences and events; and coordinate the Student Research Forum that promotes a broader and deeper understanding of university research, and helps entry-level student researchers define their place in the larger research community. See undergraduate research for more information.

Student Research Program
Administered by each Undergraduate Research Center, the Student Research Program (SRP) offers undergraduates, especially lower division and first-year transfer students, opportunities to become actively involved in the UCLA research community. Working with faculty members on research projects, SRP students gain valuable research training and experience, as well as preparation for advanced undergraduate work and graduate school. Students enroll in course 99 in any department and receive 1 unit of course credit for each 30 hours of research completed during the term. Science, engineering, and mathematics students should see sciences SRP. Humanities, arts, social sciences (HASS), and behavioral sciences students should see HASS SRP.

Undergraduate Research Fellows Program
The Undergraduate Research Fellows Program (URFP) is available on a competitive basis and by application for undergraduate students seeking entry-level research experience. Funded students typically participate in two terms of research (winter and spring quarters) through SRP. Science, engineering, and mathematics students should see sciences URFP. Humanities, arts, social sciences (HASS), and behavioral sciences students should see HASS URFP.

Undergraduate Research Scholars Program
The Undergraduate Research Scholars Program (URSP) offers scholarships from foundations, industry, and individual donors to continuing students (junior-level standing and higher). Applicants must have a strong commitment to research and must complete an honors thesis or a comprehensive independent studies project during the senior year. Applications are accepted during spring quarter for the following academic year. Science, engineering, and mathematics students should see sciences URSP. Humanities, arts, social sciences (HASS), and behavioral sciences students should see HASS URSP.

Academic Research Courses
All academic departments offer undergraduate research courses that allow students to obtain academic credit for their research experiences. Students enrolled in the courses are often upper division students with Student Research Program experience. Department requirements for credit vary, but all departments require a research proposal to enroll in upper division tutorial courses and a research
report to receive credit when the research project is completed. Senior students working toward honors or highest honors in many majors must complete a two-term (or more) research project that culminates in an honors thesis. Arrangements must be made with a faculty mentor before students can register for the course. See the undergraduate adviser in the department of interest for more information.

Internships and Service Programs

Rewarding opportunities in the form of internships, community service work, industry and business positions, local, national, and international programs, and community-based teaching furnish students with insights into a range of professional fields and the chance to apply academic theories firsthand.

Career Center

Internship and International Opportunities

The UCLA Career Center, located in the Strathmore Building, offers advice and leads for internships, fellowships, and other experiential learning opportunities in the U.S. and abroad. Many helpful resources are featured online. Options for current students and graduates include teaching or volunteering abroad, research or fieldwork, and internships in almost every occupation or industry. The UCLA Career Peers advise students on search techniques to identify relevant employers and programs. All career advisers and career peers also offer support for students eager to gain hands-on experience. See internships.

DC Fellows Summer in Washington Program

The DC Fellows summer internship program supports students from all majors and class levels who are seeking summer work experience in Washington, DC. Assignments are available with elected officials, government agencies, public interest groups, international organizations, media, and a wide range of public and private sector organizations. The fellows program offers advice on searching and applying for internships, as well as housing support and the option to apply for alumni-sponsored scholarships.

Quarter in Washington, DC

The Center for American Politics and Public Policy (CAPPP) selects undergraduates each fall, winter, and spring to participate in its Quarter in Washington Program. The program offers an exciting opportunity to combine UC courses with research and field experience.

Students live at the UC Washington Center for up to 11 weeks, dividing their time between coursework and a part-time internship placement. They can earn credit in multiple majors. The core course, a research development seminar, is multiple-listed in political science, sociology, public affairs, communication, and history, and is eligible for College Honors consideration. The internship placement fulfills the internship requirement for the Community Engagement and Social Change minor. At least one course in a subject other than political science, such as economics or history, is usually offered each quarter. All courses take advantage of the unique resources of Washington for study and research.

UC Washington Center administrators help students find a field placement that complements a substantial research project. Placements have included C-SPAN, the Human Rights Campaign, the Department of Justice, Smithsonian museums, the Wilson Center, and various members of Congress.

Reserve Officers’ Training Corps

The University of California, in accordance with the National Defense Act of 1920 and with the concurrence of The Regents, offers courses and programs in military training. This voluntary training allows students to qualify for an officer’s commission in the Army, Navy, Air Force, or Marine Corps while completing their college education. ROTC courses are offered by three departments within the College of Letters and Science: Aerospace Studies (Air Force), Military Science (Army), and Naval Science (Navy and Marine Corps). Equipment, uniforms, and textbooks are supplied. The programs supply a monthly stipend to eligible students while on contract and additional financial benefits, including tuition and fee scholarships, to qualified students. Individual programs are described in the Curricula and Courses chapter.

Teaching Opportunities

Exciting teaching programs prepare undergraduate students for careers in teaching or education and allow them to serve in classrooms in the Los Angeles area. Many teaching opportunities are offered in conjunction with the Graduate School of Education and Information Studies (GSE&IS), which helps coordinate programs leading to various instructional credentials or to graduate study.
Education Studies Minor
The Education Studies minor offers a sequence of core and elective courses designed to introduce students to key issues, research, and policies in education. Students participate in a range of seminar and practicum courses to fulfill program requirements. The program office is in 1002 Moore Hall. See the program description in the Curricula and Courses chapter.

Math for LA
Math For LA (formerly Joint Mathematics/Education Program)—offered jointly by the Graduate School of Education and Information Studies and the Mathematics Department—consists of two pathways, each leading to a California Single Subject Teaching Credential in Mathematics. In the concurrent credential pathway, students complete courses in education and mathematics during the junior and senior years to earn a California teaching credential upon graduation. In the MEd pathway, students complete courses in education and mathematics during the senior year. They complete additional education courses the following summer to earn a California teaching credential. Over the following academic year, they complete graduate courses to earn a master’s degree in Education. For information, contact the Curtis Center in 5602 Mathematical Sciences Building; or the Mathematics Student Services Office in 6356 Mathematical Sciences Building.

Mathematics for Teaching BS
The Mathematics for Teaching capstone major is primarily designed for students preparing for careers in curriculum, instruction, and/or assessment of high school mathematics. It exposes students to a broad range of topics in high school mathematics, and offers deep investigation into several core topics to help students develop a professional understanding of high school mathematics. The department’s California-approved subject matter preparation program is embedded in the major, so that students who complete the major also satisfy the California subject matter competence requirement for a Single Subject Teaching Credential in Mathematics. The major also offers deep investigation into pedagogical knowledge required for teaching high school mathematics as recommended by the Conference Board of Mathematical Sciences. For information, contact the Curtis Center in 5602 Mathematical Sciences Building. At the end of the senior year, students may request department verification of the California Subject Examination for Teachers (CSET). See the degree description in the Curricula and Courses chapter.

Science Education Minor
The Science Education minor offers preparation for careers where teaching is an important component, including middle and high school, community college, university, or other science-related outreach careers. Students who wish to become middle or high school science teachers or who plan to teach as graduate students in their disciplines are the primary focus. The minor supplies the broad general science background included in California state subject matter credential examinations, education coursework, field experiences in the development, management, and teaching of science laboratory instruction in grades 7 through 12, and UCLA-based teaching practicums in lower-division science laboratory. See the program description in the Curricula and Courses chapter.

Science Teacher Education Program
The Science Teacher Education Program (STEP), cosponsored by the College of Letters and Science and GSE&IS, allows science majors to observe and participate in classrooms in schools in the Los Angeles area and to begin teacher education courses in their senior year. Students earn a preliminary teaching credential the summer after the bachelor’s degree is received and a master’s degree in education the following academic year. For details, contact any science department undergraduate counseling office.
Teacher Education Program

The Teacher Education Program allows students to obtain both a Master of Education degree and a preliminary multiple or single subject credential in a full-time, two-year program that supplies clinical classroom experience and a full-year urban teaching residency.

UCLA California Teach

The UCLA California Teach program encourages and supports undergraduate students who are interested in exploring K-12 mathematics and science teaching as a potential career. Courses include 24 hours of observation, participation, and assisting in K-12 schools, and seminars to support those field experiences.

Visual and Performing Arts Education Minor

The Visual and Performing Arts Education (VAPAE) minor in the School of the Arts and Architecture is an interdisciplinary and interdepartmental series of courses designed to introduce students to key issues and methodologies in the field of arts education for multiple publics and to a broad range of careers in the arts, including K-12 teaching, museum education, community arts education, creative arts therapies, and arts advocacy.

The arts education teaching sequence, an important component of the minor, consists of three courses in which selected undergraduate students explore core issues in arts education, creativity, and social justice. Students are assigned to K-12 classrooms in the Los Angeles area where they first observe and then implement an eight-week sequential arts-based lesson plan under the supervision of the guiding teacher.

Students are able to focus their studies on the following areas: strategies and methods in teaching in the arts, arts in the community, teaching the arts in non-traditional settings and with special populations, social-emotional learning in the arts, and interdisciplinary arts training.

Upon completion of the minor, students are eligible to be hired to teach in VAPAE Afterschool and Arts Enrichment Programs that take place at school and community sites in Los Angeles. The program office is in 2101 Broad Art Center. See the program description in the Curricula and Courses chapter.

Center for Community Learning

The Center for Community Learning advances community-engaged scholarship to support student learning and create value for the broader community. The center supports faculty, students, and community partners to create successful community-engaged courses and research, credit-bearing internships, and AmeriCorps programs. The center is home to the undergraduate minor in Community Engagement and Social Change, and such signature student scholarship programs as Astin Community Scholars and Changemaker Scholars. The office is in A26S Murphy Hall.

University of California Center Sacramento

The University of California Center Sacramento (UCCS) is operated by UC Davis. The center’s long-term goal is to bring together UC faculty members with undergraduate students to pursue research related to state government, politics, and public policy. UCCS places students in intensive one-term policy-related internships throughout the state Capitol building and in the Sacramento policy community. UCCS is open to all juniors and seniors with at least a 3.0 grade-point average.

Lower-Division Seminar Programs

Collegium of University Teaching Fellows

The Collegium of University Teaching Fellows (CUTF) offers outstanding graduate students the opportunity to develop and teach lower division seminars in their area of expertise. These unique courses cover all areas, from the humanities to the life, physical, and social sciences. Undergraduate students take courses that are at the cutting edge of a discipline and benefit from a small-seminar environment. GE and honors credit is granted for most seminars, which are offered in winter and spring quarters only. Enrollment is limited. For more information, contact the Center for the Advancement of Teaching by e-mail.

Fiat Lux Seminar Program

As a cornerstone of the innovative undergraduate curriculum at UCLA, up to 200 seminars are offered annually through the Fiat Lux Seminar Program. These seminars provide students and faculty with small-group settings to engage in meaningful discussions on a range of topics. Students receive 1 unit of academic credit (Passed/Not Passed grading), and faculty members from across campus have
the opportunity to share with undergraduates their areas of intellectual passion and expertise. True to the University of California’s motto: *Fiat Lux—Let There be Light*, these seminars illuminate the many pathways of discovery. For details about seminar offerings each term, see the Schedule of Classes.

**Honors Collegium**

**Honors Collegium**, a series of interdisciplinary honors courses, offers a unique educational experience where students learn how to think critically and creatively and how to communicate effectively. Courses emphasize the breadth of an interdisciplinary approach to learning and focus on small classes and individual attention.

**Undergraduate Student Initiated Education**

**Undergraduate Student Initiated Education** (USIE) is an innovative program designed to provide a select group of juniors and seniors with the opportunity to develop and facilitate, under faculty supervision, a lower-division seminar for their peers.

The application and selection period is during spring quarter. During the fall and winter quarters (of the next academic year), selected student facilitators work closely with their faculty mentors in two 1-unit independent study courses (one each quarter) focused on the content-area of their proposed seminar. In addition, student facilitators enroll in two 1-unit pedagogy seminars (one each quarter) in which various facilitation strategies and techniques are discussed in preparation for leading their own spring seminar.

Through the independent study courses and pedagogy seminars, student facilitators develop a formal syllabus for their spring seminars for review and approval by the USIE Faculty-Student Advisory Committee and the Faculty Executive Committee (FEC).

**New Student and Transition Programs**

UCLA New Student and Transition Programs welcome new undergraduate students to UCLA and ease their transition into and throughout the first year. New Student Orientation introduces students to UCLA through academic counseling and educational planning and orients students to all the special programs available to them. During orientation, students work in small groups with peer counselors and gain insight into necessary academic skills. They learn how to plan their academic program and become familiar with educational opportunities, student services, and facilities available at UCLA. Individual counseling sessions help students adjust to life at UCLA and fulfill the advising requirements of the College or school. Sessions for family members are also offered.

New Student Orientation sessions are three-day, two-night, residence hall live-in programs for first-year students; and one-day programs for transfer students. There is a fee for participation.

New Student and Transition Programs also offers the College Summer Institute (CSI), a seven-week residential program in which new first-year students get a head start on graduation requirements through UCLA summer courses.

During the academic year, additional programs offer academic advising and successful transition to the second year. For more information, contact the New Student and Transition Programs office in 201 Covel Commons.

**College and School Advisers**

The College and each school and academic department at UCLA have a staff of academic counselors and advisers to help students plan their academic program, monitor their progress toward the bachelor’s degree, provide information about degree requirements, and assist with academic problems.

Students in the College are served by one of four counseling units: Academic Advancement Program, College Academic Counseling, Honors Programs, and Student Athletics. Undergraduates in the seven professional schools are served by their respective student services offices. See the Registrar’s academic counseling web page for a list of College and school advising office addresses. To contact a departmental adviser, see the individual department in the Curricula and Courses chapter; a list of department websites is available online.

**Academic Advising and Support**

Academic advising and support is available from student, staff, and faculty advisers; and through student services, tutorials, and other special programs.
Academic Advancement Program

Academic Advancement Program (AAP) is the largest university-based student diversity program in the U.S. Its programs for first-generation, low-income, and historically underrepresented students help ensure their academic success, retention, and graduation; and support their pursuit of academic excellence. AAP aims to increase member entrance to graduate and professional schools; develop academic, political, scientific, economic, and community leadership; and promote UCLA access and academic success for diverse high school and community college students across California.

Students are eligible for AAP if their academic profiles and personal backgrounds may impact their university experience and their retention and graduation from UCLA. Students are also eligible if they are part of any federally funded program that requires counseling, tutoring, or mentoring. For more information, contact AAP New Student Programs, 1230 Campbell Hall.

Center for Community College Partnerships (CCCP)

The center develops academic partnerships between California community colleges—particularly those with large underrepresented populations—and UCLA, to improve student competitiveness for UC admissions and increase the transfer admission pool diversity. Its Scholars Program offers mentoring and summer programs to help prepare students for transfer to a four-year school.

Graduate Mentoring and Research Programs (GMRP)

The office offers AAP undergraduate students one-on-one mentoring in preparation for graduate studies and professional school admission. It also offers workshops on graduate school topics. Appointments are with and workshops are led by current graduate and professional school student mentors.

Arts Initiative Program

The program focuses on integration of the arts into different scholarly fields. AAP students engage in interdisciplinary research involving fine, commercial, and performing arts with an emphasis on connections to social justice issues.

Carter-Huggins Community Development and Social Justice Program (CDSJ)

The program assists AAP students interested in pursuing graduate study in public health, public policy, social welfare, and urban planning. Students conduct applied research projects while interning at community-based social justice and equity organizations.

Educators for Tomorrow (EFT)

The program assists a new generation of socially conscious educators. AAP students participate in community service programs, internships, and research related to all facets in the field of education.

High Achievement in Math and Science (HIGH AIMS) Program

The program supports AAP students in their chosen health science professions. It offers career and academic guidance, and includes graduate school preparation, workshops, and information sessions.

McNair Research Scholars Program

The two-year program prepares AAP students for PhD programs. Students conduct an independent research project and participate in a research-intensive summer program.

Peer Learning

AAP Peer Learning offers numerous academic support sessions with peer learning facilitators (PLFs). Mainly upper-division undergraduates, PLFs are academic role models who have successfully completed courses in the mathematics, sciences, humanities, and social sciences disciplines. PLFs facilitate individual and small-group sessions designed
to help AAP students recognize their own intellectual authority by encouraging them to engage with course materials actively, critically, and independently.

**Research Rookies Program**

The program gives second-year AAP students the opportunity to develop entry-level research projects in humanities and social sciences. Over two academic terms, students gain valuable knowledge and experience regarding research.

**Scholarships**

Eligible AAP students may receive merit and need-based scholarships through established financial aid programs. AAP also awards scholarships; see scholarships for help with the application process.

**Summer Graduate Preparation Program**

Over six weeks during summer session, students prepare to apply to graduate or professional school. Students draft their application materials with a graduate student mentor. The program is not unit or credit bearing.

**Freshman/Transfer Summer Program**

This seven-week residential summer program prepares incoming AAP freshman and transfer students for the academic rigors of UCLA. Students build an academic support network that supplies interaction and broadens life experiences. Students enroll in three UCLA courses that fulfill graduation requirements, and get support in small groups or individual sessions from teaching assistants and peer learning facilitators.

**UndocuBruins Research Program**

The program prepares undocumented AAP students for graduate school. Students conduct independent research projects related to issues regarding immigration and immigration policy. Special emphasis is given to resources that best serve undocumented students and their communities.

**Vice Provost Initiative for Precollege Scholars (VIPS)**

This partnership between UCLA and the Los Angeles and Pasadena school districts prepares historically underrepresented students in 10 high schools to become competitively eligible for admission to UCLA and other flagship universities. VIPS offers peer mentoring, summer programs, Saturday academies, and research opportunities to scholars and their families.

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**Academic Excellence**

Eligible students receive the following honors and awards in recognition of academic achievement:

**Dean’s Honors List**

The School of the Arts and Architecture; Graduate School of Education and Information Studies; Henry Samueli School of Engineering and Applied Science; Herb Alpert School of Music; Meyer and Renee Luskin School of Public Affairs; School of Nursing; School of Theater, Film, and Television; and the deans of the five divisions in the College of Letters and Science award Dean’s Honors to deserving students each term. Honors are based on the grade-point average attained within a specified number of units. Contact the College or school for more information.

**Latin Honors**

The College and schools award Latin honors according to overall grade-point average at graduation. To be eligible students must have completed at least 90 (98 for the School of Nursing) UC units for a letter grade. The levels of honors are summa cum laude, magna cum laude, and cum laude. Specific requirements vary for each level and are detailed in the College and Schools chapter. See the Registrar’s honors web page for the most current calculations of Latin honors.

**Departmental Honors**

In the College of Letters and Science, departmental honors and highest honors are awarded at graduation on the recommendation of a student’s major department, based on successful completion of a departmental honors program. Students should contact their department for its requirements.

**Departmental Scholar Program**

Departments in the College of Letters and Science and each school—except the Herb Alpert School of Music; School of Nursing; and School of Theater, Film, and Television—may nominate exceptionally promising juniors and seniors as Departmental Scholars to pursue bachelor’s and master’s degree programs simultaneously. Nominations are submitted to the College or school dean for recommendation to the dean of the Graduate Division. Students interested in becoming Departmental Scholars should contact their departments well in advance of application dates for graduate admission (see the deadlines web page).
Honor Societies

Alpha Lambda Delta and Phi Eta Sigma

Alpha Lambda Delta and Phi Eta Sigma are national honor societies that recognize high-achieving first-year students. Membership is based solely on academic achievement and is by invitation only. To be eligible, students must have a 3.5 grade-point average with 12 graded UC units in the first quarter of their first year at UCLA, or a cumulative 3.5 GPA at the end of the first year. Invitations are issued in winter quarter, and an induction ceremony is held during spring quarter. For more information, send e-mail to the Office of the Dean of Students.

Golden Key

Golden Key is an international interdisciplinary academic honors organization dedicated to excellence. Students qualify on the basis of objective academic criteria. To be eligible, students must have a UC grade-point average of 3.6 after their first quarter at UCLA; and have sophomore, junior, or senior standing at the time of invitation. The society recognizes and encourages scholastic achievement and excellence in all undergraduate fields of study. It unites with collegiate faculties, staff, and administrators in developing and maintaining high standards of education, and promotes scholastic achievement and altruistic conduct through voluntary service. Invitations are issued annually. For more information, send e-mail to the Office of the Dean of Students.

Mortar Board

Mortar Board is a national honor society for college seniors that recognizes outstanding and continual scholarship, leadership, and service to the campus community. To be considered for membership, candidates must have completed 90 units and must have attained at least a B average or be in the highest 35 percent scholastically of the junior class, whichever is higher. Applications are available online early in winter quarter and are due by mid-February. Approximately 35 members are selected each spring by the outgoing chapter. For more information, contact the Student Organizations, Leadership, and Engagement (SOLE) office, 105 Kerckhoff Hall.

Phi Beta Kappa

Phi Beta Kappa is a national academic honors society in the humanities, liberal arts, and sciences, founded at the College of William and Mary in 1776. Membership is conferred for high scholastic standing and is determined by vote of the UCLA Eta Chapter council according to scholarship records. Students do not apply for Phi Beta Kappa membership.

At UCLA, only graduating seniors and selected juniors are elected to membership. The annual election is held in late April, with the initiation ceremony in June. At present, the minimum grade-point average considered is 3.67 (for 140 or more UC units); the minimum number of UC units considered is 90 (students at the 90-unit level must have at least a 3.85 GPA).

A reasonable distribution of courses in the humanities and sciences is also required, as is a foreign language course at the intermediate level (one level above the UCLA language requirement for graduation) or above. A Passed grade is computed approximately as a B, depending on number of courses taken and graded units. Elected students are notified through MyUCLA.

For more information, contact Phi Beta Kappa in the UCLA Scholarship Resource Center, 233 Covel Commons.

Tau Sigma

Tau Sigma is a national honor society that recognizes the high academic achievement of first-year transfer students. To become a member, UCLA students must have a 3.5 grade-point average or better during their first term at UCLA after transferring either from a community college or a four-year institution (summer quarter not typically included). Invitations are issued after each regular academic term, and an induction ceremony is held during spring quarter. Tau Sigma honors the large UCLA transfer community for its academic achievement. The society also holds leadership, networking, and social activities. For more information, send e-mail to Tau Sigma or contact the Office of the Dean of Students.
Graduate Study

Graduate students at UCLA benefit from—and contribute to—the resources of one of the country’s outstanding research universities. A distinguished faculty committed to research and teaching; an extensive library system ranked among the best in the nation; and excellent research centers, institutes, and laboratories in virtually every major discipline all offer extraordinary opportunities for graduate endeavor.

Graduate training at UCLA takes place in classrooms, laboratories, and libraries; in specialized seminars; through independent research; and in teaching experiences. Graduate education is enriched by several hundred postdoctoral and visiting scholars from other universities who engage in research and, in some instances, teaching at UCLA every year. This unique research environment promotes the quality of original work and study that is the hallmark of graduate education.

The degree of Master of Arts or Master of Science, or one of several professional degrees such as Master of Business Administration, is intended to develop mastery of a field and prepare students for the practice of a profession. The doctorate degree (PhD, EdD, and so forth) is designed to prepare students for creative activity and original research, often in association with college or university teaching.

Shared Governance

Graduate degree programs, courses, and requirements are governed and administered by the Graduate Council, Graduate Division, College and school faculty executive committees, and department advisers.

Graduate Council

The Graduate Council is a standing committee of the UCLA Academic Senate. The council is responsible for the establishment of UCLA policy and standards for master, doctorate, and graduate professional degree programs (other than those in law, medicine, and dentistry) and post-doctoral scholars; the approval, review, and monitoring of graduate degree programs; and recommendations about fellowships and assistantships. It also recommends to the systemwide Coordinating Committee on Graduate Affairs programs that lead to new degrees; and delegates authority to Graduate Division, and College and school faculty executive committees.

Graduate Division

The UCLA Graduate Division administers policy established by the Academic Senate and its Graduate Council. It oversees graduate recruitment and admissions (including recruitment of a diverse student body), fellowships, teaching assistantships, graduate student researcher appointments, and other graduate student support; and maintenance of high quality standards in all graduate programs.

Graduate Adviser

At matriculation, a graduate student usually selects or is assigned a graduate adviser who assists in program planning and completion of degree requirements. Sometimes this role is temporarily assumed by a faculty adviser assigned to the program as a whole. When the student’s master or doctoral committee is established, the chair of the committee assumes the adviser role.

Graduate Admission

Diversity, Inclusion, and Admissions
1237 Murphy Hall
310-206-3411

Meeting the minimum requirements does not ensure graduate admission, which is limited by the number of places and the amount of student support available in UCLA graduate programs. Applicants are evaluated on scholastic qualifications and formal preparation for the graduate field of study. Departments may have other requirements for admission, which are listed by department and by degree and can be accessed from the Graduate Division website.
Application for Admission

Prospective students apply online. A nonrefundable application fee is required when the application is submitted.

When to Apply

Most departments and schools have deadlines in November and early December for the following fall quarter. Consult the admissions section of the Graduate Division website for specific deadlines for each major. A few departments accept applications for winter and spring quarters.

At the discretion of the department, applications may be considered if submitted after a stated program deadline, provided the enrollment limits have not been exceeded.

Entrance Requirements

U.S. applicants to graduate standing must hold a bachelor’s degree from a regionally accredited institution comparable in standard and content to that awarded at the University of California. Degrees granted on the basis, for example, of nonacademic prior learning, test scores, and other than organized supervised coursework in academic subjects are not considered comparable. A scholastic average of 3.0 (B) on a 4.0 scale, or better (or its equivalent if the letter grade system is not used), is required in undergraduate coursework and in any postbaccalaureate study.

See also requirements for international applicants below.

Supporting Materials

Supporting materials to be submitted, including official transcripts of record and nonrefundable application fee, are specified on the graduate admissions website. Submitted materials become the property of UCLA and are not returnable.

Graduate Record Examination

Applicants for admission to a department or school that requires Graduate Record Examination (GRE) scores should arrange to take the examination no later than December, so scores arrive on time. GRE scores should be sent directly to the prospective department and not to Graduate Division.

GRE registration, and information about both paper and computer-based testing, are available from Educational Testing Service (ETS). Information on GRE fee waivers is also available on the ETS site.

Letters of Recommendation

Most graduate professional schools, departments, and interdepartmental programs at UCLA require applicants to submit three letters of recommendation. Letters typically augment, validate, or explain information provided in the application; and should be written by persons qualified to analyze student’s abilities and academic promise.

Admission to the Schools of Dentistry, Law, and Medicine

Applicants for MS and PhD programs in the schools of medicine and dentistry should apply for admission to Graduate Division as described above. For admission to DDS, JD, LLM, SJD, and MD degree programs in the schools of dentistry, law, and medicine, applicants should consult school websites.

Admission to Bioscience Programs

Applicants to PhD programs in fields related to life and biomedical sciences apply for admission to one of 11 individual research areas. Graduate Programs in Bioscience is a consortium of PhD programs organized into specialized research groups, called home areas, that serve as the admissions and training units associated with the degree-granting programs. Through this structure, students can specialize in their chosen area while maintaining the flexibility to move between home areas to best pursue their research interests.

Degree-Granting Programs and Home Areas

Consortium PhD programs offer the research home areas listed.

- **Bioinformatics**
  - Bioinformatics
  - Medical Informatics

- **Human Genetics**
  - Genetics and Genomics

- **Molecular Biology**
  - Biochemistry, Biophysics, and Structural Biology
  - Cell and Developmental Biology
  - Gene Regulation
  - Immunity, Microbes, and Molecular Pathogenesis

  **Molecular, Cellular, and Integrative Physiology**
Molecular and Medical Pharmacology
Molecular Pharmacology: Diagnostics, Therapeutics, and the Biology of Disease

Neuroscience

Physics and Biology in Medicine
Additional opportunities for doctoral study include Biochemistry, and Molecular and Structural Biology in the College of Letters and Science; Oral Biology in the School of Dentistry; and Molecular Toxicology in the Fielding School of Public Health.

International Applicants
International applicants who have completed their postsecondary education outside the U.S. are expected to hold a degree, with above average scholarship, from a university or university-level institution. If their examinations have been graded Excellent, Very Good, Good, and Pass, applicants must have at least a Very Good general rating to qualify for admission.

Applicants who hold a three-year Bologna degree may be considered for admission on the recommendation of the department, program, or professional school. Applicants who hold a three-year ordinary or pass degree—or who hold a professional diploma in accounting, business, librarianship, social work, physical education, health education, and so forth—or a four-year degree, diploma, or higher certificate from a technical, vocational, or postsecondary specialized school should not apply for graduate admission. Persons with memberships in professional associations such as an Institute of Chartered Accountants, Institute of Chartered Secretaries and Administrators, and so forth, do not qualify for graduate admission unless they also hold recognized university-level degrees or titles.

Applicants should submit transcripts of record, in the original language and with an English translation certified by the institution, for all college and university work. Applicants who are officially offered admission must submit official academic records before the term of admission begins. The original of an academic record that cannot be replaced must not be sent; a properly certified copy should be sent instead. Specific information for applicants from different educational systems is available from required academic records.

English Language Proficiency
Most international applicants to UCLA graduate school are required to submit scores from either the Test of English as a Foreign Language (TOEFL) or the International English Language Testing System (IELTS) examination. International students who hold a bachelor’s or higher degree from a university located in the U.S. or in another country (e.g., Australia, Barbados, Canada, Ireland, Jamaica, New Zealand, United Kingdom) in which English is both the primary spoken language of daily life and the medium of instruction, or who have completed at least two years of full-time study at such an institution, are exempt from this requirement.

Applicants who are required to submit TOEFL or IELTS scores (i.e., do not belong to the exempted categories listed) may also be required to take the UCLA English as a Second Language Placement Examination (ESLPE) to determine potential coursework in academic writing. Incoming students who score at least 100 on the TOEFL iBT (Internet-based test) or at least 7.5 overall band score on the IELTS examination are exempt from the ESLPE requirement.

Students who are required to take the ESLPE must do so before or during their first term at UCLA. Failure to do so results in a hold on student records. Students may take the ESLPE once only. Unauthorized retakes of the examination result in an invalid examination score. Depending on ESLPE results, students may be required to complete one or more courses in the English as a Second Language (ESL) credit-bearing series, beginning in their first term in residence at UCLA. The courses must be passed with a grade of C or better if taken for a letter grade, or B or better if taken on an S/U basis. Taking required ESL courses may prolong students’ time to degree. If students do not achieve a minimum score on the ESLPE, their admission is deferred until they have acquired the necessary proficiency in English.

Teaching Assistantships
Nonnative English-speaking international graduate students who plan to work as teaching assistants (TAs) are required to take the Test of Oral Proficiency (TOP), which is administered by the Center for the Advancement of Teaching (CAT). Students who do not plan to work as teaching assistants do not need to take the TOP.

Students who hold a bachelor’s degree from a U.S. institution are exempt from taking the TOP. However, those holding only a master’s degree from a U.S. institution are not exempt.

For students who receive a clear pass (7.1 or above) on the TOP, no coursework is required. Students who receive a marginal pass (between 6.4 and 7.0) are required to take an approved oral skills course either before or during their first term as teaching assistants. Students scoring 6.3 or below are not eligible to become teaching assistants and are encouraged to complete recommended ESL coursework before taking the TOP examination again.

No other oral examination is accepted. Entering graduate students who plan to work as teaching assistants in their
first term at UCLA must arrive early enough to take the TOP before instruction begins. The examination schedule and other information about TOP are available on the CAT TOP web page.

**Special Admission Policies**

**No Degree Objective**

UCLA has no special limited or unclassified categories of graduate admission. Under some circumstances, however, applicants may be admitted for coursework without a degree objective. For example, teachers with a master’s degree who wish some refresher study, or international students on a one-year stay in the U.S., may wish to apply in this manner. Requirements for admission are the same as those for degree programs, and the academic program must agree to accept the student for no degree objective (NDO) status. All admissions to NDO status must be specially approved by the dean of the Graduate Division, as must any University financial assistance for students having NDO status.

**Duplicate Degrees**

The University of California, in general, discourages the duplication of advanced degrees. At the same time, it recognizes that a professional degree does not duplicate an academic one, and that pressing needs may exist for degrees in different areas (see Graduate Concurrent and Articulated Degrees in the Majors and Degrees chapter). Students who apply for a second academic degree at the same level or lower than the one they already hold are required to show compelling cause to the department. The Graduate Division is particularly concerned that a careful review and special justification be made by the graduate program in all cases where an applicant or continuing student is recommended for admission to a second doctoral program. This concern also extends to a student support recommendation for pursuit of a second doctorate degree. All degree requirements and UCLA regulations apply just as they do for a first degree. Courses and other degree requirements already applied to the earlier degree may not be applied to the second.

**Summer Session Classes**

Enrollment in summer session classes does not constitute admission to graduate standing, nor does it substitute for the required continuous registration in fall, winter, and spring quarters. Students who wish to apply summer sessions classes to their subsequent graduate program should consult in advance with their departmental adviser. This is also true if they have been readmitted to graduate standing and wish to resume graduate study in summer sessions. Information and applications are available from Summer Sessions, 1331 Murphy Hall.

If students take summer session classes following the award of the bachelor’s degree, those grades do not appear on the undergraduate transcript (they are included on a separate transcript). After students are accepted by Graduate Division, summer session grades are included on the graduate transcript and computed in the grade-point average.

**Readmission**

Students who have registered at any time as a graduate student at UCLA and return after an absence (except a formal leave of absence) must file an Application for Graduate Admission.

See the Academic Policies chapter for readmission procedures.

**Registration**

Registrar’s Office
1113 Murphy Hall
310-825-1091, option 6

Registration consists of paying fees and enrolling in classes.

1. Registration fees and other UCLA charges are due the 20th of each month. BruinBill accounts can be viewed through MyUCLA.

2. Enrollment in classes is completed through MyUCLA. Students must complete both processes by the established deadlines to be officially registered for the term.

Graduate students must be either registered and enrolled or on an official leave of absence every term until their degrees are awarded. As an exception, certain graduate
students may be eligible to pay the filing fee. Failure to register, have filing fee status, or be on an official leave of absence for any academic term (fall, winter, or spring quarter) constitutes withdrawal from UCLA.

Paying Fees
Details on fee payment, enrollment procedures, and deadlines are published on the Registrar’s website.

Electronic Billing
BruinBill accounts are administered electronically (e-bill) through MyUCLA. Financial activity is displayed for the current term, as well as account activity for the last 24 months. Students can pay their BruinBill account electronically using an electronic check with no fee; or American Express, Discover, MasterCard, and VISA credit cards with a fee.

Annual Graduate Fees
Although the exact cost of attending UCLA varies by program, there are some fees that all UCLA students must pay. Each entering and readmitted student is required to submit a Statement of Legal Residence and Statement of Intent to Register to the Graduate Division Diversity, Inclusion, and Admissions office. A student classified as a nonresident of California must pay nonresident supplemental tuition (NRST) in addition to other registration fees. Legal residents of California are not required to pay NRST. Annual graduate fees and NRST are published online. For more information, see Residence for Tuition Purposes in Appendix A.

Professional Degree Program Fees
Students admitted to professional degree programs must also pay professional degree supplemental tuition (PDST), which varies by program. PDST amounts are published on the Registrar’s fees web page.

Self-Supporting Degree Program Fees
Students in self-supporting degree programs pay an annual fee, which may be assessed per term, course, or unit. For details, contact the individual program. Self-supporting program fees are published on the Registrar’s self-supporting fees web page.

Miscellaneous Fees
Miscellaneous fees include charges for late registration fees payment. Late fees also apply if students file their study list late or do not pay off BruinBill balances on time. Fees are charged if any check is returned by a bank for any reason. Charges are assessed for most petitions and other special requests. There is also a fee for advancement to doctoral candidacy. Study list, document and service, transcript-related, and degree and diploma fees are published on the Registrar’s website.

Student Health Insurance Fee
All graduate students are automatically assessed for and enrolled in the University of California Student Health Insurance Plan (UCSHIP) as a condition of registration at UCLA. Continued enrollment in a qualified health insurance plan is mandatory during all registered terms. UCHIPS covers medical, vision, dental, and behavioral health services. The UCHIPS fee is billed each term along with other UCLA fees. UCHIPS fulfills all requirements mandated for a qualified health insurance plan as defined by the University of California. The Ashe Student Health and Wellness Center is the primary health-care provider for UCHIPS, and where all nonemergency medical care is initiated.

Nonregistered students (those who withdraw, or are on approved leave or planned academic leave) may have access to UCHIPS services under certain conditions. Contact the Ashe Center to learn more.

UCSHIP Waiver
Students may waive UCHIPS if they maintain active enrollment in a qualified health insurance plan that meets all established requirements, apply for a waiver within established deadlines each term, and correctly complete the online waiver form. Students are responsible for providing complete and accurate information. Third-party individuals may not waive UCHIPS for a student. Waivers must be submitted before the term fees payment deadline. Deadlines are strictly enforced, and no refunds are issued after the deadline. For more information, see the Ashe insurance web page.
Fee Refunds

Students who formally withdraw from UCLA or take an approved leave of absence may receive partial refunds of fees. For more information, see Withdrawal in the Academic Policies chapter. Consult the Registrar’s refunds web page for policy details and specific refund deadlines for each term.

Fee Deferrals

Academic apprentice personnel are eligible to receive a fee deferral for registration fees assessed during the term in which they serve as an academic apprentice. For more information, students should contact their hiring department. Students are responsible for paying fees by the deferred payment deadline, which is two months after the standard term due date. Whether students attend UCLA, take a leave of absence, or withdraw from the University, they are responsible for the fees; but may be eligible to receive a partial fee refund according to the refund schedule. Fees not paid by the deadline are subject to late fees.

Reduced Nonresident Supplemental Tuition

The annual nonresident supplemental tuition (NRST) for graduate doctoral students who have advanced to candidacy is reduced by 100 percent, effective the term after the student is advanced. Doctoral students may receive this reduced NRST rate for a maximum of three years. After three years, the full nonresident rate is assessed.

Filing Fee

Graduate students may be eligible to pay the filing fee (half the quarterly student services fee) in lieu of full term registration fees, for the filing fee usage term in which they expect to complete final degree requirements and receive their degree. Students are not eligible to pay the filing fee unless registered for the immediately preceding term. For more information on other eligibility requirements, see filing fee.

Students who pay the filing fee are not eligible for UCLA services, and are not considered to have the same status as registered students.

In Absentia Registration

Graduate students who conduct research or engage in approved degree-program-related activities outside California may be eligible for in absentia registration, and reduction of tuition and the student services fee to 15 percent of the full amounts. See In Absentia Registration in the Academic Policies chapter for more information.

Fees Notice

All fees are subject to change without notice by the Regents. Current academic year fees and update information are available on the Registrar’s fees web page.

Annual Budget Estimates

Budgets are designed to serve as a guide and are subject to change without notice. Budget information is available from Financial Aid and Scholarships. Budgets for the schools of medicine, dentistry, and nursing are higher due to specialized supplies. More information can be found on the websites of the schools of dentistry, law, medicine, and nursing for their respective students.

Class Enrollment

Students enroll in classes through MyUCLA during assigned times—called enrollment appointments—when they are allowed to enroll. The Class Planner feature allows students to create class plans prior to enrollment, share plans with counselors, and quickly add classes during their enrollment appointment. Students use the Find a Class or Section feature to search the Schedule of Classes and add available classes to their class plan or study list.

MyUCLA is also used to view enrollment appointments; drop classes; change grade type and number of units; exchange classes; and view the study list, which includes information on class meeting times, final examinations, classmates, grades, textbooks, and class websites. For more information, see Registrar’s study list and enrollment policies web pages.

For classes that require written approval or specialized processing, students may enroll in person Monday through Friday from 9 a.m. to 4 p.m. at 1113 Murphy Hall.

Study List

A study list is the record of courses in which a student is enrolled for the term. At 11:59 p.m. on Friday of the second week of instruction, the study list of enrolled courses becomes official and all wait lists are eliminated. Students should verify their study list through MyUCLA after each enrollment transaction. Students are responsible for all courses and the grading basis as listed on MyUCLA, and cannot receive credit for courses not listed.

After Friday of the second week, most changes to the official study list can be made with a fee through MyUCLA. Some changes require an Enrollment Petition along with approval signatures.

See study list for deadlines and complete instructions.
Errors or omissions should be corrected before the College or school deadlines for changes by petition. Unapproved withdrawal from or neglect of a course entered on the study list results in a failing grade.

Wait List

Some departments establish wait lists for classes that are full. If an enrolled student drops the class, that seat is filled by a student on the wait list. Students can check enrollment status through MyUCLA. Position on a wait list does not indicate enrollment. Students on a wait list should not assume they will be added to a class.

Wait lists are maintained through Friday of the second week of instruction unless a department deletes them earlier.

Full-Time Graduate Program

Three courses (or 12 units) per term are considered the normal enrollment for graduate students, and are required for students not in doctoral candidacy to be counted for full-time standing in UCLA official enrollment records. Therefore, students are directed by their departments to enroll full time whenever possible.

Throughout their appointments, teaching assistants (TAs) and graduate student researchers (GSRs) are required to be registered and enrolled in at least 12 units. TAs or GSRs terminate their appointments if they take a leave of absence, withdraw, or use a filing fee. Course 375 for TAs, and individual study at the 500 level for GSRs, may be counted toward the 12-unit load.

Graduate students holding fellowships must be enrolled in at least 12 units, both before and after advancement to candidacy. The 12-unit minimum required per term may include, among others, the 500 series (individual study or research).

Veterans are required to make normal progress toward the degree as indicated by the major department. Information on Department of Veterans Affairs regulations is available from the veterans benefits coordinator, 1113 Murphy Hall.

Continuous Registration Policy

Graduate students must be either registered and enrolled or on an official leave of absence every term until the degree is awarded. As an exception, certain graduate students may be eligible to pay the filing fee. Failure to register, have filing fee status, or be on an official leave of absence for any academic term (fall, winter, or spring quarter) constitutes withdrawal from UCLA.

Registration in the Final Term

If students are completing courses; using faculty time, library facilities, laboratories, or other UCLA resources; or receiving UCLA funds, they are required to register in the final term in which they expect to receive their degree.

When the award of a degree is expected at the end of a given term, but special circumstances (not involving preparation of the manuscript) over which a student has no control prevent the completion of all requirements before the first day of instruction in the next term, a student may petition for a waiver of registration for that term. Such petitions must be accompanied by a letter from the graduate faculty adviser or department chair elaborating the exceptional circumstances.

Immunization Requirements

UCLA requires that all incoming students be vaccinated against or show immunity to multiple infectious diseases consistent with guidelines of the American College Health Association, California Department of Public Health, and U.S. Centers for Disease Control and Prevention (CDC). These requirements help protect the health of students and the entire campus community. Students submit their immunization history to the Ashe secure patient portal. See immunization requirements for more information.

Health Assessment and Evaluation

Incoming students enrolling in the school of dentistry, medicine, or nursing—or the Social Welfare Department—must meet specific requirements related to their professional health-care program. Information is available from the Ashe Center. For specific questions, contact the individual department.

Financial Support

As a major center for graduate study, UCLA offers its qualified graduate students substantial support through several types of financial assistance.

Information on available funding for entering (and re-entering) students is included in the online graduate admission application. Continuing graduate students should complete the online fellowship application. Completed fellowship applications must be returned to the home department by the published deadlines. Some departments have earlier
deadlines; see Graduate Division continuing student funding for details.

The Graduate Division website includes a financial support section for entering students and one for continuing students. Both describe the full range of financial assistance available. Students should contact their department for more detailed information.

**Fellowships**

UCLA administers several awards on the basis of scholarly achievement. Most awards are available in open competition, though some are restricted to new students or to specific departments. Some fellowship and scholarship awards are made from university funds; others are made from endowment funds held in trust by UCLA and given by interested friends and alumni. Still others come from annual donations by educational foundations, industry, government, and individual benefactors.

Most fellowship, traineeship, and grant awards are for one academic year (three terms). Fellowships and grants offer stipends in varying amounts for qualified students. Nonresident tuition fellowships cover nonresident supplemental tuition (NRST), for periods of one to three terms, of selected graduate students who are not California residents.

**Assistantships**

Academic apprenticeships train qualified students for careers in teaching and research, and compensate them for their services. Teaching assistantships offer experience in teaching undergraduates, with faculty supervision. Graduate student researcher appointments give students experience working on faculty-supervised research projects. For more information, see working at UCLA.

**Awards Based on Financial Need**

To apply for aid based on financial need, students must complete the online Free Application for Federal Student Aid (FAFSA) or California Dream Act application by the priority filing deadline (March 2). Some awards, such as university grants, are subject to funding availability. Financial aid applicants should make sure that any requested documentation is submitted to Financial Aid and Scholarships as soon as possible.

Students who need financial aid for summer session courses must submit a summer financial aid application in addition to the FAFSA. Summer applications are available on MyUCLA (under the Finances and Jobs tab) beginning April 1, and should be submitted by April 30 for on-time consideration.

Financial aid is also available to UCLA students enrolled in summer travel, summer institutes, and UC cross-campus summer programs. See Financial Aid and Scholarships.

Financial aid awards include work-study and low-interest loans. Students are usually awarded a financial aid package that is a combination of these forms of assistance. More information is available from Financial Aid and Scholarships, A129J Murphy Hall.

**Degree Requirements**

The following information is for prospective applicants and those outside UCLA who are interested in the basic structure of UCLA graduate degree requirements. It is not meant to be comprehensive or to serve as a primary resource for continuing students. Official, specific degree requirements, including language requirements, are detailed on program requirements for UCLA graduate degrees. Detailed information and general policies—many of which emanate from the Academic Senate and its Graduate Council—regarding completion of degree requirements, master’s and doctoral committees, examinations, and foreign language requirements are published in Standards and Procedures for Graduate Study at UCLA. General regulations concerning graduate courses, standards of scholarship, disqualification,
appeal, leave of absence, normal progress toward degree, withdrawal, and other matters also are included.

**Master’s and Doctoral Study**

Graduate students earn a master’s or doctorate degree by distinguished achievement in advanced study and research. In addition to coursework, there are various means of evaluating achievement in study, including qualifying examinations, capstones, and various kinds of laboratory and field work. Achievement in research is primarily assessed through evaluation of the master’s thesis or doctoral dissertation. In addition to advanced study and research, professional master’s and doctoral programs also may include professional training. This training may take the form of fieldwork, internships, or projects, and may lead to professional licensure.

**University Minimum Standards**

The requirements described here for master’s and doctorate degrees are minimum standards set by the University of California and UCLA. Individual schools or departments may set higher standards and may require additional courses and examinations for their master’s degrees. Each department also sets additional requirements for doctorate degrees according to the demands of the field of study. See [program requirements for UCLA graduate degrees](#) and the departmental graduate adviser for details. Policies and regulations are outlined in [Standards and Procedures for Graduate Study at UCLA](#).

**Academic Residence**

For the master’s degree, the minimum residence requirement is one year (three academic terms) of registration in graduate standing at the University of California, including at least two academic terms at UCLA.

For the doctorate degree, the minimum residence requirement is two years (six academic terms) of registration in graduate standing at the University of California, including one year (usually the second) in continuous residence at UCLA. If students earned a master’s degree at UCLA, one year (three academic terms) of this requirement will have been met. In most cases a longer period of residence is necessary, and from three to five years is generally considered optimal.

Academic residence for both degrees is established by successfully completing a minimum of one graduate or upper-division course (4 units) during a term.

Students may earn one term of residence for summer study in either of these ways: by enrolling in two six-week UCLA summer sessions, taking at least 2 units of upper-division and/or graduate work in each session; or enrolling in one eight-week session, taking at least 4 units. Residence earned through summer enrollment is limited to one third of the degree requirements.

To maintain satisfactory progress toward the degree, UCLA requires at least a 3.0 (B) grade-point average in all courses taken in graduate standing at the University of California, and in all courses applied toward a graduate degree.

**Foreign Language Requirements**

Foreign language requirements are determined by individual departments and programs. Many departments require graduate degree candidates to demonstrate proficiency in one or more foreign languages, so that they can acquire broad knowledge in their field of study and keep abreast of foreign developments in the field.

If their program has a language requirement, students are urged to fulfill it either before they begin graduate study or as early as possible in their graduate career. If the department requires two or more foreign languages, students must complete at least one before the University oral qualifying examination (unless, as is most common, the department requires that both be completed before the examination). All foreign language requirements must be satisfied before advancement to candidacy.

Some departments allow students to fulfill language requirements either by passing departmental examinations or by completing coursework in a foreign language. Certain departments may require additional languages, special competence, or other special procedures. In some departments, English satisfies the foreign language requirement if it is not the native language.

For more details on foreign language requirements, see [program requirements for UCLA graduate degrees](#).

**Changing Majors**

Continuing graduate students may petition for a change of major after discussing plans with the new department. The [Graduate Petition for Major/Classification Change](#) is filed with Graduate Division Academic Services, 1255 Murphy Hall. While there is no deadline for this petition, it should be submitted before the end of the tenth week of instruction for changes in the current quarter. Students should contact their department about any deadlines before completing the petition.
Program of Study and Scholarship

Master’s Degree
At least nine graduate and upper-division courses (or any number of fractional courses totaling 36 units) must be completed in graduate standing; at least five of the nine (20 units) must be graduate-level courses. These unit requirements represent the UCLA minimum standard. Many master’s degree programs have higher unit requirements.

UCLA offers master’s degrees under two plans: Plan I, the Master’s Thesis; and Plan II, the Master’s Capstone. Some departments offer both plans, and students must consult with their department to determine the plan for meeting their degree requirements. UCLA minimum requirements are the same under either plan.

Plan I: Master’s Thesis
Every master’s degree thesis plan requires the completion of an approved thesis that demonstrates the student’s ability to perform original, independent research.

Plan II: Master’s Capstone
Following advancement to candidacy, students under Plan II must pass an individual or group capstone project or comprehensive examination. Information concerning this project or examination and its format (which may be a recital, exhibition, project portfolio, etc.) is available from the department.

Doctorate Degree
Doctoral programs are individualized and permit a high degree of specialization. UCLA does not specify course requirements for doctoral programs. Individual programs set their own requirements, which may include specific courses, and these must be completed before students take the University oral qualifying examination. Students determine their course of study in consultation with a graduate faculty adviser until the doctoral committee is appointed.

Doctoral Examinations before Advancement to Candidacy
Prior to advancement to candidacy, doctoral candidates fulfill the coursework, teaching, and/or examinations required by the major department or program. They are supervised during this period by a departmental faculty adviser and/or departmental guidance committee. This committee administers a departmental written and, in some cases, oral examination (not to be confused with the University oral qualifying examination) after students complete the recommended or required work. Once all departmental requirements are met, the department chair consults with the student and then nominates a doctoral committee. All students are required to successfully complete a written qualifying examination and the University oral qualifying examination before advancement to doctoral candidacy.

University Oral Qualifying Examination
The doctoral committee, consisting of at least four faculty members nominated by the department, is appointed by the dean of the Graduate Division (consult Standards and Procedures for Graduate Study at UCLA and minimum standards for doctoral committee constitution for details on committee membership). To determine qualifications for advancement to candidacy, the committee administers the University oral qualifying examination and, at its option, a separate written examination.

Doctoral Dissertation
Every doctorate degree program requires completion of an approved dissertation that demonstrates the student’s ability to perform original, independent research; and constitutes a distinct contribution to knowledge in the principal field of study.
Academic Policies

Students at UCLA are responsible for understanding the policies and regulations established by the Academic Senate. Should any variations exist between explanations in this catalog and regulations in the Manual of the Academic Senate, the manual prevails in all cases.

Academic Terms

Undergraduate programs and most graduate programs at UCLA use the quarter system for academic terms, credit units, and registration fees. An academic quarter term is 10 weeks of instruction, and there are 146 days of instruction in an academic year. Class credit is accumulated in quarter units (see below). Registration fees are due each quarter. For details on academic dates and deadlines, see the Registrar’s term calendar. For fees, see the Registrar’s fees web page.

The School of Law and Geffen School of Medicine use the semester system.

Language of Instruction

Courses at UCLA are taught in the English language, unless otherwise noted in the course description (for example, foreign language courses).

Academic Credit

Academic work at UCLA is measured by units of credit, which are used to evaluate the amount of time a student has devoted to a particular subject and to determine a student’s class level.

Units of Credit

Most UCLA courses are assigned a unit value. One unit represents three hours of work per week per term by the student, including both class attendance and preparation.

Class Levels

Undergraduate Student

Undergraduate class level is based on completed and in-progress units, not years attended.

<table>
<thead>
<tr>
<th>UNDERGRADUATE CLASS LEVELS</th>
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</thead>
<tbody>
<tr>
<td>Class Designation</td>
</tr>
<tr>
<td>Freshman (UFR)</td>
</tr>
<tr>
<td>Sophomore (USO)</td>
</tr>
<tr>
<td>Junior (UJR)</td>
</tr>
<tr>
<td>Senior (USR)</td>
</tr>
</tbody>
</table>

Graduate Student

Graduate class level is based on the degree objective, whether or not students are advanced to candidacy for a doctorate, and/or completed units.

<table>
<thead>
<tr>
<th>GRADUATE CLASS LEVELS</th>
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</thead>
<tbody>
<tr>
<td>Class Designation</td>
</tr>
<tr>
<td>Master (MA/MS) (GMT)</td>
</tr>
<tr>
<td>Professional Master (GPM)</td>
</tr>
<tr>
<td>Doctorate 1 (GD1)</td>
</tr>
<tr>
<td>Doctorate 2 (GD2)</td>
</tr>
<tr>
<td>Professional School (PF)</td>
</tr>
<tr>
<td>Professional School (PF2)</td>
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<tr>
<td>Professional School (PF3)</td>
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</tbody>
</table>

Repetition of Courses

Certain courses, as noted in their course descriptions, may be repeated for credit. Other courses taken at UCLA (except UCLA Extension) may be repeated only according to the following guidelines:

1. To improve the grade-point average (GPA), students may repeat only those courses in which they receive a grade of C– or lower; NP or U grades may be
repeated to gain unit credit. Courses in which a letter grade is received may not be repeated on a P/NP or S/U basis. Courses originally taken on a P/NP or S/U basis may be repeated on the same basis or for a letter grade.

2. Repetition of a course more than once requires the approval of the College, school, or dean of the Graduate Division, and is granted only under extraordinary circumstances.

3. Degree credit for a course is given only once, but the grade assigned each time the course is taken is permanently recorded on the transcript.

4. For undergraduates who repeat a total of 16 or fewer units, only the most recently earned letter grades and grade points are computed in the GPA. After repeating 16 units, however, the GPA is based on all letter grades assigned and total units attempted.

5. Certain programs may place additional restrictions on the repetition of courses required for those programs.

6. For graduate students, all courses in which a letter grade is given, including repeated courses, are used in computing the GPA.

Credit for Upper-Division Tutorials
Credit for upper-division tutorial courses numbered 195 through 199 in a single term is limited to a maximum of 8 units. Subject to regulations governing P/NP grades, students may take these courses on a P/NP or letter-grade basis, but the total number of units allowed in upper-division tutorial courses for a letter grade is 32.

To enroll in an upper-division tutorial course, students must have advanced junior standing and at least a 3.0 GPA in the major field, or must have senior standing. Students who have an outstanding Incomplete (I) grade in an upper-division tutorial course may not enroll in another upper-division tutorial course until the I grade has been removed. On the advice of the instructor and chair, the dean of the College or school may authorize exceptions to the limitations listed. Departments may impose additional limitations on upper-division tutorial courses.

Credit by Examination
Students with high scholastic standing may earn credit for regular UCLA courses by taking examinations rather than enrolling in the courses. This is accomplished by establishing, with a UCLA faculty member, an individual plan of study that may include oral and written work in addition to other requirements. To be eligible, undergraduate students must have completed a minimum of 12 units at UCLA. Graduate students must be registered at the time of the examination and are limited to a maximum of three courses taken in this manner.

The results of these courses are entered on the record in the same way as UC transfer credit, and grade points are assigned. Graduate credit earned by examination may be applied to minimum course requirements for master’s degrees but cannot apply to academic residence requirements for master’s or doctorate degrees.

Students need approval from the instructor; the department; and the College, school, or dean of the Graduate Division, from whom petitions for credit by examination (with fee) are available.

Grades
The work of all students at UCLA is reported in grades. Instructors are required to assign a final grade for each student enrolled in a class.

Undergraduate Grades
The following grades are used to report the quality of undergraduate student work at UCLA:

- A+ Extraordinary
- A Superior
- B Good
- C Fair
- D Poor
- F Fail
- P Passed (achievement at grade C level or better)
- NP Not Passed
- I Incomplete
- IP In Progress
- DR Deferred Report

Grades A, B, C, and D may be modified by a plus (+) or minus (−) suffix. Grades A, B, C, and P denote satisfactory progress toward the degree. A grade of D may be applied toward degrees unless otherwise prohibited by program requirements. However, courses in which a grade of D is received must be offset by higher grades in the same term for students to remain in good academic standing. A grade of F yields no unit or course credit.
Graduate Grades

The following grades are used to report the quality of graduate student work at UCLA:

- **A**: Superior Achievement
- **B**: Satisfactorily demonstrated potentiality for professional achievement in field of study
- **C**: Passed the course but did not do work indicative of potentiality for professional achievement in field of study
- **F**: Fail
- **S**: Satisfactory (achievement at grade B level or better)
- **U**: Unsatisfactory
- **I**: Incomplete
- **IP**: In Progress
- **DR**: Deferred Report

The grades A, B, and C may be modified by a plus (+) or minus (–) suffix. The grades A, B, and S denote satisfactory progress toward the degree. A grade of C may be applied toward graduate degrees unless otherwise prohibited by the program requirements. However, courses in which a grade of C is received must be offset by higher grades in the same term for students to remain in good academic standing. A grade of F yields no unit or course credit.

The schools of dentistry, law, and medicine use their own grading codes. Students interested in dentistry, law, or medicine programs should contact the appropriate school for more information.

Grade Points

Grade points per unit are assigned by the Registrar as follows:

<table>
<thead>
<tr>
<th>Grade</th>
<th>Grade Points</th>
<th>Grade</th>
<th>Grade Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>A+</td>
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<td>C–</td>
<td>1.7</td>
</tr>
<tr>
<td>A</td>
<td>4.0</td>
<td>D+</td>
<td>1.3</td>
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<tr>
<td>A–</td>
<td>3.7</td>
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<tr>
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<tr>
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</tr>
<tr>
<td>C</td>
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</table>

As indicated, a plus (+) or minus (–) suffix added to a grade raises or lowers the grade-point value, except in the case of A+, which carries the same number of grade points as the A grade. Courses in which students receive a grade of P or S may count toward satisfaction of degree requirements, but these grades, as well as DR, I, IP, and NR, are disregarded in determining the grade-point average. (If a grade of I is later removed and a letter grade assigned, units and grade points are included in subsequent GPAs.) NR indicates that no grade was received from the instructor.

Grade-Point Average

The grade-point average (GPA) is determined by dividing the number of grade points earned by the number of units attempted. The total grade points earned for a course equals the number of grade points assigned times the number of course units. For example, if a student takes three 4-unit courses and receives grades of A–, B–, and C+, then the GPA for the term equals the total grade points (34.8) divided by the total course units (12); the GPA is 2.9. For satisfactory standing, undergraduate students must maintain a 2.0 (C) GPA and graduate students a 3.0 (B) GPA in all courses taken at any UC campus (except UCLA Extension).

Only grades earned in regular session or summer sessions at any UC campus—and grades earned by undergraduate students in UCLA Extension courses prefixed by XLC—are computed in the UCLA grade-point average. Grades earned at another institution or in UCLA Extension courses other than those prefixed by XLC do not affect the GPA.

Other schools and agencies may calculate GPAs differently from UCLA when evaluating records for admission to graduate and professional school programs. Students should contact those entities about such policies.

Passed/Not Passed Grades

Undergraduate students in good standing who are enrolled in at least 12 units (14 in the Henry Samueli School of Engineering and Applied Science) may take certain courses on a Passed/Not Passed (P/NP) basis.

The grade P is assigned for a letter grade of C or better. Units earned this way count toward degree requirements but do not affect the GPA. Students receive neither units nor course credit for a grade of NP.
Students may enroll in one course each term on a P/NP basis (two courses if they have not elected the P/NP option in the preceding term). Their department or school may require that they take some or all courses in their major for a letter grade. Certain other courses or programs may also be exempt from the P/NP option; contact the College or school for details.

Students may make changes to or from P/NP grading through the sixth week of instruction using MyUCLA.

Satisfactory/Unsatisfactory Grades

Graduate students in good standing (minimum 3.0 GPA) may enroll for Satisfactory/Unsatisfactory (S/U) grading in one graduate or upper-division course outside the major field each term, in addition to any courses offered only on an S/U grading basis within the major. The grade S is assigned for a letter grade of B or better, but units earned in this manner are not counted in computing the GPA. Students receive neither units nor degree credit for a grade of U. They may not elect the S/U option for summer session courses without an approved petition.

Courses taken on an S/U basis outside the major, and 500-series courses within the major, are applicable toward degree and/or academic residence requirements if so approved. Interdepartmental majors may not apply S/U courses to degree requirements, except for 500-series courses.

Students may make changes to or from S/U grading through the tenth week of instruction using MyUCLA.

Incomplete Grades

Once a grade of Incomplete (I) is assigned, it remains on the transcript along with the passing grade students may later receive for the course. The instructor may assign the grade I when work is of passing quality but is incomplete for a good cause (such as illness or other serious problem). It is the student’s responsibility to discuss with the instructor the possibility of receiving an Incomplete as opposed to a nonpassing grade.

If a grade of I is assigned, students may receive unit credit and grade points by satisfactorily completing the coursework as specified by the instructor. Students should not re-enroll in the course; if they do, it is recorded twice on the transcript. If the work is not completed by the end of the next full term in residence, the I lapses to an F, NP, or U as appropriate. For undergraduate students, the College or school may extend the deadline in unusual cases.

In Progress Grades

For certain courses extending over more than one term, evaluation of student performance is deferred until the end of the final term of the course. Provisional grades of In Progress (IP) are assigned in the intervening term(s) and are replaced with the final grade when students complete the full sequence. The College or school faculty, or the Graduate Division, determines credit if students do not complete the full sequence and petition for partial credit.

Deferred Report Grades

Students may receive a grade of Deferred Report (DR) when the instructor believes their work to be complete but cannot assign a grade because of disciplinary proceedings or other problems. If students are given a grade of DR, the Office of the Dean of Students assists them in resolving the problem. For graduate students, the dean of the Graduate Division sets a deadline by which the DR lapses to an F if the problem is not resolved and a grade assigned. The DR is changed to a grade, or perhaps to an Incomplete, when the instructor provides written confirmation that the situation is resolved. The DR is not included in determining the grade-point average.

Correction of Grades

All grades except DR, I, and IP are final when filed by the instructor in the end-of-term course report. Thereafter, a grade change may be made only in case of a clerical or procedural error or other unusual circumstances. No grade may be revised by re-examination or, with the exception of the I and IP grades, by completing additional work. All grade changes are recorded on the transcript.

Students who are dissatisfied with a grade may request a review of their work with their instructor and an explanation of the grade assigned. See more details and procedures for appealing grades under Grading Regulations in Appendix A.

Absence and Readmission

To be registered for a term, students must enroll in courses and pay fees according to deadlines specified in the Registrar’s term calendar. Students who do not register are subject to the following policies on absence and readmission.

Students who register and subsequently discontinue coursework or stop payment on registration fees checks—without an approved petition for withdrawal, leave of
absence, or cancellation—receive grades of F, NP, or U, as appropriate, for all courses in which they are enrolled for that term. A fine is assessed if any check for registration fees payment is returned by a bank for stopped payment, insufficient funds, or any other reason. No fees are refunded, and future registration privileges may be curtailed or revoked.

Cancellation

Before the first day of classes, students may cancel registration by completing and submitting a **Cancellation of Registration** form, or faxing written notice to 310-206-4520. Refund is as follows: fees paid by new undergraduate and Dentistry students are refunded except for the nonrefundable acceptance of admission fee; for new graduate, undergraduate, continuing, and re-entering students, a service fee is deducted from the amount of fees paid.

Graduate students who cancel their registration and do not apply for a formal leave of absence must file for readmission to return to UCLA.

Withdrawal

Withdrawing from UCLA means discontinuing attendance in all courses in which the student enrolled. Students who withdraw during a term must file a **Withdrawal Notice**.

When students officially withdraw, a percentage of the term fees may be refunded depending on the date the withdrawal form is filed. See the Registrar’s **withdrawal** web page for policy details and specific refund dates.

The UCSHIP fee is nonrefundable in most cases. Contact the Arthur Ashe Student Health and Wellness Center **insurance office** for more information.

Students may withdraw only if they have not taken any final examinations or otherwise completed the work in any classes. For undergraduates, one withdrawal places no restriction on readmission or continuation if they started the term in good academic standing. If they withdraw after one or more previous withdrawals or while in academic difficulty, a restriction may be placed on their continuance in undergraduate standing. Before withdrawing, they are urged to consult with faculty, department, or College or school advisers to consider the full implications of this action.

Undergraduates may also withdraw from a term retroactively, provided no final examinations have been taken and no coursework has been completed. No withdrawals are accepted once they have officially graduated from UCLA.

Undergraduate One-Term Absence

Undergraduate students who complete a term (fall, winter, or spring quarter) and do not register the following term may return to UCLA the subsequent term as a continuing student, and be eligible to register and enroll in advance.

Students on a one-term absence who plan to attend another institution—including UCLA Extension—should discuss plans with their College or school counselor before enrolling elsewhere. On returning to UCLA, students must have an official transcript sent from the institution directly to UCLA Undergraduate Admission to have coursework evaluated.

Planned Academic Leave (PAL) for International Travel

Students who plan to participate in a study-abroad program sponsored by an institution other than the University of California are required to take a planned academic leave of absence (PAL) from UCLA. After they are accepted into a program, students must register the program with the UCLA International Education Office (IEO), B300 Murphy Hall. Registering the program also generates the student application for the PAL.

See IEO **non-UC programs** for program and registration requirements.

Students returning from an approved PAL for participation in a registered non-UC study abroad program are not required to seek readmission, but must provide official transcripts for coursework evaluation.

Undergraduate Readmission

To return to UCLA after an absence of more than one term, students—except for those on PAL for non-UC study abroad—must complete an **Undergraduate Readmission**
Application and file it with the Registrar’s Office in accordance with published deadlines. A nonrefundable fee applies.

Students must submit official transcripts from all institutions (including UCLA Extension) and a completed Statement of Legal Residence with readmission applications. Coursework is evaluated when official transcripts are received. The paper records of nonregistered students, including transcripts submitted for transfer credit, are retained by the Registrar’s Office for five academic years after the last registered term.

Students who have not registered for five years must resubmit official transcripts of all work completed outside UCLA. Readmission is generally approved if students were in good academic standing (2.0 GPA) when they left UCLA, if coursework completed elsewhere in the interim is satisfactory, and if readmission applications are filed on time. The College or school may have other regulations. Contact the readmission clerk for more information at 310-825-1091, option 6.

**Readmission Deadlines**

<table>
<thead>
<tr>
<th>Quarter</th>
<th>Deadline</th>
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<tr>
<td>Fall Quarter</td>
<td>August 15</td>
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<tr>
<td>Winter Quarter</td>
<td>November 25</td>
</tr>
<tr>
<td>Spring Quarter</td>
<td>February 25</td>
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**Graduate Student Continuous Registration Policy**

Graduate students must be either registered and enrolled or on an official leave of absence every term until their degrees are awarded. As an exception, certain graduate students may be eligible to pay the filing fee. Failure to register, have filing fee status, or be on an official leave of absence for any term (fall, winter, or spring quarter) constitutes withdrawal from UCLA.

**Graduate Leave of Absence**

Continuing graduate students in good standing (3.0 GPA or above) who have completed at least one term of UCLA graduate work may, with the support of their department and approval of the Graduate Division, be eligible for leaves of absence. Graduate students are allowed three quarters of official leave of absence. See the Leave of Absence Request web page; for filing deadlines, see the Registrar’s term calendar.

Federal policy governing students on F-1 and J-1 visas restricts leaves of absence to certain conditions. Therefore, the Dashew Center for International Students and Scholars, in consultation with the Graduate Division, individually evaluates each international graduate student request for a leave of absence to determine that it meets federal (and UCLA) eligibility criteria.

Students on approved leave of absence are not permitted to use faculty time or make use of UCLA facilities for more than 12 hours since their last registration, and are not eligible for apprentice personnel employment or other services normally available to registered students. There is no need to apply for readmission, since the approved leave is for readmission to a specific term. The Registrar’s Office notifies students about registration for the returning term.

Research doctoral students who are new parents or who are confronted with extraordinary parenting demands should consult Standards and Procedures for Graduate Study at UCLA regarding Graduate Council policy requiring program accommodations for them.

**In Absentia Registration**

Academic and professional graduate students who conduct research or engage in approved degree program-related activities outside California may be eligible for in absentia registration. Students registered in absentia pay 15 percent of tuition and the student services fee, but pay the full amounts of other mandatory fees such as health insurance and nonresident supplemental tuition (if applicable). In absentia registration and fee reductions may be used for a maximum of six quarters or four semesters for academic doctoral students, and up to three quarters or two semesters for master’s and professional graduate students. See the In Absentia Registration Petition web page.

**Graduate Student Readmission**

Students who are granted a formal leave of absence do not have to apply for readmission if they resume their graduate work in accordance with the terms of the leave. All other continuing graduate students who fail to register for any regular session, or who fail to complete a term through cancellation or withdrawal, must apply for readmission.

Students who have registered at any time as a graduate student at UCLA and return after an absence (except a formal leave of absence) must file an Application for Graduate Admission. Payment of the nonrefundable application fee may be made by credit card only. Transcripts of all academic work completed since registration at UCLA as a graduate student must also be submitted.

**Transcripts and Records**

The transcript is the complete record of a student’s academic work at UCLA. The Registrar prepares, maintains, and permanently retains this record. Additional records may include financial and personal student information.
Transcripts
The transcript reflects all undergraduate and graduate work completed in UCLA regular and summer sessions. It lists chronologically courses, units, grades, cumulative GPA, transfer credits, and total units.

Official UCLA paper transcripts are printed on security paper to safeguard against unauthorized duplication, alteration, and misrepresentation. The paper has a multicolor security background design and a border bearing the words University of California, Los Angeles. Authentication details are located in the lower right-hand corner of the transcript, and the transcript legend appears on the reverse of the document. Transcripts are issued in blue envelopes marked Official Transcripts Enclosed.

Official UCLA electronic PDF transcripts contain a background design, identifying border text, authentication details, and legend. The secure file is sent with a cover page that includes UCLA, student, and recipient information.

Two types of official UCLA transcript—academic and verification—are designed to meet specific needs. Both can be ordered through MyUCLA, as can an unofficial (student copy) academic transcript.

Academic Transcript
The academic transcript is a student’s complete academic record, including a list of courses taken, transfer credit, units, grades, grade-point average (GPA), earned UCLA degrees, and in-progress term information. In-progress information includes a list of courses in which a student enrolled during the term the transcript was ordered, and other in-progress information such as a change in major or removal of an I grade.

Grades for completed terms are processed immediately following the conclusion of final examinations. Complete academic transcripts are available approximately two weeks after the last day of the term. For graduating students, academic transcripts with the graduation date included are available approximately six weeks after the term ends. Students who need earlier proof of graduation may contact a degree auditor at 1113 Murphy Hall.

The minimum time to process and issue academic transcripts, for both registered and former students, is three working days.

For auto insurance good-student discount purposes, an academic transcript can be attached to the insurance form; or the form can be presented at 1113 Murphy Hall.

Verification Transcript
The verification transcript certifies registration (fee payment), enrollment status, and degrees. This transcript confirms student status only after registration fees have been paid for the term. Verification of student workload is based on actual enrolled units, and does not consider wait-list units or list courses for a term.

Verification of degree can be issued after the degree has been posted to the student record, approximately six weeks after the term ends. If verification is required before the degree is posted, the student may contact a degree auditor at 1113 Murphy Hall.

A study list of 12 or more units for registered undergraduate students, or 8 or more units for registered graduate students, is considered full-time status for enrollment reporting, insurance, intercollegiate athletics, and financial aid purposes.

Third-Party Verifications
UCLA has authorized National Student Clearinghouse to act as its agent for all third-party verifications of student enrollment and degrees, including those for loans and creditors. Approved by the U.S. Department of Education, the Clearinghouse is a national organization that facilitates and expedites student enrollment verifications for creditors and other student service-related agencies. The Clearinghouse abides by all provisions of the Family Educational Rights and Privacy Act (FERPA). Degree verification for the most recent term is available approximately seven weeks after the term ends.

Ordering Transcripts
Continuing students must order official academic and verification transcripts through MyUCLA. Other students may order transcripts through MyUCLA, in person at 1113 Murphy Hall, or by using a Transcript Order form.

Requests are not processed if students have outstanding financial, academic, or administrative obligations (holds) to UCLA. Transcripts of work completed elsewhere must be requested directly from the campus or institution concerned.

More information about ordering transcripts is available on the Registrar’s student records web page, by calling 310-825-1091, or by sending e-mail to the transcripts unit.

For UCLA Extension courses, order transcripts from UCLA Extension online, or by mail at PO Box 24901, Department K, Los Angeles, CA 90024-0901.
Fees and Payment

Most academic and verification transcripts are available at no charge after payment of the document fee.

A fee may be charged for some transcript-related services. For example, forms that must be completed by the Registrar’s Office and envelopes that require official signatures incur a special handling fee. Expedited service—processing within 24 hours (paper) or 30 minutes (PDF)—is available for an additional fee; or transcripts can be faxed for an additional fee. Faxed transcripts are generally not considered official, and confidentiality cannot be guaranteed. For exact fees, see transcript-related fees.

Student Records

Student files of pertinent documents are maintained for up to five years from the admit term. Students may view their records at the Registrar’s Office, 1113 Murphy Hall. A five-day advance notice is required for viewing.

MyUCLA

Through MyUCLA, students can obtain academic, financial, and personal information from their UCLA academic records.

Name or Address Change

Students who wish to change their legal name on official UCLA records should complete a Legal Name Change or Correction form and submit it with documentation supporting the name change to the Registrar’s Office, 1113 Murphy Hall. Students on an F or J visa must provide a current passport bearing the exact same name as the new name. All name changes are recorded on the transcript.

Student address changes should be updated through MyUCLA.

Closure of Student Records

Student records are closed to revisions in enrollment, grading, and academic actions on award of a degree. Students are responsible for requesting review of their record prior to award of their degree. See UCLA Procedure 220.1, Student Grievances Regarding Challenge to Content of Student Records Under the Family Educational Rights and Privacy Act.

Changes requested by an individual after award of a degree are considered by the College or school only under extraordinary circumstances. Supportive documentation is required. On action of the academic dean, a statement of the request for revision and a note of the change will be recorded only in the memoranda section of the transcript.

Degrees

Students must satisfy UC requirements, College or school requirements, and department requirements as described in this catalog.

Undergraduate Degrees

Undergraduate degree requirements are subject to the following degree policies.

Student Responsibility

It is students’ responsibility to keep informed of and to comply with the rules, regulations, and policies affecting their academic standing. Meeting academic deadlines, monitoring the study list for accuracy, completing requisites, and fulfilling degree requirements are all part of their academic duties as students.

Minimum Scholarship

The grades A through C and Passed (P) denote satisfactory progress toward the bachelor’s degree. The grades C–through D– yield unit credit but may not satisfy certain scholarship requirements. Even when they do, they must be offset by grades of C+ or better in other courses. Students must earn at least a 2.0 (C) grade-point average (GPA) in all courses taken at any UC campus. Students who fail to maintain this level may be placed on academic probation or may become subject to dismissal. The College and each school may set additional scholarship requirements.

Academic Probation

Students are placed on probation if their overall or term GPA falls between 1.5 and 1.99. While they are on probation, they may not take any course on a Passed/Not Passed (P/NP) basis. Probation ends at the close of a regular term if students have attained a 2.0 (C) GPA for the term and a cumulative 2.0 (C) GPA in all UC coursework. Students who do not end probation within two terms are subject to dismissal.

Academic Dismissal

Students are subject to dismissal from UCLA under any of the following conditions:

• Their GPA in any one term is lower than 1.5
• They do not earn at least a 2.0 (C) GPA in any term when they are on probation
• They do not end probation within two terms

If students are subject to dismissal, their transcripts carry that notation. Students should make an appointment with their College or school counselor. Depending on the situa-
tion, they are given conditions for continuation or are dismissed from UCLA.

Progress toward the Degree
UCLA is a full-time institution, and it is expected that students complete their undergraduate degree requirements promptly. Normal progress toward graduation in four years is defined as the completion of 45 units per year, or 15 units per term.

Minimum Progress and Expected Cumulative Progress
The College and each school enforce minimum progress regulations. The College also enforces expected cumulative progress regulations. Students may be subject to disqualification for failing to meet minimum progress and expected cumulative progress requirements. See the College and Schools chapter for specific minimum progress, expected cumulative progress, and study list regulations.

Petitions
A petition is a form submitted to explain an exception from any UCLA or UC standard rule or regulation. It is the only way to obtain formal approval from the department, College or school, Registrar, or office with authority over a particular request. Some petitions require a fee.

Some uses of petitions are to change the College, school, or major; take more or fewer units than regulations permit; make changes to the study list after MyUCLA processing ends; or obtain credit by examination. Students may petition for concurrent enrollment, double major, or waiver of scholarship requirements.

Transfer Credit
Every California community college has transfer course agreements that specify which courses will receive transfer credit. These courses are displayed on ASSIST, the statewide transfer information website. Students can get some knowledge of transfer credit from accredited institutions other than the University of California, or California community colleges, by comparing the descriptions of courses taken with those in this catalog.

Once students complete the courses, they must have the other institution send official, sealed transcripts to UCLA Undergraduate Admission, 1147 Murphy Hall, Box 951436, Los Angeles, CA 90095-1436. Transfer students should discuss transfer credit with their College or school and/or department adviser.

Community College/Lower Division Transfer Limitation
Effective for students admitted fall 2017 and later: after completing 105 lower-division quarter units toward the degree at all institutions attended, students are allowed no further unit credit for courses completed at a community college or for lower-division courses completed at any institution outside of the University of California. The University of California does not grant transfer credit for community college or lower-division courses beyond 105 quarter units, but students may still receive subject credit for this coursework to satisfy lower-division requirements. Units earned through Advanced Placement (AP), International Baccalaureate (IB), and/or A-Level examinations are not included in the limitation. Units earned at any UC campus (through extension, summer, cross-campus, UCEAP, Intercampus Visitor Program, and regular academic year enrollment) are not included in the limitation. To convert semester units into quarter units, multiply the semester units by 1.5; for example, 12 semester units x 1.5 = 18 quarter units. To convert quarter units into semester units, multiply the quarter units by .666; for example, 12 quarter units x .666 = 7.99 or 8 semester units.

Summer Session Courses
Summer session grades at any UC campus are computed in the UCLA grade-point average.

UCLA Extension
Students who wish to receive degree credit for work taken through UCLA Extension should take courses that correspond in number to the undergraduate courses offered in regular session. The designation XL or XLC before the number of the Extension course signifies that the course is equivalent to the regular-session course bearing the same number. Grades earned by undergraduate students in the School of the Arts and Architecture, Graduate School of Education and Information Studies, College of Letters and Science, and Herb Alpert School of Music in courses prefixed by XLC are computed in the UCLA grade-point average. No degree credit is given for courses numbered X300 through X499. Concurrent enrollment in Extension and regular session is not permitted.

Degree Checks
Anytime before graduation, a student may request an official degree check. This review of degree progress details requirements that remain to complete the bachelor’s degree. The degree-check process may be different for the College and each school.
The **Degree Audit**—a computer-generated assessment of all degree requirements and the courses taken to fulfill them—is an essential review tool. It can be viewed and printed through **MyUCLA**, or ordered at a counseling office. The student should review their Degree Audit with their College, school, or department counselor to ensure that all requirements will be satisfied. Engineering students are encouraged to also consult the [school undergraduate degree audit](#) web page.

**School of the Arts and Architecture**  
**Office of Student Services**, 2200 Broad Art Center

**Graduate School of Education and Information Studies**  
**Office of Student Services**, 1002 Moore Hall

**Henry Samueli School of Engineering and Applied Science**  
**Office of Academic and Student Affairs**, 6246 Boelter Hall

**College of Letters and Science**  
**Academic Advancement Program**, 1209 Campbell Hall  
**College Academic Counseling**, A316 Murphy Hall  
**College Honors Programs**, A311 Murphy Hall  
**Student Athletics**, Morgan Center

**Herb Alpert School of Music**  
**Office of Student Affairs**, 1642 Schoenberg Music Building

**School of Nursing**  
**Student Affairs Office**, 2-147 Factor Building

**Meyer and Renee Luskin School of Public Affairs**  
**Student Services Office**, 3250 Public Affairs Building

**School of Theater, Film, and Television**  
**Student Services Office**, 103 East Melnitz Building

### Graduate Degrees

For graduate degree requirements and procedures, see [program requirements for UCLA graduate degrees](#) and [Standards and Procedures for Graduate Study at UCLA](#).

### Certificate of Resident Study

International students who must leave UCLA and the U.S. before completing a degree or certificate program may request a Certificate of Resident Study in addition to a formal transcript. The certificate cannot be awarded if the studies involved are covered by a diploma or other certificate. The chair of the major department recommends award of the certificate through a petition to the College, school, or Graduate Division.

To be eligible to receive the certificate, students must have completed a program of at least nine courses with a minimum GPA of 2.0 (2.5 for Graduate Division students) and have satisfactorily completed a research project over a period of nine or more months.

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### Graduation

The awarding of degrees is the culmination of several steps that begin when students identify the term in which they expect to complete degree requirements.

### Undergraduate Students

Approximately nine out of every 10 UCLA undergraduates eventually receive a bachelor’s degree, either from UCLA or from another campus or institution. One-third of all UCLA bachelor’s degree recipients go on to graduate school.

### Declaration of Candidacy

To initiate the steps leading to the award of a bachelor’s degree, students must identify the term in which they expect to complete degree requirements, through **MyUCLA**, by the time they complete 160 units (172 units for engineering students). The identified term must be within the academic year (four quarters) subsequent to the term in which students reach or expect to reach the 160- or 172-unit limit. Once they complete 160 or 172 (or more) units, a fee is assessed each time students identify or change the degree-expected term. Current- or past-term candidates over the unit limit must file a [Declaration of Candidacy](#) form with the Registrar’s Office.

Friday of the second week of the term is the last day to declare candidacy for the current term (with fee depending on units completed). Declaration of candidacy after week two incurs a late fee, and may result in a degree-award date for the following term.
Students can verify the degree-expected term through MyUCLA. For questions about degree candidacy status, College students may inquire at the Registrar’s Office. Arts and architecture; education and information studies; engineering; music; nursing; public affairs; and theater, film, and television students should contact their school office. A photo ID is required. Declaring candidacy is not a guarantee of graduation.

In Absentia Graduation

Students who intend to complete degree requirements while nonregistered (those who take a course through UCLA Extension or at another institution, remove an Incomplete grade, and so on) must submit a Request to Graduate In Absentia form to their degree auditor in 1113 Murphy Hall, by the week-two candidacy deadline. Students graduating in absentia are assessed the undergraduate in absentia degree-processing fee, in addition to the declaration of candidacy fee, if they were also not registered in the term immediately prior to their degree-expected term.

Retroactive Degree and Graduation

Students who do not declare candidacy in the term that final degree requirements are met, or who had pending degree-related issues (such as grade changes, department approval of major courses, or advanced-standing work at other institutions) in the declared term, must submit a Retroactive Degree Request form. If the request is approved, the degree is recorded on the transcript immediately, and the student record is closed to any further revision. The $75 special order diploma fee applies.

Final Degree Audits and Graduation

Degree auditors are responsible for verifying each candidate’s eligibility for a bachelor’s degree. Degree auditors have information pertaining to a student’s graduation only if that student declared candidacy and completed 160 quarter units (172 units for engineering students). Degree auditors are available in the following offices:

School of the Arts and Architecture
Office of Student Services, 2200 Broad Art Center

Graduate School of Education and Information Studies
Office of Student Services, 1002 Moore Hall

Henry Samueli School of Engineering and Applied Science
Office of Academic and Student Affairs, 6246 Boelter Hall

College of Letters and Science
Registrar’s Office, 1113 Murphy Hall

Herb Alpert School of Music
Office of Student Affairs, 1642 Schoenberg Music Building

School of Nursing
Student Affairs Office, 2-147 Factor Building

Meyer and Renee Luskin School of Public Affairs
Student Services Office, 3250 Public Affairs Building

School of Theater, Film, and Television
Student Services Office, 103 East Melnitz Building

During their graduating term, students should inform a degree auditor of grade changes, petitions for substitutions or exemptions, transfer credits, or similar changes that may affect their degree. If graduation eligibility cannot be verified, a degree auditor notifies the student of any outstanding requirements or other degree completion problems. Student records are closed to revisions in enrollment, grading, and academic actions on award of a degree. Students are responsible for requesting review of their record prior to award of their degree.

A summary of shortages for the bachelor’s degree statement is sent to each current-term candidate who does not satisfy degree requirements that term. Students who receive such notices should contact a degree auditor immediately. If students expect to satisfy degree requirements in a later term, they must change their degree-expected term through MyUCLA or at 1113 Murphy Hall. They may be assessed applicable fees.

Contact degree auditors only for questions about degree audits. Telephone numbers are published on the Registrar’s service directory. Do not contact auditors regarding commencement procedures; see Commencement.

Graduate Students

Candidates for both master’s and doctorate degrees must be advanced to candidacy and complete all degree requirements—including the master’s thesis or capstone, or doctoral dissertation—before the degree is conferred. See the filing deadlines calendar for thesis/dissertation filing deadlines. For graduate degree requirements and procedures, see program requirements for UCLA graduate degrees and Standards and Procedures for Graduate Study at UCLA.

Degree Date

Degrees are awarded at the end of fall, winter, and spring quarters and at the end of summer session C. School of Law and School of Medicine degrees are normally awarded at the end of fall and spring semesters. See the UCLA term calendar for the degree-award date, which is the final day of the term.
Commencement

The College, each school, and the Graduate Division conduct commencement ceremonies for their graduates. Ceremonies feature addresses from distinguished speakers, and recognize candidates who have achieved high academic distinction and honors.

Check with the College, school, or department for eligibility requirements, programs, and time schedules. Commencement information—including the schedule of ceremonies, maps and parking, and updates—is published online. Doctoral hooding ceremony information is also published online.

Privacy

Names of students who request that no public information be released do not appear in commencement ceremony programs. Students may change their privacy status on MyUCLA.

Diplomas

Diplomas for both undergraduate and graduate students are available approximately three months after the degree-award date. After week three of their expected term of graduation, students should provide instructions for obtaining the diploma in person or by mail using the diploma request feature on MyUCLA. To expedite receipt of diplomas, instructions should be given no later than one month after the last day of the degree term. Students may also request diplomas in person at 1113 Murphy Hall or by returning a Diploma Mail Request form.

Name Change

To be reflected on the diploma, a name change must be submitted on a Legal Name Change or Correction form, with supporting documentation, to the Registrar’s Office, 1113 Murphy Hall, by the last day of the degree-expected term. Once the degree is awarded, only a court order will be accepted to make a name change; a replacement diploma fee applies.

Replacement Diploma

If an original diploma is destroyed, a replacement may be ordered by using the diploma request feature on MyUCLA. Students may also order a replacement diploma in person at 1113 Murphy Hall, or by returning a Replacement Diploma Request form. A replacement diploma fee applies. The new diploma bears a reissue date and signatures of current California, UC, and UCLA officials.
College and Schools

The UCLA campus is home to one College and 12 professional schools. Each has its own degree requirements, and each division and school is headed by a dean who has final academic authority. Students enroll in UCLA and in the College or one of the schools described in this chapter.

College of Letters and Science

David C. Schaberg, PhD, Senior Dean and Dean of Humanities
Miguel A. García-Garibay, PhD, Dean of Physical Sciences
Darnell M. Hunt, PhD, Dean of Social Sciences
Tracy L. Johnson, PhD, Dean of Life Sciences
Adriana Galván, PhD, Dean of Undergraduate Education

College of Letters and Science
2300 Murphy Hall
310-825-9009

UCLA is one of the world’s premier universities. At the core of UCLA research programs, graduate training, and undergraduate instruction is the College of Letters and Science. With over 28,340 students and more than 900 faculty members, the College is the largest academic unit in the UC system and the academic heart of UCLA.

The undergraduate programs in the College stress a liberal arts education that brings together perspectives from many fields in a unified approach to learning. Students learn ways that issues are analyzed, questions are posed, and knowledge is organized. After sampling many general subjects, they concentrate on one field or subject and are required to pursue it rigorously and in depth, according to the standards of scholars in the field. When they reach the graduate level, they pose their own questions, analyze academic issues of their own making and, through their research, participate in the creation of knowledge.

Organization of the College

The College of Letters and Science is organized in five divisions, each led by a dean.

Humanities Division

The Humanities Division promotes—through scholarly inquiry and the transmission of ideas—sensitive, imaginative, and rigorous reflection on the human condition. Courses in literature help students understand the enduring power of texts both great and small—from cuneiform to manuscript to hypertext. Studies of nearly 100 foreign languages create a gateway to civilizations that span the globe and five millennia of human history. Philosophers offer training in the fundamental principles of logic and moral reasoning, and linguists—both theoretical and applied—illuminate the physiological, cognitive, and social aspects of human language. Art historians explore with students the forms and media through which humans have sought to express themselves and to challenge and make sense of their worlds. Programs in the humanities teach students to interpret texts with an informed sensitivity, to evaluate ideas critically, to write clearly and effectively about them, and to be able to question and discuss them with their peers.

Life Sciences Division

Faculty members and students in the Life Sciences Division play an essential role in unlocking the basic mechanisms of life at the most fundamental level. The geography of Southern California is conducive to life sciences research, since the diverse region is a natural laboratory for environmental biologists, plant and animal ecologists, and evolutionary biologists. Scientists in microbiology and molecular, cell, and developmental biology study embryo formation, cell signaling, and genetics. Neurochemists, neurophysiologists, psychobiologists, and behavior biologists study the underlying mechanisms of the neural basis of behavior. Physiological scientists examine the structure of muscle, hormonal control of behavior, and environmental conditions, such as weightlessness, that affect bone and muscle structure and function. Cognitive psychologists are concerned with the nature of knowledge—how people learn, remember, associate, and think; and how computers relate to human thought processes.

Physical Sciences Division

Departments in the Physical Sciences Division present the results of human efforts to understand the natural sciences and their physical aspects, including the properties and characteristics of matter and energy; the science of numbers and order; the origin and structure of the universe, solar system, and Earth; and climatic change and its environmental impact. The bases for the physical sciences are the fundamental laws and proof of mathematics, chemistry, and physics. Studies in the physical sciences are experimental, theoretical, observational, and computational. Faculty members and students are interested in such topics as the nature and evolution of the galaxies; ozone depletion; nuclear winter; greenhouse effect; molecular recognition, interactions, design, synthesis, and structure; evolution of life and the continents; computational mathematics and
symbolic logic; superconducting materials; plasma fusion, space plasmas; and high-energy accelerator physics.

**Social Sciences Division**

Majors in the Social Sciences Division help students make sense of the rapidly changing world around them by giving them the tools and sensibilities to appreciate the complex interplay of individuals, environment, culture, and economy that makes up their social world. They study human and animal evolution, as well as the transformation of human societies from small groups to states. They explore and debate the meaning of cultural, ethnic, and racial identities in historical and contemporary settings. Some majors challenge students to analyze the role of labor, markets, and exchange, as well as the dynamics of political choices, participation, and institutions. Communication, from interpersonal conversation to mass media, and its impact on personal and political behavior are studied in different fields, while the impact of place and the natural environment are examined through geography. Underlying all of these topics is a drive to capture the elusive nature of human behaviors and relationships through direct observation and the questioning of prevailing theories. In addition, students learn exciting and diverse methods of social and environmental analysis, such as archaeology, linguistics, statistics, game theory, remote sensing and imagery, textual analysis, ethnography, geographic information systems, fieldwork, and ecology.

**Undergraduate Education Division**

The Undergraduate Education Division is a campuswide advocate for undergraduate education, promoting academic success for the diverse undergraduate population at UCLA and ensuring options for all students to engage in a challenging array of educational opportunities, from foundational general education courses to advanced research and capstone projects.

**Academic Advancement Program**

The Academic Advancement Program (AAP) is a multiracial, multiethnic, and multicultural program that promotes academic excellence through academic counseling, learning sessions, and mentoring. Students are eligible for AAP if their academic profiles and personal backgrounds may impact their experience and their retention and graduation from UCLA.

**Center for Community Learning**

The Center for Community Learning serves faculty members, undergraduate students, and community partners through academic courses and programs, including credit-bearing internships, service learning courses, community-based research, AmeriCorps programs, and the Astin Scholars Program. It is home to the undergraduate minor in Community Engagement and Social Change.

**Center for Educational Assessment**

The Center for Educational Assessment (CEA) supplies information and analysis to support planning, program and policy development, and other decision making about undergraduate education at UCLA.

**Center for the Advancement of Teaching**

The Center for the Advancement of Teaching (CAT) supports undergraduate education by enhancing teaching and learning opportunities. Through grants, programs, and services, CAT promotes the effective use of current and emerging instructional methodologies and technologies.

**College Academic Counseling**

College Academic Counseling (CAC) advises College undergraduate students on academic regulations and procedures, course selection, preparation for graduate and professional programs, selection of appropriate majors, and the options and alternatives available to enhance a UCLA education. Academic advisers partner with students to support student personal, professional, and intellectual growth.
Honors Programs

Honors Programs offers academic programs and services designed to promote an outstanding honors education, including College Honors, Honors Collegium, Departmental Scholar Program, Individual Majors Program, Honors Scholarships, Honors Research Stipends, and specialized counseling and support services for College honors students.

New Student and Transition Programs

New Student Orientation is the first introduction to UCLA for new students. During the three-day, first-year student sessions—and the one- and two-day transfer student sessions—a unique set of comprehensive and engaging programs is offered to make student transitions to UCLA great ones.

Scholarship Resource Center

The Scholarship Resource Center (SRC) is designed to help students in the search for private scholarships, regardless of financial aid eligibility. The center also houses the Phi Beta Kappa Office.

Transfer Alliance Program

The Transfer Alliance Program (TAP) seeks to strengthen academic ties between UCLA and honors programs in over 45 California community colleges, offering specialized transfer programs for participating students.

Undergraduate Education Initiatives

Undergraduate Education Initiatives are innovative programs designed for undergraduate students that feature best practices in undergraduate education and attract the most distinguished faculty members from all UCLA areas. Programs include UCLA General Education, Fiat Lux Freshman Seminar Program, Cluster Program, Undergraduate Student Initiated Education Program, and Writing II Program.

Undergraduate Research Centers

Undergraduate Research Centers (URC)—one for students in the arts, humanities, social sciences, and behavioral sciences; and one for students in science, engineering, and mathematics—exist as part of a continuing effort by the College to engage undergraduate students in research and creative activities at all levels.

Degrees

The College offers 111 majors leading to bachelor’s, master’s, and doctorate degrees. In addition, the College offers 82 undergraduate minors.

For a complete list of College of Letters and Science degrees, see the Majors and Degrees chapter.

Undergraduate Degree Requirements

Degree programs in the College offer students a variety of intellectual challenges by combining a wide distribution of courses and the opportunity to specialize in one particular field. To this end, students are required to select lower-division courses that furnish general foundations of human knowledge. In upper-division courses, they concentrate on one major field of interest.

As described below, College students must satisfy UC requirements, College requirements, and department requirements for the Bachelor of Arts or Bachelor of Science degree.

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<th>Degree Requirements</th>
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<td>University Requirements</td>
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Courses that do not satisfy specific UC, College, or department requirements are referred to as electives and can be used to meet the minimum unit requirement for graduation.

University Requirements

The University of California has two requirements that undergraduate students must satisfy to graduate: Entry-Level Writing or English as a Second Language, and American History and Institutions. Students who do not satisfy the Entry-Level Writing requirement prior to enrollment must pass an approved course or other program prescribed by their UC campus of residence. Only after satisfying the Entry-Level Writing requirement can they take an English composition course for transfer credit after enrolling at
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UCLA. See Degree Requirements in the Undergraduate Study chapter for details.

College Requirements

There are eight requirements that must be satisfied for award of a degree.

Unit Requirement

Students must satisfactorily complete for credit a minimum of 180 units for the bachelor’s degree. At least 60 of the 180 units must be upper-division courses numbered 100 through 199. A maximum of 216 units is permitted. Students with Advanced Placement Examination or International Baccalaureate Examination (transfer) credit may exceed the unit maximum by the amount of that credit.

Scholarship Requirement

Students must earn at least a 2.0 (C) grade-point average (GPA) in all courses undertaken at UCLA to receive a bachelor’s degree. Students must also earn a 2.0 GPA in a major and satisfy both the course and scholarship requirements for that major, including preparation for the major. Some majors have additional requirements.

Academic Residence Requirement

Thirty-five of the final 45 units completed for the bachelor’s degree must be earned while in residence at the College. A minimum of 24 upper-division units must be completed in the major while in residence at the College. The academic residence requirements apply to both continuing and transfer students.

Writing Requirement

Students must complete the UC Entry-Level Writing or English as a Second Language (ESL) requirement prior to completing the College writing requirement.

Students admitted to the College are required to complete a two-term writing requirement—Writing I and Writing II. Two courses in English composition are required for graduation. Both courses must be taken for letter grades, and students must receive a C or better grade in each (a C– grade is not acceptable).

Writing I. The Writing I requirement must be satisfied within the first three terms of enrollment by completing English Composition 3, 3D, 3DS, or 3SL with a C or better grade (a C– or Passed grade is not acceptable).

The Writing I requirement may also be satisfied by scoring 4 or 5 on one of the College Board Advanced Placement Examinations in English; a combination of a score of 720 or better on the SAT Reasoning Test, Writing section (last administered in January 2016) and superior performance on the English Composition 3 Proficiency Examination; completing a course equivalent to English Composition 3 with a C or better grade (a C– or Passed grade is not acceptable) taken at another institution; or scoring 5, 6, or 7 on an International Baccalaureate Higher Level Examination.

Students whose native language is not English may need to take English Composition 1A, 1B, and 2I before enrolling in a Writing I course. All courses in the sequence must be passed with a C or better grade (a C– or Passed grade is not acceptable).

Qualifying examination scores and courses are determined by the College Faculty Executive Committee.

Writing II. The Writing II requirement must be satisfied within seven terms of enrollment by completing one course from a list of Writing II courses approved by the College Faculty Executive Committee; see the Registrar’s Writing II requirement web page for details. The course must be completed with a C or better grade (a C– or Passed grade is not acceptable).

Applicable Writing II courses may also fulfill preparation for the major requirements and, if approved for general education (GE) or diversity credit, may fulfill a GE or diversity requirement.

Transfer students with 90 or more units who have completed the Intersegmental General Education Transfer Curriculum (IGETC) will have satisfied the Writing I, Writing II, and reciprocity requirements. No transfer student is admitted to the College without completing, with a C or better grade (a C– grade is not acceptable), a college-level writing course that Undergraduate Admission accepts as equivalent to English Composition 3.

Quantitative Reasoning Requirement

The quantitative reasoning requirement may be satisfied by completing one approved UCLA course (see list below) or an equivalent course within the first seven terms of enrollment. The course must be taken for a letter grade, and students must receive a C or better grade (a C– grade is not acceptable).

The requirement may also be satisfied by achieving an SAT Reasoning Test Mathematics Section score of 600 or better for exams taken January 2016 or earlier, or achieving an SAT Mathematics section score of 620 or better for exams taken March 2016 or later, or an SAT Subject Test in Mathematics score of 550 or better, or an ACT mathematics exam score of 26 or better. Approved UCLA courses and examinations, and qualifying scores, are determined by the College Faculty Executive Committee.
Applicable courses may also fulfill preparation for the major requirements and, if approved for general education (GE) credit, may fulfill a GE requirement.

Transfer students with 90 or more units who have completed the Intersegmental General Education Transfer Curriculum (IGETC) will have satisfied the quantitative reasoning and reciprocity requirements. No transfer student is admitted to the College without completing, with a C or better grade (a C– grade is not acceptable), a college-level quantitative reasoning course that Undergraduate Admission accepts as equivalent to those approved by the College Faculty Executive Committee. Approved courses include

- Biostatistics 100A, 100B
- Life Sciences 20, 30A, 30B, 40
- Mathematics 2, 3A, 31A, 31AL
- Philosophy 31
- Political Science 6, 6R
- Program in Computing 10A, 10B, 10C
- Public Affairs 60
- Statistics 10, 12, 13

### Foreign Language Requirement

The foreign language requirement may be satisfied by one of the following methods: completing a college-level foreign language course equivalent to level three or above at UCLA with a C or Passed or better grade; or scoring 3, 4, or 5 on the College Board Advanced Placement (AP) foreign language examination in Chinese, French, German, Italian, Japanese, or Spanish, or scoring 4 or 5 in Latin, thereby earning College credit; or presenting a UCLA foreign language departmental examination score indicating competency through level three. Consult the Schedule of Classes or the appropriate department for times and places of regularly scheduled examinations. Students who wish to demonstrate proficiency in a language taught in a UCLA department that has no scheduled examination should contact the appropriate department to arrange for one. Students who wish to take an examination in a language not taught at UCLA should contact a College counselor.

Transfer students with 90 or more units who have completed the Intersegmental General Education Transfer Curriculum (IGETC) will have satisfied the foreign language and reciprocity requirements.

Courses that may be used to fulfill this requirement are published on the Registrar’s foreign language requirement web page.

### Diversity Requirement

The diversity requirement may be satisfied by completing one course from the faculty-approved list of courses. The course must be taken for a letter grade, and students must receive a C or better grade (a C– grade is not acceptable). Applicable courses may also fulfill major, minor, or elective requirements; and if approved for general education (GE) credit, may fulfill a GE requirement. A list of approved courses is available in the Schedule of Classes.

### General Education Requirements

**General education** (GE) is more than a checklist of required courses. It is a program of study that reveals to students the ways that research scholars in the arts, humanities, social sciences, and natural sciences create and evaluate new knowledge; introduces students to the important ideas and themes of human cultures; fosters appreciation for the many perspectives and diverse voices that may be heard in a democratic society; and develops the intellectual skills that give students the dexterity they need to function in a rapidly changing world.

This entails the ability to make critical and logical assessments of information, both traditional and digital; deliver reasoned and persuasive arguments; and identify, acquire, and use the knowledge necessary to solve problems.

Applicable courses may also fulfill major, minor, or elective requirements; and if approved for diversity or writing, may fulfill the diversity requirement and/or Writing II requirement.

### Foundations of Knowledge

General education courses are grouped into three foundational areas: Foundations of the Arts and Humanities, Foundations of Society and Culture, and Foundations of Scientific Inquiry.

Ten courses (48 units minimum) are required. GE-approved Writing II courses may fulfill an appropriate foundational area. See the foundational area descriptions below for a breakdown of courses required.

Students who complete a year-long GE cluster series fulfill the Writing II requirement, complete 40 percent of their general education requirements, and receive laboratory/demonstration credit where appropriate.

Courses listed in more than one category can fulfill GE requirements in only one of the categories.

#### Foundations of the Arts and Humanities

Three 5-unit courses, one from each subgroup:

- Literary and Cultural Analysis
- Philosophical and Linguistic Analysis
- Visual and Performance Arts Analysis and Practice

Courses in this area supply perspectives and intellectual skills necessary to comprehend and think critically about our situation in the world as human beings. In particular, courses furnish the basic means to appreciate and evaluate...
the ongoing efforts of humans to explain, translate, and transform their diverse experiences of the world through such media as language, literature, philosophical systems, images, sounds, and performances. Courses introduce students to the historical development and fundamental intellectual and ethical issues associated with the arts and humanities, and may also investigate the complex relations between artistic and humanistic expression and other facets of society and culture.

Foundations of Society and Culture. Three 5-unit courses, one from each subgroup and a third course from either subgroup:

- Historical Analysis
- Social Analysis

Courses in this area introduce students to the ways in which humans organize, structure, rationalize, and govern their diverse societies and cultures over time. Courses focus on a particular historical question, societal problem, or topic of political and economic concern in an effort to demonstrate how issues are objectified for study, how data is collected and analyzed, and how new understandings of social phenomena are achieved and evaluated.

Foundations of Scientific Inquiry. Four courses, two from each subgroup. One 5-unit course from each subgroup must include either laboratory/demonstration or Writing II credit. For students entering fall quarter 2019 through spring quarter 2021, the laboratory requirement is reduced to one 5-unit course from either subgroup. Other courses in the subgroups may be 4 units:

- Life Sciences
- Physical Sciences

Courses in this area ensure that students gain a fundamental understanding of how scientists formulate and answer questions about the operation of both the physical and biological world. Courses also deal with some of the most important issues, developments, and methodologies in contemporary science, addressing such topics as the origin of the universe, environmental degradation, and the decoding of the human genome. Through lectures, laboratory experiences, writing, and intensive discussions, students consider the important roles played by the laws of physics and chemistry in society, biology, Earth and environmental sciences, and astrophysics and cosmology.

Foundations Course Lists. Creating and maintaining a general education curriculum is a dynamic process; consequently, courses are frequently added to the list. For the most current list of approved courses that satisfy the Foundations of Knowledge GE plan, contact an academic adviser or see the Schedule of Classes.

Advanced Placement Examination Credit

Students may not use Advanced Placement (AP) Examination credit to satisfy the College 10-course foundational area general education requirement. See the College AP table. Consult with a departmental adviser for applicability of AP credit toward course equivalencies or satisfaction of preparation for the major requirements.

Reciprocity with Other UC Campuses

Students who transfer to UCLA from other UC campuses and have met all GE requirements prior to enrolling at UCLA are not required to complete the College GE requirements. Written verification from the dean at the other UC campus is required. Consult with a College adviser regarding eligibility for this option.

Intersegmental General Education Transfer Curriculum

Transfer students from California community colleges have the option to fulfill UCLA lower-division GE requirements by completing the Intersegmental General Education Transfer Curriculum (IGETC) prior to transfer. The curriculum consists of a series of subject areas and types of courses that have been agreed on by the University of California and the California community colleges. Although GE or transfer
core courses are degree requirements rather than admission requirements, students are advised to fulfill them prior to transfer. The IGETC significantly eases the transfer process, as all GE requirements are fulfilled when students complete the IGETC courses.

Students who are unable to complete one or two IGETC courses prior to transfer may request certification of partial completion of IGETC from their community college. On certification, each of the remaining courses must be completed with a minimum C or Passed or better grade in each. Students who fail to complete the remaining IGETC coursework or who are otherwise not eligible for IGETC or partial IGETC must complete the College GE requirements. Consult with a college adviser regarding GE requirements prior to enrolling in any courses.

Department Requirements

College of Letters and Science departments generally set two types of requirements that must be satisfied for award of a degree: preparation for the major (lower-division courses) and the major (upper-division courses). Departments also set requirements for minors and specializations.

Preparation for the Major

Admission to a major may require completion of a set of courses known as preparation for the major. Some majors admit applicants to premajor status until requisite courses are satisfactorily completed. Students in life sciences majors must complete a set of preparatory courses known as the Life Sciences core curriculum. Each department sets its own preparation for the major and eligibility requirements; see the Curricula and Courses chapter.

The Major

A major in the College consists of a group of coordinated upper-division courses and is designated as departmental, interdepartmental, or individual. Each course applied toward the major and preparation for the major must be taken for a letter grade unless otherwise stipulated by the department. Students who have been away from UCLA for several terms should consult with their major department or curriculum adviser concerning the requirements under which they are to graduate.

Each department sets its own major requirements; see the Curricula and Courses chapter.

Departmental Majors. A departmental major consists of a minimum of 36 upper-division units and a maximum of 60 upper-division units. The majors are established and supervised by campus departments.

Interdepartmental Majors. An interdepartmental major consists of a minimum of 48 upper-division units and a maximum of 75 upper-division units, of which no more than 32 units may be coursework in one department. The programs are administered by interdepartmental committees made up of faculty whose membership is determined by research interest, not by departmental affiliation. By cutting across the usual lines of departmental division, a field is studied from the perspectives of different disciplines, and a greater degree of program flexibility is achieved.

Individual Capstone Majors. If students have some unusual but definite academic interest for which no suitable major is offered at UCLA, and have completed at least three terms of work (45 units minimum) at UCLA with a grade-point average of 3.4 or better, they may petition for an individual capstone major. The consent of College Honors Programs and the assistance of a faculty adviser are required. Individual majors must be approved by the vice provost for undergraduate education.

The individual major must consist of at least 48 and no more than 60 upper-division units, a majority of which must be in departments offering a major in the College. A capstone senior thesis of at least 8 but no more than 12 units is required. For details about individual majors, contact Honors Programs, A311 Murphy Hall.

Double Majors. Students in good academic standing and on track to graduate on time may be permitted to have a double major, consisting of majors from two departments within the College. Both majors must be completed within the maximum limit of 216 units, and students must obtain the approval of both departments and the College.

With few exceptions, double majors in the same department are unacceptable. No more than 20 upper-division units may be shared by both majors.

Minors and Specializations

Students may choose to pursue a minor to complement their major program of study. Minors consist of no fewer than seven courses (28 units) and no more than nine courses (36 units). Some minors also have admission requirements.

The Computing specializations are sequences of supplemental courses that enhance work in a major.

See the list of Undergraduate Minors and Specializations in the Majors and Degrees chapter; descriptions are in the Curricula and Courses chapter.

Policies and Regulations

Degree requirements are subject to policies and regulations, including the following:
Student Responsibility

Students should take advantage of academic support resources, but they are ultimately responsible for keeping informed of and complying with the rules, regulations, and policies affecting their academic standing.

Study List

The study list is a record of classes that a student is taking during a particular term. The allowable study list load is up to 19 units. After the first term, students may petition to enroll in more than 19 units if they attained at least a 3.0 grade-point average the preceding term in a total program of at least 15 units and have an overall grade-point average of 3.0.

First-term transfer students from any other UC campus may carry excess units on the same basis as students who have completed one or more terms at UCLA; however, they are not encouraged to do so.

Degree Progress

UCLA is a full-time institution, and it is expected that students complete their undergraduate degree requirements promptly. Normal progress toward graduation in four years is defined as the completion of 45 units per year, or 15 units per term.

The Degree Audit is a record of degree requirements and the courses taken to fulfill them. Students are responsible for monitoring their progress toward the degree. They must read and understand the UCLA General Catalog, and consult regularly with College and department counselors to confirm they are satisfying all program requirements.

Department counselors advise students on progress and completion of the major requirements. Academic advisers and counselors in College Academic Counseling, Academic Advancement Program, Honors Programs, and Student Athletics Counseling assist students with College requirements, degree planning, and Degree Audits on request. Students can also view the Degree Audit through MyUCLA.

Minimum Progress/Expected Cumulative Progress

During a regular term of enrollment, undergraduate students in the College are required to enroll in a minimum of 13 units. Students are also required to meet cumulative progress unit expectations as outlined in the expected cumulative progress table.

The following courses count toward minimum progress and expected cumulative progress, as well as any other degree requirement, but are exempt from the maximum unit limit of 216:

- Any 19, 88S, 89, 89HC, M97X, 98X, 98XA, and 98XB, 99, 189, 189HC, 190, 193, 194
- Honors Collegium 101A through 101J
- Mathematics 71SL and 72SL
- Science Education 1SL and 10S

Reduced Fee Programs

While full-time study is expected and required of students, some students may qualify for part-time study due to compelling reasons of occupation, home and family responsibilities, or health. Under this policy, part-time status is defined as 10 or fewer units per term based on enrolled units at the end of the third week, and is presumed to be of a permanent nature. On approval of part-time status, a reduction of tuition by one half and a reduction of nonresident supplemental tuition by one half are approved.

To be eligible for part-time study, students must provide documentation of occupation, home and family responsibility, or health that prevents them from carrying a full-time study load; as well as documentation of a need for part-time study for a minimum of three consecutive terms. Once approved for part-time study, students must complete two courses of 10 units or less in each of the three consecutive terms. Only under documented extraordinary circumstances is a one-course study list approved. Documentation must specify that a one-course study list is warranted.

Students should obtain a Registrar’s Fee Reduction Request. The application for part-time study must be submitted with accompanying documentation by Friday of the second week of the term. Students approved for part-time study who become enrolled in or receive credit for more than 10 units during a term must pay full fees for that term.

Declaring a Major

Students are expected to select a major by the beginning of their junior year. This may be a program of related upper-division courses within a single department (departmental major) or a group of related courses involving a number of departments (interdepartmental major) or, under certain circumstances, a group of courses selected to meet a special need (individual capstone major).

Most entering freshmen are unsure about specific academic goals and request to be admitted to the College as “undeclared.” These students then explore fields of study by taking introductory courses in the physical and life sciences, social sciences, and humanities in search of an area that most excites their interest.

All students with 90 or more units toward a degree are expected to declare a premajor or a major. When they are
ready to do so, students obtain approval from the department or interdepartmental degree committee that governs their intended major.

Changing a Major

Students in good academic standing who wish to change their major may petition to do so, provided they can complete the new major within the 216-unit limit and are on track to graduate on time. Petitions must be submitted to and approved by the department or committee in charge of the new major. Admission to certain majors may be closed or restricted. Changes are normally not permitted if students are not in good academic standing or have begun their last term.

Students who fail to attain a grade-point average of 2.0 (C) in preparation for the major or major courses may be denied the privilege of entering or continuing in that major. Some departments may have higher grade-point requirements for their preparation and major courses or other restrictions; consult with the appropriate department regarding minimum standards and eligibility requirements.

Re-entering Students and Their Majors

Students returning to UCLA to resume their studies after an absence of several years may find their previous major area of study is no longer available. They must select a current major in which to complete their studies. Consult with an academic adviser for assistance.

Credit Limitations

The following credit limitations apply to all undergraduate students enrolled in the College. In many cases, units are not deducted until the final term before graduation. Students with questions should consult with an academic adviser.

Transfer students with credit from other institutions (advanced standing credit) receive a Degree Audit from Undergraduate Admission indicating the transferable units from former institutions. However, the following credit limitations may reduce the total number of transferred units that apply toward the degree in the College. Consult with an adviser in College Academic Counseling about these limitations.

Advanced Placement Examinations. Advanced Placement (AP) Examination credit may not be applied toward a degree unless students had less than 36 units of credit at the time of the examination(s). See the College AP table for UCLA course equivalents and credit allowed for GE requirements.

College Level Examination Program. Credit earned through the College Level Examination Program (CLEP) and through the California State University English Equivalency Examination may not be applied toward the bachelor’s degree.

Community College/Lower Division Transfer Limitation. Effective for students admitted fall 2017 and later, after completing 105 lower-division quarter units toward the degree in all institutions attended, students are allowed no further unit credit for courses completed at a community college or for lower-division courses completed at any institution outside of the University of California.

Credit by Examination. Within the College, eligibility for credit by examination is usually limited to students who have been approved as Departmental Scholars or who are admitted to a departmental honors program or Honors Programs. Students who have completed a minimum of 12 units at UCLA with a minimum 3.5 overall grade-point average may petition for credit by examination. The examination for that course must be taken successfully before students may petition for credit by examination in another course.

Students may receive credit by examination for only one course out of 10 courses completed. Credit by examination may not be used to gain credit for prior knowledge, audited courses, or courses taken elsewhere. Units for a course taken by examination are applied toward the 216-unit maximum allowable units for graduation. Petitions for credit by examination (with fee) are available only through an appointment with a counselor in Honors Programs, A311 Murphy Hall.

Education Abroad Program. Students participating in the Education Abroad Program may receive a maximum of 56 units of credit toward the degree including units earned in an Intensive Language Program.

Foreign Language. Credit is not allowed for completing a less advanced course in grammar and/or composition after students have received credit for a more advanced course. College credit for an international student’s native language and literature is allowed for courses taken in native colleges and universities or upper-division (advanced language courses only) and graduate courses taken at the University of California or another English-speaking institution of approved standing. No credit is allowed for lower-division courses.

Performance Courses. No more than 12 units of music and/or dance performance courses (Dance 5, 6 through 16, 56 through 65, C109A, C113A, 114, C115, 116, Ethnomusicology 68A through 68Z, 91A through 91Z, 161A through 161Z, 168A through 168Z, Music 50, 60A through 61C, 160A through 161C, C185A through C186C, and World Arts and Cultures 114) may be applied toward the bachelor’s degree, whether taken at UCLA or another institution.

Physical Education. No more than 4 units in physical education activities courses may be applied toward the bachelor’s degree.

Physics Courses. Any two or more courses from Physics 1A, 1AH, 5A, and 6A are limited to a total of 6 units of credit.
ROTC Courses. For students contracted in the Aerospace Studies Department, 36 units of aerospace studies credit may be applied toward the requirements for the bachelor’s degree; for students contracted in the Military Science Department, 26 units of military science credit may be applied; for students contracted in the Naval Science Department, 26 units of naval science credit may be applied.

Statistics Courses. Credit is allowed for only one of Statistics 10, 12, 13, 15 (or former 10H, 11, or 14), and a maximum of 8 units for any combination of introductory statistics courses taken at UCLA and another institution.

Upper-Division Tutorials. No more than 8 units of credit may be taken per term in upper-division tutorials numbered 195 through 199. The total number of units allowed in such courses for a letter grade is 32; see specific restrictions under each course.

300- and 400-Level Courses. No more than 8 units in the 300 and 400 series of courses may be applied toward the bachelor’s degree. Credit is not granted for X300 and X400 courses taken at UCLA Extension.

Academic Advising Services
The College offers academic advising and counseling to help students develop and thrive, both personally and academically, through individual meetings with an adviser in their advising unit: Academic Advancement Program, College Academic Counseling, Honors Programs, or Student Athletics. College advisers work with students to plan their programs, understand requirements and regulations, learn about available resources, navigate the university, and maximize their undergraduate careers.

Academic Advancement Program
Academic Advancement Program (AAP) values student diversity and fosters student empowerment. AAP counselors assist students in planning an academic program and meeting College and UC requirements. They also monitor degree progress and connect students with campus resources and opportunities. Counselors are available for scheduled or same-day appointments. Visit 1205 Campbell Hall or call 310-825-1481.

AAP peer counselors offer peer support and an undergraduate-focused view of life at UCLA. They also can assist students with planning an academic program and navigating campus resources.

College Academic Counseling
College Academic Counseling (CAC) is committed to making students’ campus life and learning experience a positive one. Academic advising helps students develop and thrive both personally and academically in individual meetings, workshops, and other events to plan their programs, understand requirements and regulations, learn about available resources, navigate UCLA, and maximize their undergraduate careers. From orientation to graduation, CAC offers information, assistance, and support so that students can make well-informed decisions about their course of study and degree progress. For additional information or advising, students may come to A316 Murphy Hall, Monday through Friday from 8:30 a.m. to 4:30 p.m.; or call 310-825-3382.

College Academic Mentors work with first- and second-year students and new transfers for academic advising, choosing a major, and preparing for graduate or professional school. Students can also visit ASK Peer Counselors at various locations around campus for quick questions on degree requirements, rules and regulations, deadlines, petitions, and more.

Honors Programs
Honors Programs offers academic counseling and student advising services in a welcoming, safe, and supportive environment. Honors counselors are specially trained professionals with whom students collaborate for pre- and post-graduate planning; while Honors student affairs advisors assist students in navigating the various university processes, rules, and regulations.

Students are welcome to visit the Honors Programs office, A-311 Murphy Hall, or call 310-825-1553.

Student Athletics
Student athletes are assigned an Academic and Student Services (AS2) College academic adviser, whose role is to provide academic advice and direction in the areas of program planning, academic difficulty counseling, degree requirements, and major selection. Visit the Morgan Center or call 310-825-8699.

Honors
College undergraduate students who achieve scholastic distinction may qualify for the following honors and programs.

College Honors
The highest academic recognition the College confers on its undergraduate students is College Honors, which is awarded to graduating seniors who successfully complete the College Honors program and who have an overall University of California grade-point average of 3.5 or better. The program offers exceptional undergraduate students an opportunity to pursue individual excellence.
Dean’s Honors

The Dean’s Honors list recognizes high scholastic achievement in any one term. The following criteria are used to note Dean’s Honors on student records: a 3.75 grade-point average (GPA) in any one term, with at least 12 letter-graded units; or a 3.66 GPA and at least 56 grade points during the term. Students are not eligible for Dean’s Honors in any given term if they receive an Incomplete or a Not Passed (NP). Dean’s Honors are automatically recorded on the transcript for the appropriate term.

Departmental Honors

Individual departments and programs in the College offer departmental honors. Admission and curricular requirements vary according to the department or program. See the Curricula and Courses chapter for details, and consult with a departmental adviser about procedures and arrangements. Students who successfully complete the requirements graduate with departmental honors or highest honors.

Latin Honors

Students who have achieved scholastic distinction may be awarded the bachelor’s degree with Latin honors. To be eligible, students must have completed 90 or more units for a letter grade at the University of California and must have attained an overall grade-point average (GPA) at graduation that places them in the top five percent of College graduates (3.936 GPA or better) for summa cum laude, the next five percent (3.888 GPA or better) for magna cum laude, or the next 10 percent (3.782 GPA or better) for cum laude. Coursework taken on the Education Abroad Program is applied toward Latin honors at graduation. The minimum GPAs required are subject to change on an annual basis. Required GPAs in effect in the graduating year (fall, winter, spring, summer) determine student eligibility. Students should consult their Degree Audits, or the Registrar’s honors web page, for the most current Latin honors calculations.

Departmental Scholar Program

Departments may nominate exceptionally promising undergraduate students (juniors and seniors) as UCLA Departmental Scholars to pursue bachelor’s and master’s degrees simultaneously. Qualifications include completion of 24 courses (96 quarter units) at UCLA or the equivalent at a similar institution, the requirements in preparation for the major, and eligibility to participate in the College Honors program. Students must also have at least one term of coursework remaining at UCLA. To obtain both the bachelor’s and master’s degrees, students must be provisionally admitted to the Graduate Division, fulfill requirements for each program, and maintain a minimum 3.0 (B) GPA. No course may be used to fulfill requirements for both degrees. Interested students should consult with their department well in advance of application dates for graduate admission. For more information, contact the Honors Programs Office in A311 Murphy Hall.

Graduate Study

The College of Letters and Science offers graduate students a variety of opportunities for academic pursuit, faculty-sponsored research, and fieldwork relative to specific programs and career goals.

With Graduate Division approval and subject to UCLA minimum requirements, each department sets its own standards for admission and other requirements for award of master’s and doctorate degrees. For complete degree requirements, see program requirements for UCLA graduate degrees.

For information on proficiency in English requirements for international graduate students, see Graduate Admission in the Graduate Study chapter.

David Geffen School of Medicine

Kelsey C. Martin, MD, PhD, Dean

Geffen School of Medicine
1400 Geffen Hall
310-825-6081
School admissions e-mail

The top-ten-ranked David Geffen School of Medicine at UCLA is internationally recognized as a leader in research, medical education, and patient care. Along with the UCLA Health hospitals and facilities, the school is affiliated with more than a dozen major Southern California health care institutions.

Degrees

The Geffen School of Medicine offers an MD degree program and postgraduate medical training programs; its faculty members participate in the Graduate Programs in Bioscience. Additional master’s and doctorate degrees are offered through the UCLA Graduate Division.

Biomathematics MS, PhD
Clinical Research MS
Genetic Counseling MS
Human Genetics MS, PhD
Articulated Degree Programs
Medicine MD/Graduate Division health science major PhD
Medicine MD/Public Health MPH

Concurrent Degree Programs
Medicine MD/Management MBA
Medicine MD/Public Policy MPP

MD Degree Program
The Doctor of Medicine (MD) degree program is a four-year medical curriculum that prepares students broadly for careers in research, practice, and teaching in the medical field of their choice. For details on the MD curriculum, see the current curriculum. For information about applying to the program, see the application web page or contact the Geffen School of Medicine Admissions Office, B27 Geffen Hall, Box 957035, Los Angeles, CA 90095-7035.

Articulated Degree Programs
The Geffen School of Medicine and the Graduate Division offer the Medical Scientist Training Program, an articulated degree program that allows students to earn both the MD and PhD in about eight years, depending on the course of study and research. The PhD may be awarded in one of several medical or social sciences fields.

An articulated program with the Fielding School of Public Health allows students to earn both the MD and MPH degrees in five years. The program includes four years of medical school and one year plus one additional quarter at the Fielding School of Public Health. Separate application must be made to the Fielding School of Public Health during the third year of medical school.

Concurrent Degree Programs
Concurrent programs with the Anderson Graduate School of Management and Luskin School of Public Affairs allow UCLA medical students to earn both the MD and MBA degrees, or MD and MPP degrees, over five years by following a designated course of study and some shared course-work. Separate application must be made to the Anderson Graduate School of Management or Luskin School of Public Affairs during the third year of medical school.

Special Programs

Partnerships
Extending medical education to a broader segment of tomorrow’s physicians and researchers, the Geffen School of Medicine admits a select group of students into two innovative partnership programs. In addition to completing the requirements for the MD degree, students engage in specialized coursework and/or projects designed to fulfill the mission of each program.

Charles Drew/UCLA Medical Education Program
The mission of the Charles Drew University (CDU)/UCLA Medical Education Program is to train students to practice medicine with competence and compassion in disadvantaged rural and urban communities. Each year 24 students are admitted to the program. Students spend their first two years at the UCLA campus, and complete their last two years of clinical work in specially designated training centers in medically underserved communities and at UCLA and affiliated hospitals. A distinguishing component of the program is the required medical research thesis.

UCLA PRIME Program
The UCLA PRIME Program is a five-year, dual-degree program to develop leaders in medicine who address policy, care, and research issues in health care for underserved populations. A commitment to serve and experience in working with diverse medically disadvantaged populations is paramount. The program leads to the MD and a master’s degree in areas that complement the mission of the program. Each year 18 students are admitted to the class. Students identify with one of two programs: PRIME UCLA-Westwood or PRIME UCLA-CDU.
Postgraduate Medical Training

Postgraduate medical training programs, including residencies, are offered through all the clinical departments at UCLA and the affiliated training hospitals such as Harbor-UCLA, Cedars-Sinai, and Greater Los Angeles VA System. Programs at the affiliated institutions broaden the scope of the teaching programs by offering extensive clinical facilities, special population settings, and diverse practice modes. Information about these programs is available from the individual clinical departments of the Geffen School of Medicine or the affiliated hospitals.

Semel Institute for Neuroscience and Human Behavior

The Semel Institute is one of the world’s leading interdisciplinary research and education institutes devoted to the understanding of complex human behavior. Fourteen research centers ranging from genetics to human culture, together with research initiatives distributed widely across the academic departments of the Geffen School of Medicine and the College of Letters and Science, offer a comprehensive and outstanding research and training environment for the study of neuroscience and behavior.

The research portfolio of the 400 faculty members, graduate students, and fellows who work in the institute spans behavioral genetics, developmental neurobiology, cognitive neuroscience, neuropharmacology, brain imaging, clinical research, health policy, and sociocultural studies of human behavior and its disorders.

Graduate School of Education and Information Studies

Christina A. Christie, PhD, Interim Dean

Graduate School of Education and Information Studies
1009 Moore Hall
310-825-8326
School e-mail

The Graduate School of Education and Information Studies (GSE&IS) at UCLA is dedicated to inquiry, advancement of knowledge, improvement of professional practice, and service to the education and information professions. GSE&IS develops future generations of scholars, teachers, information professionals, and institutional leaders. Its work is guided by the principles of individual responsibility and social justice, an ethic of caring, and commitment to the communities it serves.

Faculty members and students of GSE&IS combine a passion and skill for cutting-edge research with an appreciation for its application in the widely diverse cultures and communities in which it exists. These communities serve as fertile training ground for students in all programs, through internships, research projects, summer placements, and teaching opportunities.

GSE&IS is committed to the highest-quality professional education, and to the application of research and scholarship to the challenges facing a diverse and increasingly urbanized world.

Degrees

The Graduate School of Education and Information Studies offers the following degrees and undergraduate minor:

- Education MA, MEd, EdD, PhD
- Educational Administration Joint EdD with UC Irvine
- Education and Social Transformation BA
- Information Studies PhD
- Library and Information Science MLIS, accredited by American Library Association
- Special Education Joint PhD with California State University, Los Angeles

Articulated Degree Programs

- Education MEd/Latin American Studies MA
- Library and Information Science MLIS/Latin American Studies MA
Concurrent Degree Programs
Education MEd, MA, EdD, or PhD/Law JD
Library and Information Science MLIS/Management MBA

Credential Programs
The school offers two credential programs accredited by the California Commission on Teacher Credentialing:
Preliminary Administrative Services Credential
Teacher Credential

Undergraduate Minor
Education Studies

Undergraduate Admission

Admission as a Freshman
Freshmen are admitted with a declared premajor in the College of Letters and Science. See the Curricula and Courses chapter for information on applying to the major.

Admission as a Junior
Transfer students are admitted directly to the Graduate School of Education and Information Studies.

Undergraduate Degree Requirements
Students must satisfy UC requirements, school requirements, and major requirements for the Bachelor of Arts degree.

University Requirements
The University of California has two requirements that undergraduate students must satisfy to graduate: Entry-Level Writing or English as a Second Language, and American History and Institutions. Students who do not satisfy the Entry-Level Writing requirement prior to enrollment must pass an approved course or other program prescribed by their UC campus of residence. Only after satisfying the Entry-Level Writing requirement can they take an English composition course for transfer credit after enrolling at UCLA. See Degree Requirements in the Undergraduate Study chapter for details.

School Requirements
There are eight requirements that must be satisfied for the award of the degree.

Unit Requirement
Students must satisfactorily complete for credit a minimum of 180 units for the bachelor’s degree. At least 60 of the 180 units must be upper-division courses numbered 100 through 199. A maximum of 216 units is permitted. Students with Advanced Placement Examination or International Baccalaureate Examination (transfer) credit may exceed the unit maximum by the amount of that credit.

After 216 quarter units, enrollment may not normally be continued in the school without special permission from the dean.

Credit for upper-division tutorials numbered 195 through 199 is limited to 16 units taken for a letter grade. No more than eight units of freshman seminars may be applied toward the degree.

Scholarship Requirement
Students must earn at least a 2.0 (C) grade-point average (GPA) in all courses undertaken at UCLA to receive a bachelor’s degree.
Students must also earn a 2.0 GPA in the major and satisfy both the course and scholarship requirements for the major, including preparation for the major.

**Academic Residence Requirement**

Students are in residence while enrolled and attending classes at UCLA with a declared major in the Graduate School of Education and Information Studies. Thirty-five of the final 45 units completed for the bachelor’s degree must be earned in residence at the school. No more than 18 of these 35 units may be completed in summer session.

For students who transfer from another institution, from UCLA Extension, or from another College or school with senior standing, of the 35 units earned while in residence, 28 must be upper-division units, including 16 upper-division units in the major department. Courses in UCLA Extension may not be offered as part of this residence requirement.

Students enrolled in the Education Abroad Program (EAP) must satisfy the residence requirement by earning 35 of their final 90 units, including the final 12 units, in residence at the school.

**Writing Requirement**

Students must complete the UC Entry-Level Writing or English as a Second Language (ESL) requirement prior to completing the school writing requirement.

Students admitted to the school are required to complete a two-term writing requirement—Writing I and Writing II. Two courses in English composition are required for graduation. Both courses must be taken for letter grades, and students must receive a C or better grade in each (a C– grade is not acceptable).

**Writing I.** The Writing I requirement must be satisfied within the first three terms of enrollment by completing English Composition 3, 3D, 3DS, or 3SL with a C or better grade (a C– or Passed grade is not acceptable).

The Writing I requirement may also be satisfied by scoring 4 or 5 on one of the College Board Advanced Placement Examinations in English; a combination of a score of 720 or better on the SAT Reasoning Test, Writing section (last administered in January 2016) and superior performance on the English Composition 3 Proficiency Examination; completing a course equivalent to English Composition 3 with a C or better grade (a C– or Passed grade is not acceptable) taken at another institution; or scoring 5, 6, or 7 on an International Baccalaureate Higher Level Examination.

Students whose native language is not English may need to take English Composition 1A, 1B, and 2I before enrolling in a Writing I course. All courses in the sequence must be passed with a C or better grade (a C– or Passed grade is not acceptable).

Qualifying examination scores and courses are determined by the school Faculty Executive Committee.

**Writing II.** The Writing II requirement must be satisfied within seven terms of enrollment by completing one course from a faculty-approved list of Writing II courses; see the Registrar’s Writing II requirement web page for details. The course must be completed with a C or better grade (a C– or Passed grade is not acceptable).

Applicable Writing II courses may also fulfill preparation for the major requirements and, if approved for general education (GE) credit, may fulfill a GE requirement.

Transfer students with 90 or more units who have completed the Intersegmental General Education Transfer Curriculum (IGETC) will have satisfied the Writing I, Writing II, and reciprocity requirements. No transfer student is admitted to the school without completing, with a C or better grade (a C– grade is not acceptable), a college-level writing course that Undergraduate Admission accepts as equivalent to English Composition 3.

**Quantitative Reasoning Requirement**

The quantitative reasoning requirement may be satisfied by completing one approved UCLA course (see list below) or an equivalent course within the first seven terms of enrollment. The course must be taken for a letter grade, and students must receive a C or better grade (a C– grade is not acceptable).

The requirement may also be satisfied by achieving an SAT Reasoning Test Mathematics Section score of 600 or better for exams taken January 2016 or earlier, or achieving an SAT Mathematics section score of 620 or better for exams taken
March 2016 or later, or an SAT Subject Test in Mathematics score of 550 or better, or an ACT Mathematics Test score of 26 or better. Approved UCLA courses and examinations, and qualifying scores, are determined by the school Faculty Executive Committee. Applicable courses may also fulfill preparation for the major requirements and, if approved for general education (GE) credit, may fulfill a GE requirement.

Transfer students with 90 or more units who have completed the Intersegmental General Education Transfer Curriculum (IGETC) will have satisfied the quantitative reasoning and reciprocity requirements. No transfer student is admitted to the school without completing, with a C or better grade (a C– grade is not acceptable), a college-level quantitative reasoning course that Undergraduate Admission accepts as equivalent to those approved by the school Faculty Executive Committee. Approved courses include

- Biostatistics 100A, 100B
- Life Sciences 20, 30A, 30B, 40
- Mathematics 2, 3A, 31A, 31AL
- Philosophy 31
- Political Science 6, 6R
- Program in Computing 10A, 10B, 10C
- Public Affairs 60
- Statistics 10, 12, 13

**Foreign Language Requirement**

The foreign language requirement may be satisfied by one of the following methods: scoring 3, 4, or 5 on the College Board Advanced Placement (AP) foreign language examination in Chinese, French, German, Italian, Japanese, or Spanish, or scoring 4 or 5 in Latin; presenting a UCLA foreign language departmental examination score indicating competency through level three; or completing a college-level foreign language course equivalent to level three or above at UCLA with a C or Passed or better grade.

Transfer students with 90 or more units who have completed the Intersegmental General Education Transfer Curriculum (IGETC) will have satisfied the foreign language and reciprocity requirements.

International students may petition to use an advanced course in their native language for this requirement. Students whose entire secondary education has been completed in a language other than English may petition to be exempt from the foreign language requirement.

Courses that may be used to fulfill this requirement are published on the Registrar’s foreign language requirement web page.

**Diversity Requirement**

The diversity requirement may be satisfied by completing one course from the faculty-approved list of courses. Courses used to satisfy the diversity requirement are approved by the school Faculty Executive Committee. The course must be taken for a letter grade, and students must receive a C or better grade (a C– grade is not acceptable). Applicable courses may also fulfill major, minor, or elective requirements and, if approved for general education (GE) credit, may fulfill a GE requirement. A list of approved courses is available in the Schedule of Classes.

**General Education Requirements**

**General education** (GE) is more than a checklist of required courses. It is a program of study that reveals to students the ways that research scholars in the arts, humanities, social sciences, and natural sciences create and evaluate new knowledge; introduces students to the important ideas and themes of human cultures; fosters appreciation for the many perspectives and diverse voices that may be heard in a democratic society; and develops the intellectual skills that give students the dexterity they need to function in a rapidly changing world.

This entails the ability to make critical and logical assessments of information, both traditional and digital; deliver reasoned and persuasive arguments; and identify, acquire, and use the knowledge necessary to solve problems.

Applicable courses may also fulfill major, minor, or elective requirements and, if approved for diversity or writing, may fulfill the diversity requirement and/or Writing II requirement.

**Foundations of Knowledge**

General education courses are grouped into three foundational areas: Foundations of the Arts and Humanities, Foundations of Society and Culture, and Foundations of Scientific Inquiry.

Ten courses (48 units minimum) are required. GE-approved Writing II courses may fulfill an appropriate foundational area. See the foundational area descriptions below for a breakdown of courses required.

Students who complete a year-long GE cluster series fulfill the Writing II requirement, complete 40 percent of their general education requirements, and receive laboratory/demonstration credit where appropriate.

Courses listed in more than one category can fulfill GE requirements in only one of the categories.

**Foundations of the Arts and Humanities.** Three 5-unit courses, one from each subgroup:
Courses in this area supply perspectives and intellectual skills necessary to comprehend and think critically about our situation in the world as human beings. In particular, courses furnish the basic means to appreciate and evaluate the ongoing efforts of humans to explain, translate, and transform their diverse experiences of the world through such media as language, literature, philosophical systems, images, sounds, and performances. Courses introduce students to the historical development and fundamental intellectual and ethical issues associated with the arts and humanities, and may also investigate the complex relations between artistic and humanistic expression and other facets of society and culture.

**Foundations of Society and Culture.** Three 5–unit courses, one from each subgroup and a third course from either subgroup:

- Historical Analysis
- Social Analysis

Courses in this area introduce students to the ways in which humans organize, structure, rationalize, and govern their diverse societies and cultures over time. Courses focus on a particular historical question, societal problem, or topic of political and economic concern in an effort to demonstrate how issues are objectified for study, how data is collected and analyzed, and how new understandings of social phenomena are achieved and evaluated.

**Foundations of Scientific Inquiry.** Three courses, one from each subgroup and a third course from either subgroup. One 5-unit course from each subgroup must include either laboratory/demonstration or Writing II credit. For students entering fall quarter 2019 through spring quarter 2021, the laboratory requirement is reduced to one 5-unit course from either subgroup. Other courses in the subgroups may be 4 units:

- Life Sciences
- Physical Sciences

Courses in this area ensure that students gain a fundamental understanding of how scientists formulate and answer questions about the operation of both the physical and biological world. Courses also deal with some of the most important issues, developments, and methodologies in contemporary science, addressing such topics as the origin of the universe, environmental degradation, and the decoding of the human genome. Through lectures, laboratory experiences, writing, and intensive discussions, students consider the important roles played by the laws of physics and chemistry in society, biology, Earth and environmental sciences, and astrophysics and cosmology.

**Foundations Course Lists.** Creating and maintaining a general education curriculum is a dynamic process; consequently, courses are frequently added to the list. For the most current list of approved courses that satisfy the Foundations of Knowledge GE plan, contact an academic adviser or see the Schedule of Classes.

<table>
<thead>
<tr>
<th>General Education Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foundations of the Arts and Humanities</td>
</tr>
<tr>
<td>Literary and Cultural Analysis .................................. 1 course</td>
</tr>
<tr>
<td>Philosophical and Linguistic Analysis .................................. 1 course</td>
</tr>
<tr>
<td>Visual and Performance Arts Analysis and Practice  1 course</td>
</tr>
<tr>
<td>Total = 15 units minimum</td>
</tr>
<tr>
<td>Foundations of Society and Culture</td>
</tr>
<tr>
<td>Historical Analysis .................................. 1 course</td>
</tr>
<tr>
<td>Social Analysis .................................. 1 course</td>
</tr>
<tr>
<td>Third course from either subgroup .................................. 1 course</td>
</tr>
<tr>
<td>Total = 15 units minimum</td>
</tr>
<tr>
<td>Foundations of Scientific Inquiry</td>
</tr>
<tr>
<td>Life Sciences .................................. 2 courses</td>
</tr>
<tr>
<td>Physical Sciences .................................. 2 courses</td>
</tr>
<tr>
<td>In each subgroup, one of the two courses must be 5 units and carry either laboratory/demonstration or Writing II credit. For students entering fall quarter 2019 through spring quarter 2021, the laboratory requirement is reduced to one 5-unit course from either subgroup. Other courses in the subgroups may be 4 units.</td>
</tr>
<tr>
<td>Total = 18 units minimum (17 min. fall 2019–spring 2021)</td>
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<tr>
<td>Total GE .................................. 10 courses/48 units minimum</td>
</tr>
<tr>
<td>.................................. (10 courses/47 units minimum F19-S21)</td>
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</tbody>
</table>

**Reciprocity with Other UC Campuses**

Students who transfer to UCLA from other UC campuses and have met all GE requirements prior to entering at UCLA are not required to complete the school GE requirements. Written verification from the dean at the other UC campus is required. Consult with a school counselor regarding eligibility for this option.

**Intersegmental General Education Transfer Curriculum**

Transfer students from California community colleges have the option to fulfill UCLA lower-division GE requirements by completing the Intersegmental General Education Transfer Curriculum (IGETC) prior to transfer. The curriculum consists of a series of subject areas and types of courses that have been agreed on by the University of California and the California community colleges. Although GE or transfer core courses are degree requirements rather than admission requirements, students are advised to fulfill them prior to transfer. The IGETC significantly eases the transfer pro-
cess, as all GE requirements are fulfilled when students complete the IGETC courses.

**Major Requirements**

Two types of requirements must be satisfied for the award of a degree: preparation for the major (lower-division courses) and the major (upper-division courses). Departments set requirements for minors.

**Preparation for the Major**

Admission to the major requires completion of a set of courses known as preparation for the major. Applicants are admitted to premajor status until requisite courses are satisfactorily completed. See the Curricula and Courses chapter.

**The Major**

A major consists of a group of coordinated upper-division courses and shall be designated as schoolwide, departmental, interdepartmental, or individual. Each course applied toward the major and preparation for the major must be taken for a letter grade unless otherwise stipulated. A major consists of a minimum of 40 upper-division units. Students must complete their major with a scholarship grade-point average of at least 2.0 (C) in all courses in order to remain in the major.

See the Curricula and Courses chapter for more details.

**Double Majors.** Double majors between the school and other academic units are permitted. Students must be able to complete the proposed double major within the 216-unit limit.

**Minors**

Students may choose to pursue a minor to complement their major program of study. Minors consist of no fewer than seven courses (28 units) and no more than nine courses (36 units). Some minors also have admission requirements.

For a list of minors and specializations, see Undergraduate Minors and Specializations; descriptions are in the Curricula and Courses chapter.

**Policies and Regulations**

Degree requirements are subject to policies and regulations, including the following:

**Student Responsibility**

Students should take advantage of academic support resources, but they are ultimately responsible for keeping informed of and complying with the rules, regulations, and policies affecting their academic standing.

**Study List**

The study list is a record of classes that a student is taking during a particular term. Each term the study list must include from 12 to 20 units. After the first term, students may petition to enroll in more than 20 units if they have an overall grade-point average of 3.0 (B) and attained at least a 3.0 (B) grade-point average the preceding term with all courses passed.

First-term transfer students from any other UC campus may carry excess units on the same basis as students who have completed one or more terms at UCLA; however, they are not encouraged to do so.

**Minimum Progress**

Students are expected to complete satisfactorily at least 36 units in any three consecutive terms while in residence; they are placed on probation if they fail to pass these units. They are subject to dismissal if they fail to pass at least 32 units in three consecutive regular terms while in residence.

**Changing a Major**

Students in good academic standing who wish to change their major may petition to do so provided they can complete the new major within the 216-unit limit and are on track to graduate on time. Petitions must be submitted to and approved by the department or committee in charge of the new major. Admission to certain majors may be closed or restricted; changes are normally not permitted if students are on probation or have begun their last term.

Students who fail to attain a grade-point average of 2.0 (C) in preparation for the major or major courses may be denied the privilege of entering or continuing in that major.

**Re-entering Students and Their Majors**

Students returning to UCLA to resume their studies after an absence of several years may find their previous major area of study is no longer available. They must select a current major in which to complete their studies. Consult with an academic adviser for assistance.

**Concurrent Enrollment**

Enrollment at a non-UC institution or UCLA Extension while enrolled at UCLA is not permitted except in extraordinary circumstances. No credit is given for courses taken concurrently elsewhere without the approval of the school.
Credit Limitations

The following credit limitations apply to all undergraduate students. In many cases, units are not deducted until the final term before graduation. Students with questions should consult with an academic adviser.

Transfer students with credit from other institutions (advanced standing credit) receive a Degree Audit from Undergraduate Admission indicating the transferable units from former institutions; however, the following credit limitations may reduce the total number of transferred units that apply toward the degree in the school. Consult with an adviser about these limitations.

Upper-Division Tutorials. No more than 8 units of credit may be taken per term in upper-division tutorials numbered 195 through 199. The total number of units allowed in such courses for a letter grade is 32; see the specific restrictions of each department.

Graduate Courses. Undergraduate students who wish to take courses numbered in the 200 series for credit toward a specific degree requirement must petition for advance approval of the department chair and the dean of the school. Courses numbered in the 300, 400, and 500 series may not be applied toward the degree.

Academic Advising Services

The Graduate School of Education and Information Studies offers advising, program planning in the major and general education requirements, and individual meetings with school and departmental counselors. For counseling information, contact the Office of Student Services, 1002 Moore Hall.

Honors

Undergraduate students who achieve scholastic distinction may qualify for the following honors and programs:

Dean’s Honors

The Dean’s Honors list recognizes high scholastic achievement in any one term. The following criteria are used to note Dean’s Honors on student records: a 3.75 grade-point average (GPA) in any one term, with at least 12 graded units; or a 3.66 GPA and at least 56 grade points during the term. Students are not eligible for Dean’s Honors in any given term if they receive an Incomplete or a Not Passed (NP). Dean’s Honors are automatically recorded on the transcript for the appropriate term.

Latin Honors

Students who have achieved scholastic distinction may be awarded the bachelor’s degree with Latin honors. To be eligible, students must have completed 90 or more units for a letter grade at the University of California and must have attained an overall grade-point average at graduation that places them in the top five percent of school graduates (3.936 GPA or better) for summa cum laude, the next five percent (3.888 GPA or better) for magna cum laude, or the next 10 percent (3.782 GPA or better) for cum laude. Coursework taken on the Education Abroad Program is applied toward Latin honors at graduation. The minimum GPAs required are subject to change on an annual basis. Required GPAs in effect in the graduating year (fall, winter, spring, summer) determine student eligibility. Students should consult their Degree Audits, or the Registrar’s Latin honors web page for the most current Latin honors calculations.

Graduate Study

Admission

Admission criteria established by the UCLA Graduate Division require a bachelor’s degree from a regionally accredited institution comparable in standards and content to a bachelor’s degree from the University of California. A scholastic grade-point average of B (3.0 on a 4.0 scale) or better—or its equivalent if the letter grade system is not used—is required for the last 60 semester units or last 90 quarter units of undergraduate study and in any postbaccalaureate study. Additional requirements for International Applicants are explained in the Graduate Study chapter. See the Graduate Division admissions website.

Departments and programs in the school set additional admission requirements. See the school admissions web page.

Degree Requirements

Specific degree requirements vary according to the department and program. Refer to program requirements for UCLA graduate degrees.

Research Centers and Institutes

The centers and institutes below furnish GSE&IS with valuable resources that support school programs and research. See research centers.

Black Male Institute

The Black Male Institute (BMI) is a cadre of scholars, practitioners, community members, and policymakers dedi-
icated to improving the educational experiences and life chances of black males. Educational settings are considered to be critical spaces for developing informed action to address black male persistence in schooling, recognizing that the challenges that impact the academic success of black males are manifold, be they economic, social, legal, or health-related.

Center for Improving Child Care Quality

The Center for Improving Child Care Quality (CICCQ) conducts high-quality, policy-relevant research, with focus on improving the early care and education environments of young children. Utilizing expertise in the areas of child development, professional development, child care quality, attachment, and observational and survey research methodology, CICCQ conducts basic, applied, and policy-driven research at the local, state, and national levels. CICCQ takes a collaborative approach to the evaluation process, building relationships with community partners to inform research, practice, and professional development.

Center for Information as Evidence

The Center for Information as Evidence (CIE) is an interdisciplinary forum to address the ways in which information objects and systems are created, used, and preserved as legal, administrative, scientific, social, cultural, and historical evidence. CIE is committed to incorporating perspectives from ethnic communities around the world, to sustain the diversity within indigenous cultural heritages and broaden methods of information analysis and conservation.

Center for International and Development Education

The Center for International and Development Education (CIDE) is a research and action center whose mission is to enhance educational capacity, facilitate human and economic development, and promote cross-cultural exchanges related to international and development education. This is accomplished through a series of publications, research programs, practical initiatives, and networks with existing development and academic institutions.

Center for Knowledge Infrastructures

The Center for Knowledge Infrastructures (CKI) conducts research on scientific data practices and policy, scholarly communication, and sociotechnical systems. It explores methods of data collection, innovations in scaling and work-processes, and multidisciplinary approaches to complex problems.

Center for Research and Innovation in Elementary Education

The Center for Research and Innovation in Elementary Education, also known as CONNECT, links nationally recognized researchers with teachers and administrators at UCLA Lab School and public schools in Southern California to investigate central issues in education. Programs examine children’s learning and development from preschool to sixth grade; investigate teaching diverse student populations; encourage exchange of ideas among scholars, practitioners, and policymakers concerned with child development and school reform; and disseminate effective educational approaches and research.

Center for Study of Evaluation/National Center for Research on Evaluation, Standards, and Student Testing

The Center for Study of Evaluation (CSE)/National Center for Research on Evaluation, Standards, and Student Testing (CRESST) is devoted to educational research, development, training, and dissemination. CSE/CRESST supplies leadership in these areas by creating new methodologies for evaluating educational quality, creating new designs for assessing student learning, promoting the sound use of assessment data, setting the national research agenda, and influencing practice.

Center for the Transformation of Schools

The Center for the Transformation of Schools (CTS) conducts research and develops tools to help education systems place a commitment to equity at the center of their work.

Center X

Center X offers a unique setting where researchers and practitioners collaborate to design and conduct programs that prepare and support K-12 education professionals committed to social justice, instructional excellence, the integration of research and practice, and caring in low-income urban schools.

Civil Rights Project/Proyecto Derechos Civiles

The Civil Rights Project/Proyecto Derechos Civiles (CRP) research center is dedicated to creating a new generation of research in social sciences and law on the critical issues of
civil rights and equal opportunity for racial and ethnic groups in the U.S. It has commissioned more than 400 studies, published 14 books, been cited in major Supreme Court decisions on affirmative action, and issued numerous reports from authors at universities and research centers across the country.

Digital Cultures Laboratory

The Digital Cultures Laboratory (DCL) offers a unique, people-focused analysis of new technologies as they spread across the world. Faculty members and students examine and discuss the means by which new media technologies impact economics, cultures, politics, labor, and the environment through our collaborations with global partners. They share their insights through digital platforms, monthly blog posts, interviews, consultancies, and collaborative research projects.

Higher Education Research Institute

The Higher Education Research Institute (HERI) conducts research, evaluation, information, policy studies, and research training in postsecondary education. The HERI research program includes the outcomes of postsecondary education, leadership development, institutional transformation, faculty performance, federal and state policy, and educational equity; and houses the Cooperative Institutional Research Program (CIRP), the largest ongoing national study of college students in the U.S.

Institute for Democracy, Education, and Access

The Institute for Democracy, Education, and Access (IDEA) seeks to understand and challenge pervasive racial and social class inequalities in education. In addition to conducting research and policy analysis, IDEA supports educators, public officials, advocates, community activists, and young people as they design, conduct, and use research to make high-quality public schools and successful college participation routine occurrences in all communities. IDEA also studies how research combines with strategic communications and public engagement to promote widespread participation in civic life.

Institute for Immigration, Globalization, and Education

The Institute for Immigration, Globalization, and Education (IGE) conducts multidisciplinary and comparative research engaging policymakers, practitioners, and institutional leaders. The research informs efforts to expand opportunities, reduce barriers, and improve the well-being of diverse, vulnerable, and marginalized students. The work is timely in the context of globalization, which is profoundly changing the developmental contexts, educational trajectories, and life courses of children, adolescents, and young adults.

Paulo Freire Institute

The Paulo Freire Institute (PFI) seeks to gather scholars and critics of Freire’s pedagogy in permanent dialog to foster the advancement of new pedagogical theories and concrete interventions in the real world. PFI brings together research, teaching, and technology while concentrating on five major areas: studies of globalization and education, teacher education, a comparative perspective on Latin American education, the politics of education, and Paulo Freire’s political philosophy and critical pedagogy.

Sudikoff Family Institute for Education and New Media

The Sudikoff Family Institute for Education and New Media utilizes the popular press and other media to disseminate the work of GSE&IS scholars to policymakers, educators, and the general public. Sudikoff Fellows are selected each year from GSE&IS faculty members to enhance awareness of critical issues related to education and information studies, by contributing to a variety of media that reach a lay audience or serve the public interest in some manner.

Henry Samueli School of Engineering and Applied Science

Jayathi Y. Murthy, PhD, Dean

Samueli School of Engineering and Applied Science

6426 Boelter Hall

310-825-2826

Founded in 1945, the UCLA Henry Samueli School of Engineering and Applied Science is committed to providing a rigorous hands-on engineering education to undergraduate and graduate students. Recognized internationally as a top program, UCLA Samueli is the birthplace of the Internet and has developed breakthrough technologies in aerospace systems, wireless communication, solar energy, clean water, and much more. As part of a great public university, the school is committed to a core mission of education, research, and service.

UCLA Samueli supports dynamic programs in traditional and new disciplines, and pursues cutting-edge research in
areas such as precision medicine and bioengineering, sustainable and resilient urban systems, advanced materials and manufacturing, robotics and cyberphysical systems, computer networking and cybersecurity, artificial intelligence and machine learning, and data science. Partnerships across campus reflect the school commitment to a wide range of interdisciplinary activities in health care, business, public policy, and more.

Students receive their education through traditional lectures, hands-on experience in the school makerspace and laboratories, and assignments that develop real-world problem-solving skills. The undergraduate degree curriculum also exposes students to the humanities, social sciences, life sciences, and the arts. It includes a technical breadth requirement, designed to provide students with working knowledge of a technical field outside their major. The school emphasizes that engineers must uphold high ethical standards in creating and managing technology, and is committed to training engineers from diverse backgrounds. Opportunities exist for students to gain exposure to entrepreneurship and commercialization of technologies.

Undergraduate students are encouraged to participate in industrial internships and academic research. Students are committed to a high standard of achievement and service to society, consistent with the mission of the school and UCLA.

**Departments and Programs**

The Henry Samueli School of Engineering and Applied Science has seven departments that offer study in aerospace engineering, bioengineering, chemical engineering, civil engineering, computer engineering, computer science, computer science and engineering, electrical and computer engineering, electrical engineering, manufacturing engineering, materials engineering, and mechanical engineering. Undergraduate programs in aerospace engineering, bioengineering, chemical engineering, civil engineering, computer science and engineering, electrical engineering, materials engineering, and mechanical engineering are accredited by the Engineering Accreditation Commission of ABET. The computer science and computer science and engineering programs are accredited by the Computing Accreditation Commission of ABET. The undergraduate program in computer engineering, established in fall 2017, will be submitted to ABET for accreditation during the next ABET visit in 2024.

For specific programs, see department information in the Curricula and Courses chapter; or refer to the school Announcement available from the Office of Academic and Student Affairs, 6426 Boelter Hall.

**Degrees**

The Henry Samueli School of Engineering and Applied Science offers the following degrees and undergraduate minors:

- Aerospace Engineering BS, MS, PhD
- Bioengineering BS, MS, PhD
- Chemical Engineering BS, MS, PhD
- Civil Engineering BS, MS, PhD
- Computer Engineering BS
- Computer Science BS, MS, PhD
- Computer Science and Engineering BS
- Electrical and Computer Engineering MS, PhD
- Electrical Engineering BS
- Engineering MEng, online MS, Engr
- Engineering – Aerospace online MS
- Engineering – Computer Networking online MS
- Engineering – Electrical online MS
- Engineering – Electronic Materials online MS
- Engineering – Integrated Circuits online MS
- Engineering – Manufacturing and Design online MS
- Engineering – Materials Science online MS
- Engineering – Mechanical online MS
- Engineering – Signal Processing and Communications online MS
- Engineering – Structural Materials online MS
- Engineering and Applied Science Graduate Certificate of Specialization
- Manufacturing Engineering MS
- Materials Engineering BS
- Materials Science and Engineering MS, PhD
- Mechanical Engineering BS, MS, PhD

**Concurrent Degree Program**

Computer Science MS/Management MBA

**Undergraduate Minors**

- Bioinformatics
- Environmental Engineering

**Undergraduate Admission**

Applicants for admission to the school must satisfy the UC admission requirements as outlined in the Undergraduate
Students must apply directly to the Henry Samueli School of Engineering and Applied Science by selecting one of the majors within the school or the undeclared engineering option (only available to freshmen). In the selection process, many elements are considered including grades, test scores, and academic preparation. Applicants are accepted at either the freshman or junior level.

Admission as a Freshman

Freshman applicants must satisfy the examination requirement described in the Undergraduate Study chapter and should take required tests by the December test date, since scores are part of the review process. Applicants should instruct testing agencies to send results directly to Undergraduate Admission.

Applicants must submit scores from an approved core test of mathematics, language arts, and writing. This requirement may be satisfied by taking either the ACT with Writing test, the SAT Reasoning Test (last administered January 2016), or the SAT with Essay test. Applicants are strongly encouraged to also take the following SAT subject tests: Mathematics Level 2, and a laboratory science test (Biology E/M, Chemistry, or Physics) that is closely related to the intended major.

Freshman applicants must meet the UC subject, scholarship, and examination requirements described on undergraduate admission.

Credit for Advanced Placement Examinations. Students may fulfill part of the school requirements with credit allowed at the time of admission for College Board Advanced Placement (AP) Examinations with scores of 3, 4, or 5. Students with AP Examination credit may exceed the 213-unit maximum by the amount of this credit. AP Examination credit for freshmen entering in fall quarter 2019 fulfills requirements as published on the school AP table.

Students who have completed 36 quarter units after high school graduation at the time of the examination receive no AP Examination credit.

Admission as a Junior

Students who begin their college work at a California community college are expected to remain at the community college to complete the lower-division requirements in chemistry, computer programming, English composition, mathematics, physics, and the recommended engineering courses before transferring to UCLA. Transfer students who have completed the recommended lower-division program in engineering at California community colleges normally can complete the remaining requirements for one of the BS degrees in two to three academic years of full-time study. Students who select certain majors, such as Computer Science and Engineering or Chemical Engineering, may be required to complete additional lower-division courses for the major sequence.

Lower-Division Requirements

Applicants to the school in junior standing should have completed 90 quarter units (60 semester units) in good standing, including the following lower-division minimum subject requirements:

1. Chemistry courses equivalent to Chemistry and Biochemistry 20A, 20B, 20L at UCLA (only Chemistry and Biochemistry 20A is required for the Electrical Engineering major; the Bioengineering and Chemical Engineering curricula also require Chemistry and Biochemistry 30A, 30AL, 30B). The Computer Engineering, Computer Science, and Computer Science and Engineering majors do not require chemistry


3. Physics courses equivalent to Physics 1A, 1B, 1C, 4AL, 4BL at UCLA, depending on curriculum selected

4. Computer programming: applicants to the Computer Engineering, Computer Science, Computer Science and Engineering, and Electrical Engineering majors may take any C++, C, or Java course to meet the admission requirement, but to be competitive the applicant must take a C++ course equivalent to Computer Science 31 at UCLA. Applicants to Chemical Engineering may take any C++, C, Java, or MATLAB course to satisfy the admission requirement, but lack of a MATLAB course equivalent to Mechanical and Aerospace Engineering M20 or Civil and Environmental Engineering M20 at UCLA will delay time to graduation. Appli-
cants to all other engineering majors may take any C++, C, Java, or MATLAB course to satisfy the admission requirement, but the MATLAB course equivalent to Mechanical and Aerospace Engineering M20 or Civil and Environmental Engineering M20 is preferred.

5. At least one general education (GE) course in the arts, humanities, or social sciences as required to be UC eligible

Transfer students must also complete a course equivalent to English Composition 3 at UCLA and a second UC-transferable English composition course.

All lower-division requirements should be completed by the end of the spring term prior to anticipated enrollment at UCLA.

Transfer Credit

Students transferring to the school from institutions that offer instruction in engineering subjects in the first two years, particularly California community colleges, may be given credit for certain engineering core requirements.

Many sophomore courses in circuit analysis, strength of materials, and properties of materials may satisfy Civil and Environmental Engineering 108, Electrical and Computer Engineering 100, and Materials Science and Engineering 104 requirements respectively. Students should check with the Office of Academic and Student Affairs, 6426 Boelter Hall.

Undergraduate Degree Requirements

Students must satisfy UC requirements, school requirements, and department requirements for the Bachelor of Science degree.

University Requirements

The University of California has two requirements that undergraduate students must satisfy in order to graduate: Entry-Level Writing or English as a Second Language, and American History and Institutions. See Degree Requirements in the Undergraduate Study chapter for details.

School Requirements

There are seven requirements that must be satisfied for award of a degree.

Unit Requirement

The minimum units allowed for students is between 180 and 185, depending on the program. The maximum allowed is 213 units.

Degree Requirements

University Requirements
1. Entry-Level Writing or English as a Second Language
2. American History and Institutions

School Requirements
1. Unit
2. Scholarship
3. Academic Residence
4. Writing Requirement
   Writing I
   Engineering Writing
5. Technical Breadth
6. Ethics Requirement
7. General Education
   Foundations of Arts and Humanities
   Foundations of Society and Culture
   Foundations of Scientific Inquiry

Department Requirements
1. Preparation for the Major
2. The Major

Courses that do not satisfy specific UC, school, or department requirements are referred to as electives and can be used to meet the minimum unit requirement for graduation.

After 213 quarter units, enrollment may not normally be continued in the school without special permission from the associate dean. This regulation does not apply to Departmental Scholars.

Scholarship Requirement

Students must earn at least a 2.0 (C) grade-point average in all courses taken at any UC campus. In addition, at least a 2.0 grade-point average must be achieved in total upper-division required courses and total upper-division engineering courses. See a counselor in 6426 Boelter Hall for details.

Academic Residence Requirement

Of the last 48 units completed for the BS degree, 36 must be earned in residence at the Samueli School of Engineering and Applied Science on this campus. No more than 16 of the 36 units may be completed in summer sessions at UCLA.

Writing Requirement

Students must complete the UC Entry-Level Writing or English as a Second Language (ESL) requirement prior to completing the school writing requirement.

Students admitted to the school are required to complete a two-term writing requirement—Writing I and Engineering Writing. Both courses must be taken for a letter grade, and
students must receive a C or better grade in each (a C– grade is not acceptable).

**Writing I.** The Writing I requirement must be satisfied by the end of the second year of enrollment by completing English Composition 3, 3D, 3DS, 3E, or 3SL with a C or better grade (a C– or Passed grade is not acceptable).

The Writing I requirement may also be satisfied by scoring 4 or 5 on one of the College Board Advanced Placement Examinations in English; a combination of a score of 720 or better on the SAT Reasoning Test, Writing section (last administered in January 2016) and superior performance on the English Composition 3 Proficiency Examination; completing a course equivalent to English Composition 3 with a C or better grade (a C– or Passed grade is not acceptable) taken at another institution; or scoring 5, 6, or 7 on an International Baccalaureate Higher Level Examination.

Students whose native language is not English may need to take English Composition 1A, 1B, and 2I before enrolling in a Writing I course. All courses in the sequence must be passed with a C or better grade (a C– or Passed grade is not acceptable).

**Engineering Writing.** The Engineering Writing requirement is satisfied by selecting one approved engineering writing (EW) course from the school writing course list or by selecting one approved Writing II (W) course. The course must be completed with a C or better grade (a C– or Passed grade is not acceptable). Writing courses are published in the Schedule of Classes.

Writing courses also approved for general education credit may be applied toward the relevant general education foundational area.

**Technical Breadth Requirement**

The technical breadth requirement consists of a set of three courses providing sufficient breadth outside the student’s core program. A list of school Faculty Executive Committee-approved technical breadth requirement courses is available in the Office of Academic and Student Affairs, 6426 Boelter Hall, and deviations from that list are subject to approval by the associate dean for Academic and Student Affairs. None of the technical breadth requirement courses selected by students can be used to satisfy other major course requirements.

**Ethics Requirement**

The ethics and professionalism requirement is satisfied by completing one course from Engineering 181EW, 182EW, 183EW, or 185EW with a C or better grade (a C– or Passed grade is not acceptable). The course may be applied toward the Engineering Writing requirement.

**General Education Requirements**

**General education** (GE) is more than a checklist of required courses. It is a program of study that reveals to students the ways that research scholars in the arts, humanities, social sciences, and natural sciences create and evaluate new knowledge; introduces students to the important ideas and themes of human cultures; fosters appreciation for the many perspectives and diverse voices that may be heard in a democratic society; and develops the intellectual skills that give students the dexterity they need to function in a rapidly changing world.

This entails the ability to make critical and logical assessments of information, both traditional and digital; deliver reasoned and persuasive arguments; and identify, acquire, and use the knowledge necessary to solve problems.

Students may take one GE course per term on a Passed/Not Passed (P/NP) basis if they are in good academic standing and are additionally enrolled in nine letter-graded units. For details on P/NP grading, see Grades in the Academic Policies chapter or consult with a counselor in the Office of Academic and Student Affairs.

GE courses used to satisfy the engineering writing and/or ethics requirements must be taken for a letter grade.

**Foundations of Knowledge**

General education courses are grouped into three foundational areas: Foundations of the Arts and Humanities, Foundations of Society and Culture, and Foundations of Scientific Inquiry.

Five courses (24 units minimum) are required. Engineering writing requirement courses also approved for GE credit may be applied toward the relevant GE foundational areas.

Students must meet with a counselor in the Office of Academic and Student Affairs to determine the applicability of GE cluster courses toward the engineering writing or GE requirements.

Courses listed in more than one category can fulfill GE requirements in only one of the categories.

**Foundations of the Arts and Humanities.** Two 5-unit courses selected from two different subgroups:

- Literary and Cultural Analysis
- Philosophical and Linguistic Analysis
- Visual and Performance Arts Analysis and Practice

Courses in this area supply perspectives and intellectual skills necessary to comprehend and think critically about our situation in the world as human beings. In particular, courses furnish the basic means to appreciate and evaluate the ongoing efforts of humans to explain, translate, and
transform their diverse experiences of the world through such media as language, literature, philosophical systems, images, sounds, and performances. The courses introduce students to the historical development and fundamental intellectual and ethical issues associated with the arts and humanities and may also investigate the complex relations between artistic and humanistic expression and other facets of society and culture.

**Foundations of Society and Culture.** Two 5-unit courses, one from each subgroup:
- Historical Analysis
- Social Analysis

Courses in this area introduce students to the ways in which humans organize, structure, rationalize, and govern their diverse societies and cultures over time. Courses focus on a particular historical question, societal problem, or topic of political and economic concern in an effort to demonstrate how issues are objectified for study, how data is collected and analyzed, and how new understandings of social phenomena are achieved and evaluated.

**Foundations of Scientific Inquiry.** One course (4 units minimum) from the Life Sciences subgroup or one course from Bioengineering CM145/Chemical Engineering CM145, Chemistry and Biochemistry 153A, or Civil and Environmental Engineering M166/Environmental Health Sciences M166:
- Life Sciences

This requirement is automatically satisfied for Bioengineering and Chemical Engineering majors. The requirement is satisfied for Civil Engineering majors by the natural science requirement.

Courses in this area ensure that students gain a fundamental understanding of how scientists formulate and answer questions about the operation of both the physical and biological world. Courses also deal with some of the most important issues, developments, and methodologies in contemporary science, addressing such topics as the origin of the universe, environmental degradation, and the decoding of the human genome. Through lectures, laboratory experiences, writing, and intensive discussions, students consider the important roles played by the laws of physics and chemistry in society, biology, Earth and environmental sciences, and astrophysics and cosmology.

**Foundations Course Lists.** Creating and maintaining a general education curriculum is a dynamic process; consequently, courses are frequently added to the list. For the most current list of approved courses that satisfy the Foundations of Knowledge GE plan, consult with an academic counselor or see the Schedule of Classes.

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### General Education Requirements

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<thead>
<tr>
<th>Foundations of the Arts and Humanities</th>
<th>Literary and Cultural Analysis</th>
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<tr>
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<td>Philosophical and Linguistic Analysis</td>
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<td></td>
<td>Visual and Performance Arts Analysis and Practice2</td>
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<tr>
<td>Each course must be from a different subgroup.</td>
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<td>Total = 10 units minimum</td>
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<tr>
<th>Foundations of Society and Culture</th>
<th>Historical Analysis .............................. 1 course</th>
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<td></td>
<td>Social Analysis ........................................ 1 course</td>
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<td>Total = 10 units minimum</td>
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<tr>
<th>Foundations of Scientific Inquiry</th>
<th>Life Sciences ........................................ 1 course</th>
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<tr>
<td>Total = 4 units minimum</td>
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**Total GE ......... 5 courses/24 units minimum**

Engineering writing requirement courses also approved for GE credit may be applied toward the relevant GE foundational areas.

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### Intersegmental General Education Transfer Curriculum

Transfer students from California community colleges have the option to fulfill UCLA lower-division GE requirements by completing the Intersegmental General Education Transfer Curriculum (IGETC) prior to transfer. The curriculum consists of a series of subject areas and types of courses that have been agreed on by the University of California and the California community colleges. Although GE or transfer core courses are degree requirements rather than admission requirements, students are advised to fulfill them prior to transfer. The IGETC significantly eases the transfer process, as all UCLA GE requirements are fulfilled when students complete the IGETC courses. Students who select the IGETC must complete it entirely before enrolling at UCLA. Otherwise, they must fulfill the Henry Samueli School of Engineering and Applied Science GE requirements. The school does not accept partial IGETC.

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### Department Requirements

Departments generally set two types of requirements that must be satisfied for award of a degree: preparation for the major (lower-division courses) and the major (upper-division courses). Preparation for the major courses should be completed before beginning upper-division work.

### Preparation for the Major

A major requires completion of a set of courses known as preparation for the major. Each department sets its own
preparation for the major requirements; see the Curricula and Courses chapter.

The Major

Students must complete their major with a scholarship grade-point average of at least 2.0 (C) in all courses in order to remain in the major. Each course in the major department must be taken for a letter grade. See the Curricula and Courses chapter for details on each major.

Minors and Double Majors

Students in good academic standing may be permitted to have a minor or double major. The minor or second major must be outside the school (e.g., Electrical Engineering major and Economics major). Students are not permitted to have a double major with two school majors (e.g., Chemical Engineering and Civil Engineering). Students may file an Undergraduate Request to Double Major or Add Minor form at the Office of Academic and Student Affairs. The school determines final approval of a minor or double major request; review is done on a case-by-case basis, and filing the request does not guarantee approval. Students interested in a minor or double major should meet with their counselor in 6426 Boelter Hall.

While minor and double major requests are considered, specializations are not considered.

Policies and Regulations

Degree requirements are subject to policies and regulations, including the following:

Student Responsibility

Students should take advantage of academic support resources, but they are ultimately responsible for keeping informed of and complying with the rules, regulations, and policies affecting their academic standing.

Study List

The study list is a record of classes that a student is taking during a particular term. It is the student’s responsibility to present a study list that reflects satisfactory progress toward the degree. Study lists or programs of study that do not comply with the standards set by the faculty may result in enforced withdrawal from UCLA or other academic action. Study lists require approval of the dean of the school or a designated representative.

Undergraduate students in the school are expected to enroll in at least 12 units each term. Students enrolling in fewer than 12 units must obtain approval by petition to the dean before enrolling in classes. The normal program is 16 units per term. Students may not enroll in more than 21 units per term unless an Excess Unit Petition is approved in advance by the dean.

Minimum Progress

Full-time undergraduate students must complete a minimum of 36 units in three consecutive terms in which they are registered.

Credit Limitations

The following credit limitations apply to all undergraduate students enrolled in the school:

Advanced Placement Examinations. Some portions of Advanced Placement (AP) Examination credit are evaluated by corresponding UCLA course number. If students take the equivalent UCLA course, a deduction of UCLA unit credit is made prior to graduation. See the school AP table.

College Level Examination Program. Credit earned through the College Level Examination Program (CLEP) may not be applied toward the bachelor’s degree.

Community College/Lower Division Transfer Limitation. Effective for students admitted fall 2017 and later, after completing 105 lower-division quarter units toward the degree in all institutions attended, students are allowed no further unit credit for courses completed at a community college or for lower-division courses completed at any institution outside of the University of California. The University of California does not grant transfer credit for community college or lower-division courses beyond 105 quarter units, but students may still receive subject credit for this coursework to satisfy lower-division requirements. Units earned through Advanced Placement (AP), International Baccalaureate (IB), and/or A-Level examinations are not included in the limitation. Units earned at any UC campus (through extension, summer, cross-campus, UCEAP, Intercampus Visitor Program, and regular academic year enrollment) are not included in the limitation. To convert semester units into quarter units, multiply the semester units by 1.5; for example, 12 semester units x 1.5 = 18 quarter units. To convert quarter units into semester units, multiply the quarter units by .666; for example, 12 quarter units x .666 = 7.99 or 8 semester units.

Foreign Language. No credit is granted toward the bachelor’s degree for college foreign language courses equivalent to quarter levels one and two if the equivalent of level two of the same language was completed with satisfactory grades in high school.
Repetition of Courses

For undergraduate students who repeat a total of 16 or fewer units, only the most recently earned letter grades and grade points are computed in the grade-point average (GPA). After repeating 16 units, the GPA is based on all letter grades assigned and total units attempted. The grade assigned each time a course is taken is permanently recorded on the transcript.

1. To improve the grade-point average (GPA), students may repeat only those courses in which they receive a C– or lower grade; NP or U grades may be repeated to gain unit credit. Courses in which a letter grade is received may not be repeated on a P/NP or S/U basis. Courses originally taken on a P/NP or S/U basis may be repeated on the same basis or for a letter grade.

2. Repetition of a course more than once requires the approval of the College or school or the dean of the Graduate Division and is granted only under extraordinary circumstances.

3. Degree credit for a course is given only once, but the grade assigned each time the course is taken is permanently recorded on the transcript.

4. There is no guarantee that in a later term a course can be repeated (such as in cases when a course is deleted or no longer offered). In these cases, students should consult with their academic counselor to determine if there is an alternate course that can be taken to satisfy a requirement. The alternate course would not count as a repeat of the original course.

Counseling Services

Academic counselors in the Office of Academic and Student Affairs assist students with UCLA procedures and answer questions related to general requirements.

New undergraduate students must have their course of study approved by an academic counselor. After the first term, curricular and career advising is accomplished on a formal basis. Freshmen students are assigned a faculty adviser in their particular specialization.

In addition, undergraduate students are assigned, by major, to an academic counselor in the Office of Academic and Student Affairs who provides them with advice regarding general requirements for degrees, and UC, UCLA, and school regulations and procedures. It is the student’s responsibility to periodically meet with their academic counselor, as well as with their faculty adviser, to discuss curriculum requirements, programs of study, and any other academic matters of concern.

Students normally follow the curriculum in effect when they enter the school. California community college transfer students may also select the curriculum in the catalog in effect at the time they began their community college work in an engineering program, provided attendance has been continuous since that time.

Students admitted to UCLA in fall quarter 2012 and thereafter use the Degree Audit system, which can be accessed through MyUCLA. Students should contact their academic counselor in 6426 Boelter Hall with any questions.

Undergraduate students admitted to UCLA prior to fall quarter 2012, and beginning their upper-division major field coursework, are advised to meet with their academic counselor in 6426 Boelter Hall to review their degree requirements.

Honors

Undergraduate students who achieve scholastic distinction may qualify for the following honors and programs:

Dean’s Honors

The Dean’s Honors list recognizes high scholastic achievement in any one term. The following criteria are used to note Dean’s Honors on student records: a 3.7 grade-point average (GPA) in any one term, with at least 15 units (12 units of letter grade). Students are not eligible for Dean’s Honors in any given term if they receive an Incomplete or a Not Passed (NP) grade, or repeat a course. Only courses applicable to an undergraduate degree are considered toward eligibility for Dean’s Honors. Dean’s Honors are automatically recorded on the transcript for the appropriate term.

Latin Honors

Students who have achieved scholastic distinction may be awarded the bachelor’s degree with honors. To be eligible, students must have completed 90 or more units for a letter grade at the University of California and must have attained a cumulative grade-point average (GPA) at graduation that places them in the top five percent of the school (GPA of 3.914 or better) for summa cum laude, next five percent (GPA of 3.857 or better) for magna cum laude, and the next 10 percent (GPA of 3.743 or better) for cum laude. The minimum GPAs required are subject to change on an annual basis. Required GPAs in effect in the graduating year determine student eligibility.

Based on grades achieved in upper-division courses applied to a specific school degree requirement, engineering students must also have a 3.914 GPA for summa cum laude, 3.857 for magna cum laude, and 3.743 for cum laude. For all designations of honors, students must have a minimum 3.25
GPA in their major field upper-division courses. Upper-division courses that are not applied to a specific school BS degree requirement are excluded from these upper-division averages.

**Tau Beta Pi**

The UCLA chapter of **Tau Beta Pi**, the national engineering honor society, encourages high scholarship, supplies volunteer tutors, and offers many services and programs to foster a spirit of liberal culture in engineering colleges.

**Departmental Scholar Program**

Exceptionally promising juniors or seniors may be nominated as Departmental Scholars to pursue engineering bachelor’s and master’s degree programs simultaneously. Minimum qualifications include the completion of 24 courses (96 quarter units) at UCLA, or the equivalent at a similar institution; a minimum 3.7 grade-point average (GPA) in the major field upper-division courses and a minimum 3.7 cumulative GPA; and the requirements in preparation for the major. To obtain both the bachelor’s and master’s degrees, Departmental Scholars fulfill the requirements for each program. Students may not use any one course to fulfill requirements for both degrees.

For details, contact the Office of Academic and Student Affairs in 6426 Boelter Hall well in advance of application dates for admission to graduate standing.

**Exceptional Student Admissions Program**

There is an **Exceptional Student Admissions Program** (ESAP) for outstanding Samueli School undergraduates who wish to enter the school graduate program upon completion of the BS degree. ESAP is an alternative to the Departmental Scholar Program. In contrast to that program, an ESAP-admitted student would be an enrolled graduate student and would be eligible for consideration of graduate fellowships and teaching assistant positions if available.

**Special Programs**

**Extracurricular Activities**

Students are encouraged to participate in UCLA extracurricular activities, especially those relevant to engineering such as the student engineering society (Engineering Society, University of California), student publications, and programs of the technical and professional engineering societies in the Los Angeles area.

The student body takes an active part in shaping policies of the school through elected student representatives on the school Faculty Executive Committee.

**Women in Engineering**

Among UCLA engineering students, women make up approximately 28 percent of the undergraduate and 23 percent of the graduate enrollment. Today’s opportunities for women in engineering are excellent, as both employers and educators try to change the image of engineering as a males-only field. Women engineers are in great demand in all fields of engineering.

The **Society of Women Engineers** (SWE), recognizing that women in engineering are still a minority, has established a UCLA student chapter that sponsors field trips and engineering-related speakers (often professional women) to introduce the various options available to women engineers. The UCLA chapter of SWE, in conjunction with other Los Angeles schools, also publishes an annual résumé book to aid women students in finding jobs; and presents a career day for high school students.

**Continuing Education**

Continuing education in engineering is developed and administered by the UCLA Extension (UNEX) **Engineering and Technology Department** in close cooperation with Henry Samueli School of Engineering and Applied Science. The department offers evening classes, short courses, certificate programs, special events, and education and training at the workplace.

**Graduate Study**

**Concurrent Degree Program**

A concurrent degree program between the Henry Samueli School of Engineering and Applied Science and the Anderson Graduate School of Management allows students to earn two master’s degrees simultaneously: the MBA and the MS in Computer Science. Students should contact the Office of Academic and Student Affairs for details.

**Master of Science in Engineering Online Degree**

The **Master of Science in Engineering** online self-supporting degree program enables employed engineers and computer scientists to augment their technical education beyond the Bachelor of Science degree, and enhances their value to the technical organizations by which they are employed.
Master of Engineering Degree
The Master of Engineering (MEngr) degree is granted to graduates of the Engineering Executive Program, a two-year work-study program consisting of graduate-level professional courses in the management of technological enterprises.

Engineer Degree
The school offers an Engineer (Engr) degree at a level equivalent to completion of preliminaries in the PhD program. The Engineer degree represents considerable advanced training and competence in the engineering field but does not require the research effort involved in a PhD dissertation.

Requirements for the Engineer degree are identical to those of the PhD degree up to and including the oral preliminary examination, except that the Engineer degree is based on coursework. The minimum requirement is 15 (at least nine graduate) courses beyond the bachelor’s degree, with at least six courses in the major field (minimum of four graduate courses) and at least three in each minor field (minimum of two graduate courses in each).

The PhD and Engineer degree programs are administered interchangeably, so that a student in the PhD program may exit with an Engineer degree or pick up the Engineer degree en route to the PhD degree; similarly, a student in the Engineer degree program may continue to the PhD after receiving the Engineer degree. The time spent in either of the two programs may also be applied toward the minimum residence requirement and time limitation for the other program.

PhD Degrees
The PhD programs prepare students for advanced study and research in the major areas of engineering and computer science. All candidates must fulfill the minimum requirements of the Graduate Division. Major and minor fields may have additional course and examination requirements. For more information, contact the individual departments.

Fields of Study
Established fields of study for the PhD are listed below. With the support of an adviser, students may propose any other field of study to their department. Instructions on the definition of acceptable ad hoc fields and procedures for their approval are available in each department office.

Bioengineering Department. Biomedical instrumentation, biomedical signal and image processing, biosystems science and engineering, medical imaging informatics, molecular cellular tissue therapeutics, neuroengineering

Chemical and Biomolecular Engineering Department. Chemical engineering

Civil and Environmental Engineering Department. Civil engineering materials, environmental engineering, geotechnical engineering, hydrology and water resources engineering, structures (structural mechanics and structural/earthquake engineering)

Computer Science Department. Artificial intelligence, computational systems biology, computer network systems, computer science theory, computer system architecture, data science computing, graphics and vision, software systems

Electrical and Computer Engineering Department. Circuits and embedded systems, physical and wave electronics, signals and systems

Materials Science and Engineering Department. Ceramics and ceramic processing, electronic and optical materials, structural materials

Mechanical and Aerospace Engineering Department. Applied mathematics (established minor field only), applied plasma physics (minor field only), design, robotics, and manufacturing (DROM), fluid mechanics, dynamics, micro-nano engineering, structural and solid mechanics, systems and control, thermal science and engineering (TSE)

Graduate Certificate of Specialization
The school offers a Certificate of Specialization in all areas, except computer science. Requirements for admission are the same as for the MS degree.

Each graduate certificate program consists of five 100- or 200-series courses, at least two of which must be at the graduate level. No work completed for any previously awarded degree or credential may be applied toward the certificate. Successful completion of a certificate program requires an overall minimum 3.0 (B) grade-point average in all courses applicable to the certificate. In addition, graduate certificate candidates are required to maintain a minimum 3.0 (B) grade-point average in 200-series courses used in the program. A minimum of three terms of academic residence is required. The time limitation for completing the requirements of a certificate program is two calendar years. Details about certificate programs may be obtained from each department office.

Courses completed in the school for a Certificate of Specialization may subsequently be applied toward master’s and/or doctorate degrees.

Admission
In addition to meeting the requirements of the Graduate Division, applicants to Henry Samueli School of Engineering
College and Schools / Herb Alpert School of Music

and Applied Science graduate programs are required to take the General Test of the Graduate Record Examination (GRE). Specific information about the GRE may be obtained from the department of interest.

Students entering the Engineer/PhD program normally are expected to have completed the requirements for the master’s degree with at least a 3.25 grade-point average and to have demonstrated creative ability. Check with department of interest for specific GPA requirements. Usually the MS degree is required for admission to the PhD program. Exceptional students, however, can be admitted to the PhD program without having an MS degree.

For information on the proficiency in English requirements for international graduate students, see Graduate Admission in the Graduate Study chapter.

To submit a graduate application, see the school graduate admissions web page. From there connect to the preferred department or program site and go to the online graduate application.

Graduate Degree Requirements

Graduate degree information is updated annually in program requirements for UCLA graduate degrees.

Master of Science Degrees

No lower-division courses may be applied toward graduate degrees. In addition, the various departments generally do not allow, for graduate degree credit, courses required of their undergraduate students. Consult the departmental graduate affairs office for more information.

Individual departments may impose certain restrictions on the applicability of other undergraduate courses toward graduate degrees. Consult with the graduate adviser on departmental requirements and restrictions.

Major Fields or Subdisciplines

The MS program focuses on one major field. The major fields and subdisciplines offered at the MS level in most cases parallel those listed for the PhD program. There are some differences (for example, manufacturing engineering in the Department of Mechanical and Aerospace Engineering is offered only at the MS level). Students should contact the specific department regarding possible differences between the MS and PhD fields and subdisciplines. Students are free to propose to the school any other field of study, with the support of their adviser.

Course Requirements

A total of nine courses is required for an MS degree, including a minimum of five graduate courses. (Some fields require more than five; obtain specific information from the department of interest.) A majority of the total formal course requirement and of the graduate course requirement must consist of school courses. In the thesis plan, seven of the nine courses must be formal courses, including at least four from the 200 series. The remaining two courses may be 598 courses involving work on the thesis. In the comprehensive examination plan, at least five of the nine courses must be in the 200 series; the remaining four courses may be either 200-series graduate or upper-division undergraduate courses. No 500-series courses may be applied toward the comprehensive examination plan requirements.

Thesis Plan

The thesis must either describe some original piece of research that students have done, usually but not necessarily under the supervision of the thesis committee; or supply a critical exposition of some topic in their major field of study. Students would normally start to plan the thesis at least one year before award of the MS degree is expected. There is no examination under the thesis plan.

Comprehensive Examination Plan

For information on the comprehensive examination plan for each department, see program requirements for UCLA graduate degrees.

Herb Alpert School of Music

Eileen L. Strempel, DM, Dean
Alpert School of Music
2539 Schoenberg Music Building
310-825-4761

First of its kind in the UC system, the UCLA Herb Alpert School of Music focuses on scholarship, performance, composition, pedagogy, and understanding of music in all its contemporary and historical diversity.

With its three outstanding departments of Ethnomusicology, Music, and Musicology, and interdepartmental program for Global Jazz Studies, the Herb Alpert School of Music aspires to educate the whole student through productive collaboration between performance and scholarship; a cross-cultural, global understanding of the art of music; and preparatory training for a broad range of careers in music after graduation.

Public concerts, lectures, symposia, master classes, and musical theater and opera productions are hallmarks of the school. Each department hosts a calendar of events open to the entire community, enriching the lives of both those on stage and those in the audience, and contributing to the quality of life in Los Angeles and beyond.
Schoenberg Music Building includes the Lani Hall (recital hall) and Schoenberg Hall (main concert hall), both fully equipped for audio recording. The building also houses the Music Library, Ethnomusicology Archive, Ethnomusicology Laboratory, Henry Mancini Media Laboratory, World Instrument Collection, and Herbie Hancock Institute of Jazz Performance, as well as numerous classrooms, practice rooms, orchestra room, band room, choral room, organ studio, and ethnomusicology performance rooms.

The Evelyn and Mo Ostin Music Center includes a high-technology recording studio, spaces for rehearsal and teaching, a café and social space for students, and an Internet-based music production center.

Departments and Programs

Students in the Ethnomusicology Department study the performance and context of music-making from a global perspective. The Music Department offers majors in Music Composition, Music Education, and Music Performance. The Musicology Department offers students a broad understanding of the history and culture of music.

The school is also home to three undergraduate minors. The Musicology minor offers undergraduates an overview of music history and the study of music. Students may select from a wide variety of undergraduate courses that range through the history of European and American music. The Music Industry minor introduces students to critical perspectives on the formative effects the music industry and music technology have on musical practices around the world. The Ethnomusicology minor gives students who are interested in the culture of music a unique opportunity to participate in a hands-on educational experience. Students perform in ensembles, explore the world’s instruments, and study global traditions.

Information regarding academic programs is available from the Office of Student Affairs, 2520 Schoenberg Music Building.

Teaching Credentials

Students interested in obtaining instructional credentials for California elementary and secondary schools should contact the Teacher Education Program, 1009 Moore Hall.

Degrees

The Herb Alpert School of Music offers the following degrees and undergraduate minors:

- Ethnomusicology BA, MA, CPhil, PhD
- Global Jazz Studies BA
- Music BA, BM, MA, MM, CPhil, DMA, PhD
- Music Composition BA
- Music Education BA
- Music History and Industry BA
- Music Performance BA
- Musicology BA, MA, CPhil, PhD

Undergraduate Minors

- Ethnomusicology
- Music Industry
- Musicology

Undergraduate Admission

In addition to the UC undergraduate application, some departments require auditions, interviews, portfolios, or evidence of creativity. Information regarding departmental requirements is available on each department website; see the school undergraduate admission website. After the UC application has been submitted, applicants need to submit supplemental application material and should consult the individual department website for details.

Undergraduate Degree Requirements

Students must satisfy UC requirements, school requirements, and department requirements for the Bachelor of Arts degree.
University Requirements

The University of California has two requirements that undergraduate students must satisfy in order to graduate: Entry-Level Writing or English as a Second Language, and American History and Institutions. See Degree Requirements in the Undergraduate Study chapter for details.

Students enrolled in English Composition 1A, 1B, and 2I must take each course for a letter grade.

School Requirements

There are eight requirements that must be satisfied for award of a degree.

Unit Requirement

Students must complete for credit, with a passing grade, no fewer than 180 units and no more than 216 units, of which at least 60 units must be upper-division courses (numbered 100 through 199). Credit for upper-division tutorials numbered 195 through 199 is limited to a maximum of 24 units total for a letter grade, 8 of which may be applied toward the major.

Scholarship Requirement

A 2.0 (C) grade-point average is required in all work attempted at the University of California, exclusive of courses in UCLA Extension and those graded Passed/Not Passed. A 2.0 (C) grade-point average is also required in all upper-division courses in the major taken at the University of California, as well as in all courses applied toward the general education and UC requirements.

Academic Residence Requirement

Students are in residence while enrolled and attending classes at UCLA with a declared major in the Herb Alpert School of Music. Of the last 45 units completed for the bachelor’s degree, 35 must be earned while in residence at the school. No more than 18 of the 35 units may be completed in UCLA summer sessions.

Courses offered by UCLA Extension may not be applied toward any part of the residence requirement.

Writing Requirement

Students must complete the UC Entry-Level Writing or English as a Second Language (ESL) requirement prior to completing the school writing requirement.

Students admitted to the school are required to complete a two-term writing requirement—Writing I and Writing II. The courses must be taken for letter grades, and students must receive a C or better grade in each (a C– grade is not acceptable).

Writing I. The Writing I requirement must be satisfied within the first three terms of enrollment by completing English Composition 3, 3D, 3DS, or 3SL with a C or better grade (a C– or Passed grade is not acceptable).

The Writing I requirement may also be satisfied by scoring 4 or 5 on one of the College Board Advanced Placement Examinations in English; a combination of a score of 720 or better on the SAT Reasoning Test, Writing section (last administered in January 2016) and superior performance on the English Composition 3 Proficiency Examination; completing a course equivalent to English Composition 3 with a C or better grade (a C– or Passed grade is not acceptable) taken at another institution; or scoring 5, 6, or 7 on an International Baccalaureate Higher Level Examination.

Students whose native language is not English may need to take English Composition 1A, 1B, and 2I before enrolling in a Writing I course. All courses in the sequence must be passed with a C or better grade (a C– or Passed grade is not acceptable).

Writing II. The Writing II requirement must be satisfied within the first seven terms of enrollment by completing one course from a faculty-approved list of Writing II courses and available on the student Degree Audit; see the Registrar’s Writing II requirement web page for details.
The course must be completed with a C or better grade (a C– or Passed grade is not acceptable).

Applicable Writing II courses may also fulfill preparation for the major or minor requirements and, if approved for general education (GE) credit, may fulfill a GE requirement.

Transfer students with 90 or more units who have completed the Intersegmental General Education Transfer Curriculum (IGETC) will have satisfied the Writing I, Writing II, and reciprocity requirements. No transfer student is admitted to the school without completing, with a C or better grade (a C– grade is not acceptable), a college-level writing course that Undergraduate Admission accepts as equivalent to English Composition 3.

Quantitative Reasoning Requirement

Students must demonstrate basic skills in quantitative reasoning. The requirement may be satisfied by completing one approved UCLA course (see list below) for a C or Passed or better grade (a C– or Not Passed grade is not acceptable).

The quantitative reasoning requirement may also be satisfied by achieving an SAT Reasoning Test Mathematics section score of 600 or better for exams taken January 2016 or earlier, or achieving an SAT Mathematics section score of 620 or better for exams taken March 2016 or later, or an SAT Subject Test in Mathematics score of 550 or better.

If approved for general education (GE) credit, applicable courses may also fulfill a GE requirement. Approved courses include

- Biostatistics 100A, 100B
- Life Sciences 20, 30A, 30B, 40
- Mathematics 2, 3A, 31A, 31AL
- Philosophy 31
- Political Science 6, 6R
- Program in Computing 10A, 10B, 10C
- Public Affairs 60
- Statistics 10, 12, 13

Foreign Language Requirement

Students may meet the foreign language requirement by scoring 3, 4, or 5 on the College Board Advanced Placement (AP) foreign language examination in Chinese, French, German, Italian, Japanese, or Spanish, or scoring 4 or 5 on the AP foreign language examination in Latin; presenting a UCLA foreign language proficiency examination score indicating competency through level three; or completing one college-level foreign language course equivalent to level three or above or American Sign Language 1, 2, and 3, or 8 at UCLA with a C or Passed or better grade. The foreign language requirement must be completed within the first six terms of enrollment.

International students may petition to use an advanced course in their native language for this requirement. Students whose entire secondary education has been completed in a language other than English may petition to be exempt from the foreign language requirement.

Transfer students with 90 or more units who have completed the Intersegmental General Education Transfer Curriculum (IGETC) will have satisfied the foreign language and reciprocity requirements.

Courses that may be used to fulfill this requirement are published on the Registrar’s foreign language requirement web page.

Diversity Requirement

The diversity requirement is predicated on the notion that students in music must be trained to understand the local, national, and global realities in which they make, understand, interpret, and teach music. Those realities include the multicultural, transnational, and global nature of contemporary society. To satisfy the requirement, students must complete one course from the faculty-approved list of diversity courses (available in the Schedule of Classes, through degree audits, or in the Office of Student Affairs). The course must be taken for a letter grade, and students must receive a C or better grade (a C– or Passed grade is not acceptable).

Applicable courses may also fulfill major, minor, or elective requirements and, if approved for general education (GE) credit, may fulfill a GE requirement. As such, students are not required to complete an additional course to satisfy the diversity requirement.

General Education Requirements

General education (GE) is more than a checklist of required courses. It is a program of study that reveals to students the ways that research scholars in the arts, humanities, social sciences, and natural sciences create and evaluate new knowledge; introduces students to the important ideas and themes of human cultures; fosters appreciation for the many perspectives and diverse voices that may be heard in a democratic society; and develops the intellectual skills that give students the dexterity they need to function in a rapidly changing world.

This entails the ability to make critical and logical assessments of information, both traditional and digital; deliver reasoned and persuasive arguments; and identify, acquire, and use the knowledge necessary to solve problems.
Foundations of Knowledge

General education courses are grouped into three foundational areas: Foundations of the Arts and Humanities, Foundations of Society and Culture, and Foundations of Scientific Inquiry.

Eight courses (38 units minimum) are required. A Writing II course also approved for general education may be applied toward the relevant general education foundational area.

Students who complete a year-long GE cluster series fulfill the Writing II requirement and complete nearly 50 percent of their general education requirements. Students who do not complete the year-long GE cluster series must meet with a counselor in the Office of Student Services and Enrollment Management to determine applicable GE credit.

Courses listed in more than one category can fulfill GE requirements in only one of the categories.

Foundations of the Arts and Humanities. Three 5-unit courses, one from each subgroup. Courses required to satisfy the major or other courses taken in the major field may be used to satisfy this GE requirement:

- Literary and Cultural Analysis
- Philosophical and Linguistic Analysis
- Visual and Performance Arts Analysis and Practice

Courses in this area supply perspectives and intellectual skills necessary to comprehend and think critically about our situation in the world as human beings. In particular, courses furnish the basic means to appreciate and evaluate the ongoing efforts of humans to explain, translate, and transform their diverse experiences of the world through such media as language, literature, philosophical systems, images, sounds, and performances. The courses introduce students to the historical development and fundamental intellectual and ethical issues associated with the arts and humanities and may also investigate the complex relations between artistic and humanistic expression and other facets of society and culture.

Foundations of Society and Culture. Three 5-unit courses, one from each subgroup and a third course from either subgroup:

- Historical Analysis
- Social Analysis
- Third course from either subgroup

Total = 15 units minimum

Foundations of Scientific Inquiry. Two courses from either subgroup. If both courses are selected from the same subgroup, they must be from different departments:

- Life Sciences
- Physical Sciences

Courses in this area ensure that students gain a fundamental understanding of how scientists formulate and answer questions about the operation of both the physical and biological world. Courses also deal with some of the most important issues, developments, and methodologies in contemporary science, addressing such topics as the origin of the universe, environmental degradation, and the decoding of the human genome. Through lectures, laboratory experiences, writing, and intensive discussions, students consider the important roles played by the laws of physics and chemistry in society, biology, Earth and environmental sciences, and astrophysics and cosmology.

Foundations Course Lists. Creating and maintaining a general education curriculum is a dynamic process; consequently, courses are frequently added to the list. For the most current list of approved courses that satisfy the Foundations of Knowledge GE plan, consult with an academic counselor or see the Schedule of Classes.

Reciprocity with Other UC Campuses

Students who transfer to UCLA from other UC campuses and have met all GE requirements prior to enrolling at UCLA
are not required to complete the Herb Alpert School of Music GE requirements. Written verification from the dean at the other UC campus is required. Verification letters should be sent to UCLA Herb Alpert School of Music, Office of Student Affairs, Box 957234, Los Angeles, CA 90095-7234.

Intersegmental General Education Transfer Curriculum

Transfer students from California community colleges have the option to fulfill UCLA lower-division GE requirements by completing the Intersegmental General Education Transfer Curriculum (IGETC) prior to transfer. The curriculum consists of a series of subject areas and types of courses that have been agreed on by the University of California and the California community colleges. Although GE or transfer core courses are degree requirements rather than admission requirements, students are advised to fulfill them prior to transfer. The IGETC significantly eases the transfer process, as all UCLA GE requirements are fulfilled when students complete the IGETC courses. Students who select the IGETC must complete it entirely before enrolling at UCLA. Otherwise, they must fulfill the Herb Alpert School of Music GE requirements.

Department Requirements

Departments generally set two types of requirements that must be satisfied for award of a degree: preparation for the major (lower-division courses) and the major (upper-division courses). Preparation for the major courses should be completed before beginning upper-division work.

Preparation for the Major

A major requires completion of a set of courses known as preparation for the major. Each department sets its own preparation for the major requirements; see the Curricula and Courses chapter.

The Major

A major is composed of at least 36 units and no more than 58 units of upper-division courses.

Students must complete their major with a grade-point average of at least 2.0 (C) in all courses in order to remain in the major. Each course in the major department must be taken for a letter grade.

As changes in major requirements occur, students are expected to satisfy the new requirements insofar as possible. Hardship cases should be discussed with the department adviser, and petitions for adjustment should be submitted to the dean of the school when necessary.

Minors and Double Majors. Students may petition for a minor and/or double major on an individual basis. Students should contact the Office of Student Affairs for an outline of criteria required for the petition.

Policies and Regulations

Degree requirements are subject to policies and regulations, including the following:

Student Responsibility

Students should take advantage of academic support resources, but they are ultimately responsible for keeping informed of and complying with the rules, regulations, and policies affecting their academic standing.

Study List

Each term the study list must include from 15 to 20 units. The school has no provision for part-time enrollment. After the first term, students may petition to carry more than 20 units if they have an overall grade-point average of 3.0 (B) or better and have attained at least a 3.0 (B) average in the preceding term with all courses passed. Students should contact the Office of Student Affairs no later than the end of the second week of instruction to petition for more than 20 units.

Minimum Progress

Students are expected to complete satisfactorily at least 40 units during any three consecutive terms in residence; they are placed on probation if they fail to pass these units. Students are subject to disqualification if they fail to pass at least 32 units in three consecutive regular terms in residence.

Changing a Major

Students in good academic standing who wish to change their major may petition to do so, provided they can complete the new major within the 216-unit limit and normal time to degree (12 terms for students who entered as freshmen; six terms for students who entered as transfers). Petitions must be submitted to and approved by the department or committee in charge of the new major. Admission to certain majors may be closed or restricted; changes are normally not permitted if students are on probation or have begun their last term.

Concurrent Enrollment

Enrollment at a non-UC institution or at UCLA Extension while enrolled at UCLA is not permitted.
Credit Limitations
The following credit limitations apply to all undergraduate students enrolled in the school:

**Advanced Placement Examinations.** Credit earned through the College Board Advanced Placement (AP) Examinations may be applied toward certain UC/school requirements. Consult with a counselor in the Office of Student Affairs to determine applicable credit. Portions of AP Examination credit may be evaluated by corresponding UCLA course numbers (e.g., French 4). If students take the equivalent UCLA course, unit credit for such duplication is deducted before graduation. See the school AP table for UCLA course equivalents.

**Graduate Courses.** Undergraduate students who wish to take courses numbered in the 200 series for credit toward a specific degree requirement must petition for advance approval of the department chair and dean of the school, and must meet specific qualifications. Courses numbered in the 400 and 500 series may not be applied toward the degree.

Counseling Services
The Herb Alpert School of Music offers advising, program planning in the major and general education requirements, and individual meetings with school and departmental counselors. For counseling information, contact the Office of Student Affairs, 2520 Schoenberg Music Building, 310-825-4761.

Honors
Undergraduate students who achieve scholastic distinction may qualify for the following honors and programs:

**Dean’s Honors**
The Dean’s Honors list recognizes high scholastic achievement in any one term. The following criteria are used to note Dean’s Honors on student records: a 3.8 grade-point average (GPA) for less than 16 units of work (3.7 GPA for 16 or more units), with at least 12 letter-graded units. Students are not eligible for Dean’s Honors in any given term if they receive an Incomplete or a Not Passed (NP) grade, change a grade, or repeat a course. Dean’s Honors are automatically recorded on the transcript for the appropriate term.

**Latin Honors**
Latin Honors are awarded at graduation to students with superior grade-point averages. To be eligible, students must have completed 90 or more units for a letter grade at the University of California and must have attained an overall grade-point average (GPA) at graduation that places them in the top five percent of the school (GPA of 3.987 or better) for summa cum laude, the next five percent (GPA of 3.930 or better) for magna cum laude, or the next 10 percent (GPA of 3.860 or better) for cum laude. The minimum GPAs required are subject to change on an annual basis. Required GPAs in effect in the graduating year determine student eligibility. Students should contact the Office of Student Affairs or see the Registrar’s honors web page for the most current Latin honors calculations.

Graduate Study
The advanced degree programs offer graduate students unique research opportunities when combined with special resources, such as Young Research Library, Music Library special collections, and UCLA performance halls.

Fellowships, grants, and assistantships are available through the departments and the dean of the Graduate Division.

Admission
In addition to requiring that applicants hold a bachelor’s degree from an accredited U.S. institution or an equivalent degree of professional title from an international institution, each department in the school has limitations and additional requirements. In general, samples of creative work (auditions, portfolios, computer programs, etc.) are required. Detailed information is available on individual department websites and on program requirements for UCLA graduate degrees.

For information on the proficiency in English requirements for international graduate students, see Graduate Admission in the Graduate Study chapter.

Degree Requirements
Requirements to fulfill each degree objective vary according to the degree and the department. For complete degree requirements, see program requirements for UCLA graduate degrees.

John E. Anderson Graduate School of Management

Antonio E. Bernardo, PhD, Dean
Anderson Graduate School of Management
G415 Marion Anderson Hall
310-825-7982
In today’s rapidly changing global marketplace, it is essential that professional managers be conversant with the latest concepts and principles of management. At the UCLA John E. Anderson Graduate School of Management, which is consistently ranked among the best such schools in the nation, students prepare to become first-rate managers with both specialized skills and broad understanding of the general economic, business, and managerial environment. This background enables them to become effective and efficient directors of organizations and people whether they are in the private, public, or not-for-profit sector.

Specifically, the Anderson Graduate School of Management offers the business community a wide range of higher education programs that furnish state-of-the-art information in a variety of fields. Through its faculty, the school advances the art and science of management by engaging in fundamental and cutting-edge research in all fields of management, and by educating scholars who can continue to create this new knowledge.

Students come from diverse professional and educational backgrounds and seek equally diverse personal and professional goals. Whether they pursue the professional MBA or a PhD in Management, they graduate with a broad understanding of people and organizations and with a sound technical background in the economic and mathematical concepts of management planning and decision making.

The school offers a variety of programs leading to graduate degrees at the master’s and doctorate levels. These include a professional Master of Business Administration (MBA), Master of Science (MS) in Business Analytics, and a Master of Financial Engineering (MFE); as well as an Executive MBA program designed for working managers who are moving from specialized areas into general management, and a three-year Fully Employed MBA program for emerging managers. The school also offers a dual Global Executive MBA degree with the National University of Singapore (NUS) Business School that prepares participants for top positions in organizations around the world. A PhD in Management is also offered, as are a certificate executive program and research conferences and seminars for experienced managers.

The school offers an undergraduate minor in Accounting. It also offers an interdisciplinary undergraduate minor in Entrepreneurship in conjunction with the College of Letters and Science, designed for students interested in new business ventures, business development, and entrepreneurial ideas; see the Entrepreneurship minor for details. Several undergraduate courses in management are also offered. Enrollment in these courses, although open to all UCLA students who have completed the requisites, is limited.

Degrees and Programs

The Anderson Graduate School of Management offers the following degrees and undergraduate minors:
- Master of Business Administration MBA
- Executive Master of Business Administration EMBA
- Fully Employed Master of Business Administration FEMBA
- Global Executive MBA for Asia Pacific GEMBA—dual degree program with National University of Singapore
- Business Analytics MS
- Management MS, CPhil, PhD
- Master of Financial Engineering MFE

Concurrent Degree Programs
- Management MBA/Computer Science MS
- Management MBA/Dentistry DDS
- Management MBA/Latin American Studies MA
- Management MBA/Law JD
- Management MBA/Library and Information Science MLIS
- Management MBA/Medicine MD
- Management MBA/Nursing MSN
- Management MBA/Public Health MPH
- Management MBA/Public Policy MPP
- Management MBA/Urban and Regional Planning MURP

Undergraduate Minors
- Accounting
- Entrepreneurship
Executive Education

Founded in 1954, UCLA Anderson Executive Education offers innovative learning solutions that focus on leadership, management, and strategy to meet the unique business objectives of individual executives and leading organizations worldwide. More than 50 custom and open-enrollment programs are offered annually to leaders of today, both on campus and wherever they are in the world: on the go, online, and on demand.

Research Centers

Eight interdisciplinary research centers supply valuable resources that support school programs: Center for Global Management (CGM); Center for Management of Enterprise in Media, Entertainment, and Sports (MEMES); Easton Technology Management Center; Harold and Pauline Price Center for Entrepreneurship and Innovation; Laurence and Lori Fink Center for Finance; Morrison Center for Marketing and Data Analytics; UCLA Anderson Forecast; and Ziman Center for Real Estate.

Outreach Programs

A wide range of outreach programs—such as the Entrepreneurship Bootcamp for Veterans with Disabilities; Leaders in Sustainability Certificate Program; Management Development for Entrepreneurs (MDE); Impact@Anderson; Office of Equity, Diversity, and Inclusion; and Riordan Programs—offer many teaching, research, and service resources to UCLA, Los Angeles, and beyond.

Jonathan and Karin Fielding School of Public Health

Ronald S. Brookmeyer, PhD, Dean

Fielding School of Public Health
16-035 Center for Health Sciences
310-825-5524
Student Affairs e-mail

The public health field is experiencing an unprecedented level of attention as the nation continues to better prepare itself for a variety of threats to its health and security. As a result, many new and exciting opportunities exist for students, faculty members, and graduates.

The field of public health strives to create healthier communities. Where medicine treats the individual, public health looks to the larger community. Those working in public health focus on efforts to assess the health of people and their environments, and develop policies and programs to protect people and help them lead healthier lives.

To achieve these goals, public health crosses many of the traditional academic disciplinary boundaries, drawing from medicine, law, public policy, economics, and biology to name a few. Making water safe to drink and air safe to breathe, controlling toxic waste, halting the spread of infectious disease, promoting the advantages of healthy lifestyles, and minimizing violence in our communities are all examples of public health in action. Increasingly public health is called on to help determine which clinical approaches to an individual health problem are best (outcomes research), and to assess and identify disparities in access to health care, quality of health care, and health status.

The UCLA Jonathan and Karin Fielding School of Public Health is among the top public health schools in the country, and offers superior public health training and real-world experience. School classrooms and laboratories are located in the Center for Health Sciences (CHS) shared with the Geffen School of Medicine, School of Dentistry, and School of Nursing, and just steps away from its science facilities and schools of engineering, law, management, and public affairs.

The school is enriched by its location in Los Angeles, where a melting pot of cultures, industries, environmental situations, and urban issues offers unparalleled opportunities for education, research, and service. Its location also supplies students and faculty members with a unique opportunity to be involved with cutting-edge health care issues, as many of the health system changes have origins in Southern California.

Students can look forward to working with acclaimed public health experts and innovators. Among its 250 faculty members are more than 15 members of the prestigious Institute of Medicine, three past presidents of the American Public Health Association, and two past presidents of the International Epidemiological Association.

The school’s 611 students are among the most talented and promising in the nation. They are a culturally diverse group—one of the most diverse of all schools of public health—representing more than 23 countries and nearly every region of the U.S. Graduates continue to make an impressive impact on the field and can be found at the forefront of all major public health efforts.

Departments

The school offers graduate programs leading to both academic and professional degrees in five departments. The Department of Biostatistics develops statistical and analytical techniques for public health use. The Department of
Community Health Sciences addresses behaviors that prevent disease and enhance health; health problems of high-risk groups (women, children, the aged, the poor, the disadvantaged, and racial and ethnic minorities); health education and promotion; public health policy; community nutrition; and international health. The Department of Environmental Health Sciences elucidates health hazards in the general environment and in the workplace. The Department of Epidemiology is concerned with the nature, extent, and distribution of disease and health in populations. The Department of Health Policy and Management deals with the organization, financing, delivery, quality, and distribution of health care services. The school also administers an interdepartmental degree program in molecular toxicology. See the Curricula and Courses chapter for more information on each department.

Degrees and Programs
The Fielding School of Public Health offers the following degrees and undergraduate minor:

- Biostatistics MS, PhD
- Community Health Sciences MPH-HP, MS, PhD
- Environmental Health Sciences MS, PhD
- Epidemiology MS, PhD
- Health Policy and Management EMPH, MS, PhD
- Molecular Toxicology PhD
- Public Health MPH, DrPH

Articulated Degree Programs
- Public Health MPH/Latin American Studies MA
- Public Health MPH/Medicine MD

Concurrent Degree Programs
- Community Health Sciences MPH/Urban and Regional Planning MURP
- Environmental Health Sciences MPH/Urban and Regional Planning MURP
- Public Health MPH/African Studies MA
- Public Health MPH/Asian American Studies MA
- Public Health MPH/Law JD
- Public Health MPH/Management MBA
- Public Health MPH/Public Policy MPP
- Public Health MPH/Social Welfare MSW

Undergraduate Minor
Public Health

Admission
Admission criteria established by the UCLA Graduate Division require a bachelor’s degree from a regionally accredited institution comparable in standard and content to a bachelor’s degree from the University of California. A scholastic grade-point average of B (3.0 on a 4.0 scale) or better is required—or its equivalent if the letter grade system is not used—for the last 60 semester units or last 90 quarter units of undergraduate study and in any postbaccalaureate study. Additional requirements for International Applicants are explained in the Graduate Study chapter. Applicants must submit their application to both the centralized Schools of Public Health Application Service (SOPHAS) and UCLA Graduate Division. For additional admission requirements, see the school application web page.

Degree Requirements
Specific degree requirements vary according to the department and program. Refer to program requirements for UCLA graduate degrees.

Research Centers
The field of public health addresses a wide range of issues, making it a natural for interdisciplinary collaboration. UCLA faculty members and students reach beyond traditional academic boundaries to promote cooperative exchange across disciplines. The following interdisciplinary centers are sponsored by or associated with the Fielding School of Public Health.
Biobehavioral Assessment and Research Center

The Biobehavioral Assessment and Research Center (BARC) promotes research on high impact science that the National Institute of Health (NIH) has identified as high-priority areas of public health research. With a team of multidisciplinary investigators, BARC utilizes and develops innovative biobehavioral and technological approaches that integrate behavioral measures/markers into intervention studies, prevention trials, and clinical science. BARC also supports incorporation of clinical and basic biomarkers into behavioral research and prevention science.

Bixby Center on Population and Reproductive Health

The Bixby Center on Population and Reproductive Health was established in 2001 at the Fielding School as the result of a generous gift from the Fred H. Bixby Foundation, and has grown since then with the support from additional Bixby Foundation gifts. The center promotes and supports research, training, and applied public health in the areas of population, reproductive health, and family planning. The principal focus is on reproductive health issues in developing countries, where population growth rates remain high and reproductive health services are poor or inaccessible. The center also works in reproductive health-related issues in the U.S.

Center for Cancer Prevention and Control Research

The Center for Cancer Prevention and Control Research is a joint program of the Fielding School and the Geffen School of Medicine’s Jonsson Comprehensive Cancer Center. Since its inception in 1976, the center has been recognized in Los Angeles community, nationally, and internationally. It conducts rigorous peer-reviewed research in two major program areas—the Healthy and At-Risk Populations Program and the Patients and Survivors Program.

The Healthy and At-Risk Populations Program focuses on research in primary prevention and screening/early detection among healthy populations and persons at increased risk for developing cancer. Its research portfolio includes cancer epidemiology; gene-environment interaction; tobacco control; nutrition and exercise; and breast, cervix, prostate, and colon cancer screenings; as well as risk counseling and genetic testing of high-risk populations. The Patients and Survivors Program has as its major goal the reduction in avoidable morbidity and mortality among adult and pediatric patients with cancer and long-term survivors of cancer.

Center for Environmental Genomics

The Center for Environmental Genomics was established in May 2003 in partnership with the Jonsson Comprehensive Cancer Center. The goal of the center is to bring together experts from a variety of fields—including cancer, environmental health, epidemiology, biostatistics, human genetics, pathology, and pharmacology—to investigate the molecular mechanisms by which environmental agents, such as air pollutants and radiation, interact with genetic predisposing factors to cause disease. A better understanding of these processes paves the way not only for genetic drug therapies, but also for targeted public health efforts to reduce environmental exposures in high-risk populations. Environmental genomics helps prevent diseases rather than waiting to cure them once they have occurred.

Center for Global and Immigrant Health

The last several years have seen major transformations in global public health, requiring major expansion and reconstruction of the international public health work force. Many emerging health problems require timely and sustained research efforts and require application of the best scientific knowledge and focused training and continuing education for the global public health work force.

The UCLA Center for Global and Immigrant Health was established in 2008. The UCLA Center for Global and Immigrant Health was established in 2008. The center includes faculty from all of the departments in the Fielding School of Public Health as well as the schools of medicine, dentistry, and nursing, and the California Center for Population Research, all of whom have research or teaching interests in global and/or immigrant health. Participating faculty have active research collaborations in more than 50 countries throughout the world, and several work both with immigrant communities in California and in the countries of origin of these communities. The center offers a Certificate in Global Health available to students in any UCLA degree-granting graduate and professional program.

Center for Health Advancement

The UCLA Center for Health Advancement supplies enhanced analysis and evidence-based information to help policymakers decide which policies and programs can best improve health and reduce health disparities. The center analyzes a wide range of timely health improvement opportunities, identifying those supported by strong evidence. It presents and disseminates the results of these analyses in plain language to those who make and influence public- and private-sector policies and programs, and offers training and technical assistance to facilitate implementation of recommended approaches.
The center brings together faculty from multiple departments of the Fielding School and other UCLA schools with a wide range of subject matter and methodological expertise, including expertise in nonhealth sectors such as education, transportation, housing, environmental protection, community planning, agriculture, public welfare, and economics. It has strong collaborations with government public health agencies, foundations, academic institutions, and other not-for-profit organizations. Within the health sector, its work is focused on how alternative investments to wasteful expenditures in health care can yield greater returns.

Center for Health Policy Research

The UCLA Center for Health Policy Research is one of the nation’s leading health policy research centers and the premier source of health policy information for California. It was established in 1994 to apply the expertise of UCLA faculty members and researchers to meet national, state, and local community needs for health-policy-related research and information, and to accomplish three missions: conduct research on national, state, and local health policy issues; offer public service to policymakers and community leaders; and offer educational opportunities for graduate students and postdoctoral fellows.

Sponsored by the Fielding School and the Luskin School of Public Affairs, the center offers a collaborative health policy research environment for the leading professional schools and academic departments of UCLA. One major project is the California Health Interview Survey (CHIS), one of the largest health surveys in the nation. The center also sponsors major public service programs supported by extramural grants.

Center for Healthcare Management

The Center for Healthcare Management brings together academic researchers, students, seasoned executives, practitioners, and other health experts, as well as interdisciplinary academic health care management resources to advance health care management. The center is committed to accomplish its mission to unite, inspire, and enrich interdisciplinary leadership that progresses health care management by pulling together the best minds from UCLA and from the broader community to improve the current state of applied research, knowledge, and practice; jointly exploring critical issues in the management of health care organizations; providing an academic home for leaders in the field to contribute career experience and mentorship; producing research that influences management practices and seeks on-the-ground health care management expertise to inform research questions; and creating a library of health care management cases, generated internally and fielded from outside UCLA, as a repository for internal use and external licensing.

Center for Healthier Children, Families, and Communities

The Center for Healthier Children, Families, and Communities (CHCFC) was established in 1995 to address some of the most challenging health and social problems facing children and families. The center’s mission is to improve society’s ability to provide children with the best opportunities for health and well-being, and the chance to assume productive roles within families and communities.

Through a unique interdisciplinary partnership—between UCLA departments including Psychology; schools including education, law, medicine, nursing, public affairs, and public health; and providers, community agencies, and affiliated institutions—a critical mass of expertise has been assembled. This allows CHCFC to conduct activities in five major areas: child health and social services; applied research; health and social service provider training; public policy research and analysis; and technical assistance and support to community providers, agencies, and policymakers.

Center for Occupational and Environmental Health

The California State Legislature mandated that the Center for Occupational and Environmental Health (COEH) be formed in 1978, when a group of chemical workers became sterile from exposure to the pesticide DBCP, a known carcinogen and reproductive toxin. With branches in northern and southern California, COEH trains occupational and environmental health professionals and scientists, conducts research, and offers services through consultation, education, and outreach. The centers constitute the first state-supported institutions to develop new occupational and environmental health leadership in the U.S.

The UCLA COEH branch is housed in the Center for Health Sciences and involves the schools of Public Health, Medicine, and Nursing. Specific COEH programs within the Fielding School include environmental chemistry, occupational/environmental epidemiology, occupational/environmental medicine, occupational ergonomics, occupational hygiene, toxicology, gene-environment interactions, psychosocial factors in the work environment, occupational health education, and pollution prevention.

Center for Public Health and Disasters

The Center for Public Health and Disasters was established in 1997 to address critical issues faced when a disaster impacts a community. The center promotes interdisciplinary efforts to reduce the health impacts of domestic, international, natural, and human-induced disasters. It facilitates dialog between public health and medicine, engineering,
physical and social sciences, and emergency management. This unique philosophy is applied to the education and training of practitioners and researchers, collaborative interdisciplinary research, and service to the community. The multidisciplinary center staff and participating faculty members have backgrounds that include emergency medicine, environmental health sciences, epidemiology, gerontology, health services, social work, sociology, urban planning, and public health.

The center is one of 15 Academic Centers for Public Health Preparedness funded by the Centers for Disease Control and Prevention. The goal of these national centers is to improve competencies of front-line workers in public health to respond to public health threats.

Center for the Study of Racism, Social Justice, and Health

The Center for the Study of Racism, Social Justice, and Health is a multidisciplinary, collaborative research center housed in the Community Health Sciences Department leading the nation in conducting rigorous, community-engaged research to identify, investigate, and explain how racism and other social inequalities may influence the health of diverse local, national, and global populations.

The center is distinguished from other disparities-related research units at UCLA by its primary focus on the health implications of racism for diverse populations. Public health is both an academic discipline and an applied one. Therefore, the center encourages the translation of research findings for use by public health professionals, community organizations, and policy makers in their ongoing health equity efforts. Many center affiliates are working to identify, investigate, and explain how racism and other social inequalities may influence the health of diverse local, national, and global populations.

Southern California NIOSH Education and Research Center

The purposes of the Region IX Southern California NIOSH Education and Research Center are to educate professionals in the various disciplines of occupational health and safety; offer continuing education for professionals and others in occupational safety and health fields; proliferate occupational health and safety activity through outreach to regional institutions and organizations; foster research on issues important to occupational health and safety; be an occupational health and safety resource to organizations and agencies that need its expertise; facilitate marshaling of community resources to address and solve occupational health and safety problems; respond through educational programs and research to the changing range of occupational safety and health problems; and educate nonacademic stakeholders including business, labor, and vulnerable worker populations.

The characteristics of the center are embodied in a coordinated, interdisciplinary set of professional education, continuing education, research, and outreach activities that have a positive impact on the regional and national occupational health and safety practice.

The center has five programs at UCLA, one at UC Irvine, and two centerwide programs. The UCLA programs are Industrial Hygiene, Occupational and Environmental Health Nursing, Center Administration and Planning, Continuing Education, and Outreach. UC Irvine hosts the Occupational Medicine Program.

UCLA Center for Prevention Research

The UCLA Center for Prevention Research conducts prevention research that addresses the needs of children, adolescents, young adults, and their families. The center is a partnership of the Fielding School, Geffen School of Medicine Pediatrics Department, and a wide range of community partners. The center is innovative in its approach to community service, partnering with ethnically and economically diverse communities in Los Angeles County to identify opportunities for the center to provide technical support to community groups for program implementation and assessment. In addition, the center has partnerships with the Los Angeles Unified School District, Los Angeles County Department of Health Services, and other local groups.

UCLA Kaiser Permanente Center for Health Equity

Academic studies and current events have converged to highlight the magnitude of potentially preventable health
disparities among various population groups, and the urgency of addressing these disparities. The UCLA Kaiser Permanente Center for Health Equity identifies, investigates, and addresses these differences in health status and disease burden. A key feature of the center is its heavy focus on community-based intervention research to mitigate observed disparities.

The center aims to advance understanding of health disparities across the lifespan and to foster multidisciplinary research to improve the health of underserved communities. With focus on Los Angeles county, the center facilitates community and academic partnerships in research, trains new investigators in health disparities research, and assists community partners in implementing effective programs and advocating for effective policies to reduce disparities. The center also endeavors to erode the barriers preventing more effective collaboration with local health departments and other key community partners engaged in the practice of public health. It is a collaborative center without walls that includes associates from academia, government, foundations, and private/nonprofit organizations.

**World Policy Analysis Center**

The World Policy Analysis Center aims to improve the quantity and quality of comparative data available to policymakers, citizens, civil society, and researchers around the world on policies affecting human health, development, well-being, and equity. To date, the research team has gathered detailed information on public policies in all UN member states—including labor laws, poverty reduction policies, education policies, and constitutional rights—with the goals of increasing access to this data and translating research findings into policies and programs at the global, national, and local levels. The center is committed to enhancing global health and public policy research and policy capacity across universities, governments, and international organizations.

**Meyer and Renee Luskin School of Public Affairs**

Gary M. Segura, PhD, Dean

Luskin School of Public Affairs
3250 Public Affairs Building
310-206-8858

Founded in 1994, the UCLA Meyer and Renee Luskin School of Public Affairs incorporates best practices in scholarship, research, and teaching in the fields of policymaking, social work, and urban and regional planning. The unique intersection of these disciplines within one school allows for academic cross-collaboration, and a graduate and undergraduate education that values perspectives at both the macro- and micro-organizational levels. Graduates of the master’s and doctorate degree programs are well prepared to take leadership roles and effect change as practitioners, researchers, and policymakers in public, private, and nongovernmental sectors. The undergraduate major offers students a rigorous conceptual and empirical foundation that prioritizes capacity for action by students exhibiting high motivations for public service and social change. Faculty members are actively engaged in research that addresses pressing national and regional issues including immigration, drug policy, prison reform, health care financing, transportation and the environment, national security, economic development, and the aging U.S. and world population.

**Departments**

The school comprises three academic departments—Public Policy, Social Welfare, and Urban Planning—and faculty members from such diverse disciplines as economics, geography, history, law, management, and political science. The school trains policy professionals, planners, and social workers for public, private, and nongovernment service; conducts research on significant regional, national, and international issues with a strong interdisciplinary and cross-cultural focus; and acts as a convener and catalyst for public dialog that engages people locally, nationally, and internationally.

**Degrees and Programs**

The Luskin School of Public Affairs offers the following degrees and undergraduate minors:

- Public Affairs BA
- Public Policy MPP
- Social Welfare MSW, PhD
- Urban and Regional Planning MURP
- Urban Planning PhD

**Concurrent Degree Programs**

- Public Policy MPP/Law JD
- Public Policy MPP/Management MBA
- Public Policy MPP/Medicine MD
- Public Policy MPP/Public Health MPH
- Public Policy MPP/Social Welfare MSW
- Social Welfare MSW/Asian American Studies MA
Social Welfare MSW/Law JD
Social Welfare MSW/Public Health MPH
Urban and Regional Planning MURP/Architecture MArch
Urban and Regional Planning MURP/Latin American Studies MA
Urban and Regional Planning MURP/Law JD
Urban and Regional Planning MURP/Management MBA
Urban and Regional Planning MURP/Public Health MPH

Undergraduate Minors
Gerontology
Public Affairs
Urban and Regional Studies

Obtain brochures about the school undergraduate programs from the department offices, 3343 Public Affairs Building, or see school minors.

The school also offers a wide array of undergraduate courses in public affairs. Enrollment in these courses is open to all undergraduate students during the second enrollment pass. Most classes are restricted to students pursing the BA in Public Affairs during the first pass.

Undergraduate Admission

Admission as a Freshman
Freshmen are admitted with a declared premajor in the College of Letters and Science. See the Curricula and Courses chapter for information on applying to the major.

Admission as a Junior
Transfer students are admitted directly to the Luskin School of Public Affairs.

Undergraduate Degree Requirements

Students must satisfy UC requirements, school requirements, and major requirements for the Bachelor of Arts degree.

University Requirements

The University of California has two requirements that undergraduate students must satisfy to graduate: Entry-Level Writing or English as a Second Language, and American History and Institutions. Students who do not satisfy the Entry-Level Writing requirement prior to enrollment must pass an approved course or other program prescribed by their UC campus of residence. Only after satisfying the Entry-Level Writing requirement can they take an English composition course for transfer credit after enrolling at UCLA. See Degree Requirements in the Undergraduate Study chapter for details.

School Requirements

There are eight requirements that must be satisfied for the award of the degree.

Unit Requirement
Students must satisfactorily complete for credit a minimum of 180 units for the bachelor’s degree. At least 60 of the 180 units must be upper-division courses numbered 100 through 199. A maximum of 216 units is permitted. Students with Advanced Placement Examination or International Baccalaureate Examination (transfer) credit may exceed the unit maximum by the amount of that credit.

After 216 quarter units, enrollment may not normally be continued in the school without special permission from the dean.

Scholarship Requirement
Students must earn at least a 2.0 (C) grade-point average (GPA) in all courses undertaken at UCLA to receive a bachelor’s degree.

Students must also earn a 2.0 GPA in the major and satisfy both the course and scholarship requirements for the major, including preparation for the major.

Academic Residence Requirement
Students are in residence while enrolled and attending classes at UCLA with a declared major in the Luskin School of Public Affairs. Of the last 45 units completed for the bachelor’s degree, 35 units including the final 12 units must be
earned while in residence at the school. A minimum of 24 upper-division units must be completed in the major while in residence at the school.

For students who transfer from another institution, from UCLA Extension, or from another College or school with senior standing, of the 35 units earned while in residence, 28 must be upper-division units, including 16 upper-division units in the major department. Courses in UCLA Extension may not be offered as part of this residence requirement.

Students enrolled in the Education Abroad Program (EAP) must satisfy the residence requirement by earning 35 of their final 90 units, including the final 12 units, in residence at the school.

Writing Requirement

Students must complete the UC Entry-Level Writing or English as a Second Language (ESL) requirement prior to completing the school writing requirement.

Students admitted to the school are required to complete a two-term writing requirement—Writing I and Writing II. Two courses in English composition are required for graduation. Both courses must be taken for letter grades, and students must receive a C or better grade in each (a C– grade is not acceptable).

Writing I. The Writing I requirement must be satisfied within the first three terms of enrollment by completing English Composition 3, 3D, 3DS, or 3SL with a C or better grade (a C– or Passed grade is not acceptable).

The Writing I requirement may also be satisfied by scoring 4 or 5 on one of the College Board Advanced Placement Examinations in English; a combination of a score of 720 or better on the SAT Reasoning Test, Writing section (last administered in January 2016) and superior performance on the English Composition 3 Proficiency Examination; completing a course equivalent to English Composition 3 with a C or better grade (a C– or Passed grade is not acceptable) taken at another institution; or scoring 5, 6, or 7 on an International Baccalaureate Higher Level Examination.

Students whose native language is not English may need to take English Composition 1A, 1B, and 2I before enrolling in a Writing I course. All courses in the sequence must be passed with a C or better grade (a C– or Passed grade is not acceptable).

Qualifying examination scores and courses are determined by the school Faculty Executive Committee.

Writing II. The Writing II requirement must be satisfied within seven terms of enrollment by completing one course from a faculty-approved list of Writing II courses; see the Registrar’s Writing II requirement web page for details. The course must be completed with a C or better grade (a C– or Passed grade is not acceptable).

Applicable Writing II courses may also fulfill preparation for the major requirements and, if approved for general education (GE) credit, may fulfill a GE requirement.

Transfer students with 90 or more units who have completed the Intersegmental General Education Transfer Curriculum (IGETC) will have satisfied the Writing I, Writing II, and reciprocity requirements. No transfer student is admitted to the school without completing, with a C or better grade (a C– or Passed grade is not acceptable), a college-level writing course that Undergraduate Admission accepts as equivalent to English Composition 3.

Quantitative Reasoning Requirement

The quantitative reasoning requirement may be satisfied by completing one approved UCLA course (see list below) or an equivalent course within the first seven terms of enrollment. The course must be taken for a letter grade, and students must receive a C or better grade (a C– grade is not acceptable).

The requirement may also be satisfied by achieving an SAT Reasoning Test Mathematics Section score of 600 or better for exams taken January 2016 or earlier, or achieving an SAT Mathematics section score of 620 or better for exams taken
March 2016 or later, or an SAT Subject Test in Mathematics score of 550 or better, or an ACT Mathematics Test score of 26 or better. Approved UCLA courses and examinations, and qualifying scores, are determined by the school Faculty Executive Committee.

Applicable courses may also fulfill preparation for the major requirements and, if approved for general education (GE) credit, may fulfill a GE requirement.

Transfer students with 90 or more units who have completed the Intersegmental General Education Transfer Curriculum (IGETC) will have satisfied the quantitative reasoning and reciprocity requirements. No transfer student is admitted to the school without completing, with a C or better grade (a C– grade is not acceptable), a college-level quantitative reasoning course that Undergraduate Admission accepts as equivalent to those approved by the school Faculty Executive Committee. Approved courses include:

- Biostatistics 100A, 100B
- Life Sciences 20, 30A, 30B, 40
- Mathematics 2, 3A, 31A, 31AL
- Philosophy 31
- Political Science 6, 6R
- Program in Computing 10A, 10B, 10C
- Public Affairs 60
- Statistics 10, 12, 13

Foreign Language Requirement

The foreign language requirement may be satisfied by one of the following methods: scoring 3, 4, or 5 on the College Board Advanced Placement (AP) foreign language examination in Chinese, French, German, Italian, Japanese, or Spanish, or scoring 4 or 5 in Latin; presenting a UCLA foreign language departmental examination score indicating competency through level three; or completing a college-level foreign language course equivalent to level three or above at UCLA with a C or Passed or better grade.

Transfer students with 90 or more units who have completed the Intersegmental General Education Transfer Curriculum (IGETC) will have satisfied the foreign language and reciprocity requirements. Courses that may be used to fulfill this requirement are published on the Registrar’s foreign language requirement web page.

Diversity Requirement

The diversity requirement may be satisfied by completing one course from the faculty-approved list of courses. Courses used to satisfy the diversity requirement are approved by the school Faculty Executive Committee. The course must be taken for a letter grade, and students must receive a C or better grade (a C– grade is not acceptable). Applicable courses may also fulfill major, minor, or elective requirements and, if approved for general education (GE) credit, may fulfill a GE requirement. A list of approved courses is available in the Schedule of Classes.

General Education Requirements

General education (GE) is more than a checklist of required courses. It is a program of study that reveals to students the ways that research scholars in the arts, humanities, social sciences, and natural sciences create and evaluate new knowledge; introduces students to the important ideas and themes of human cultures; fosters appreciation for the many perspectives and diverse voices that may be heard in a democratic society; and develops the intellectual skills that give students the dexterity they need to function in a rapidly changing world.

This entails the ability to make critical and logical assessments of information, both traditional and digital; deliver reasoned and persuasive arguments; and identify, acquire, and use the knowledge necessary to solve problems.

Applicable courses may also fulfill major, minor, or elective requirements and, if approved for diversity or writing, may fulfill the diversity requirement and/or Writing II requirement.

Foundations of Knowledge

General education courses are grouped into three foundational areas: Foundations of the Arts and Humanities, Foundations of Society and Culture, and Foundations of Scientific Inquiry.

Ten courses (48 units minimum) are required. GE-approved Writing II courses may fulfill an appropriate foundational area. See the foundational area descriptions below for a breakdown of courses required.

Students who complete a year-long GE cluster series fulfill the Writing II requirement, complete 40 percent of their general education requirements, and receive laboratory/demonstration credit where appropriate.

Courses listed in more than one category can fulfill GE requirements in only one of the categories.

Foundations of the Arts and Humanities. Three 5-unit courses, one from each subgroup:

- Literary and Cultural Analysis
- Philosophical and Linguistic Analysis
- Visual and Performance Arts Analysis and Practice

Courses in this area supply perspectives and intellectual skills necessary to comprehend and think critically about our situation in the world as human beings. In particular,
courses furnish the basic means to appreciate and evaluate the ongoing efforts of humans to explain, translate, and transform their diverse experiences of the world through such media as language, literature, philosophical systems, images, sounds, and performances. Courses introduce students to the historical development and fundamental intellectual and ethical issues associated with the arts and humanities, and may also investigate the complex relations between artistic and humanistic expression and other facets of society and culture.

**Foundations of Society and Culture.** Three 5-unit courses, one from each subgroup and a third course from either subgroup:

- Historical Analysis
- Social Analysis

Courses in this area introduce students to the ways in which humans organize, structure, rationalize, and govern their diverse societies and cultures over time. Courses focus on a particular historical question, societal problem, or topic of political and economic concern in an effort to demonstrate how issues are objectified for study, how data is collected and analyzed, and how new understandings of social phenomena are achieved and evaluated.

**Foundations of Scientific Inquiry.** Three courses, one from each subgroup and a third course from either subgroup. One 5-unit course from each subgroup must include either laboratory/demonstration or Writing II credit. For students entering fall quarter 2019 through spring quarter 2021, the laboratory requirement is reduced to one 5-unit course from either subgroup. Other courses in the subgroups may be 4 units:

- Life Sciences
- Physical Sciences

Courses in this area ensure that students gain a fundamental understanding of how scientists formulate and answer questions about the operation of both the physical and biological world. Courses also deal with some of the most important issues, developments, and methodologies in contemporary science, addressing such topics as the origin of the universe, environmental degradation, and the decoding of the human genome. Through lectures, laboratory experiences, writing, and intensive discussions, students consider the important roles played by the laws of physics and chemistry in society, biology, Earth and environmental sciences, and astrophysics and cosmology.

**Foundations Course Lists.** Creating and maintaining a general education curriculum is a dynamic process; consequently, courses are frequently added to the list. For the most current list of approved courses that satisfy the Foundations of Knowledge GE plan, contact an academic adviser or see the Schedule of Classes.

### General Education Requirements

<table>
<thead>
<tr>
<th>Foundations of the Arts and Humanities</th>
<th>1 course</th>
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<tbody>
<tr>
<td>Literary and Cultural Analysis</td>
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</tr>
<tr>
<td>Philosophical and Linguistic Analysis</td>
<td></td>
</tr>
<tr>
<td>Visual and Performance Arts Analysis and Practice</td>
<td>1 course</td>
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<tr>
<td>Total</td>
<td>15 units</td>
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</table>

<table>
<thead>
<tr>
<th>Foundations of Society and Culture</th>
<th>1 course</th>
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<tbody>
<tr>
<td>Historical Analysis</td>
<td></td>
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<tr>
<td>Social Analysis</td>
<td></td>
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<tr>
<td>Third course from either subgroup</td>
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<tr>
<td>Total</td>
<td>15 units</td>
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<table>
<thead>
<tr>
<th>Foundations of Scientific Inquiry</th>
<th>2 courses</th>
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<tbody>
<tr>
<td>Life Sciences</td>
<td></td>
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<tr>
<td>Physical Sciences</td>
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<tr>
<td>Total</td>
<td>18 units</td>
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<td>(17 min. fall 2019–spring 2021)</td>
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</tbody>
</table>

*Total GE  . . . . . . . . . . . . 10 courses/48 units minimum 
 . . . . . . . (10 courses/47 units minimum F19-S21)*

### Reciprocity with Other UC Campuses

Students who transfer to UCLA from other UC campuses and have met all GE requirements prior to enrolling at UCLA are not required to complete the school GE requirements. Written verification from the dean at the other UC campus is required. Consult with a school counselor regarding eligibility for this option.

### Intersegmental General Education Transfer Curriculum

Transfer students from California community colleges have the option to fulfill UCLA lower-division GE requirements by completing the Intersegmental General Education Transfer Curriculum (IGETC) prior to transfer. The curriculum consists of a series of subject areas and types of courses that have been agreed on by the University of California and the California community colleges. Although GE or transfer core courses are degree requirements rather than admission requirements, students are advised to fulfill them prior to transfer. The IGETC significantly eases the transfer process, as all GE requirements are fulfilled when students complete the IGETC courses.

### Major Requirements

Two types of requirements must be satisfied for the award of a degree: preparation for the major (lower-division
courses) and the major (upper-division courses). Departments set requirements for minors.

**Preparation for the Major**

Admission to the major requires completion of a set of courses known as preparation for the major. Applicants are admitted to premajor status until requisite courses are satisfactorily completed. See the Curricula and Courses chapter.

**The Major**

A major consists of a group of coordinated upper-division courses and shall be designated as schoolwide, departmental, interdepartmental, or individual. Each course applied toward the major and preparation for the major must be taken for a letter grade unless otherwise stipulated.

A major consists of a minimum of 40 upper-division units.

Students must complete their major with a scholarship grade-point average of at least 2.0 (C) in all courses in order to remain in the major.

As changes in major requirements occur, students are expected to satisfy the new requirements insofar as possible. Petitions for adjustment should be submitted to the dean of the school in hardship cases.

See the Curricula and Courses chapter for more details.

**Minors**

Students may petition for a minor offered by the school or one offered outside the school, provided they can complete the requirements within 216 units.

As changes in minor requirements occur, students are expected to satisfy the new requirements insofar as possible unless they have completed 50 percent of the required coursework for the minor at the time the new requirements go into effect. Petitions for adjustment should be submitted to the undergraduate program chair for a departmental minor and to the dean for a schoolwide minor.

For a list of minors and specializations, see Undergraduate Minors and Specializations; descriptions are in the Curricula and Courses chapter.

**Policies and Regulations**

Degree requirements are subject to policies and regulations, including the following:

**Student Responsibility**

Students should take advantage of academic support resources, but they are ultimately responsible for keeping informed of and complying with the rules, regulations, and policies affecting their academic standing.

**Study List**

The study list is a record of classes that a student is taking during a particular term. Each term, the study list must include from 12 to 19 units. After the first term, students may petition to enroll in more than 19 units if they have an overall grade-point average of 3.0 (B) and attained at least a 3.0 (B) grade-point average the preceding term with all courses passed.

First-term transfer students from any other UC campus may carry excess units on the same basis as students who have completed one or more terms at UCLA; however, they are not encouraged to do so.

**Minimum Progress**

Students are expected to complete satisfactorily at least 36 units in any three consecutive terms while in residence; they are placed on probation if they fail to pass these units. They are subject to dismissal if they fail to pass at least 32 units in three consecutive regular terms while in residence.

**Changing a Major**

Students in good academic standing who wish to change their major may petition to do so provided they can complete the new major within the 216-unit limit and are on track to graduate on time. Petitions must be submitted to and approved by the department or committee in charge of the new major. Admission to certain majors may be closed or restricted; changes are normally not permitted if students are on probation or have begun their last term.

Students who fail to attain a grade-point average of 2.0 (C) in preparation for the major or major courses may be denied the privilege of entering or continuing in that major.

**Re-entering Students and Their Majors**

Students returning to UCLA to resume their studies after an absence of several years may find their previous major area of study is no longer available. They must select a current major in which to complete their studies. Consult with an academic adviser for assistance.

**Concurrent Enrollment**

Enrollment at a non-UC institution or UCLA Extension while enrolled at UCLA is not permitted except in extraordinary circumstances. No credit is given for courses taken concurrently elsewhere without the approval of the school.
Credit Limitations
The following credit limitations apply to all undergraduate students. In many cases, units are not deducted until the final term before graduation. Students with questions should consult with an academic adviser.

Transfer students with credit from other institutions (advanced standing credit) receive a Degree Audit from Undergraduate Admission indicating the transferable units from former institutions; however, the following credit limitations may reduce the total number of transferred units that apply toward the degree in the school. Consult with an adviser about these limitations.

Upper-Division Tutorials. No more than 8 units of credit may be taken per term in upper-division tutorials numbered 195 through 199. The total number of units allowed in such courses for a letter grade is 32; see the specific restrictions of each department.

Graduate Courses. Undergraduate students who wish to take courses numbered in the 200 series for credit toward a specific degree requirement must petition for advance approval of the department chair and the dean of the school. Courses numbered in the 300, 400, and 500 series may not be applied toward the degree.

Academic Advising Services
The Luskin School of Public Affairs offers advising, program planning in the major and general education requirements, and individual meetings with school and departmental counselors. For counseling information, contact the Undergraduate Program Student Services Office, 3343 Public Affairs Building.

Honors
Undergraduate students who achieve scholastic distinction may qualify for the following honors and programs:

Dean’s Honors
The Dean’s Honors list recognizes high scholastic achievement in any one term. The following criteria are used to note Dean’s Honors on student records: a 3.75 grade-point average (GPA) in any one term, with at least 12 letter-graded units; or a 3.66 GPA and at least 56 grade points during the term. Students are not eligible for Dean’s Honors in any given term if they receive an Incomplete or a Not Passed (NP). Dean’s Honors are automatically recorded on the transcript for the appropriate term.

Latin Honors
Students who have achieved scholastic distinction may be awarded the bachelor’s degree with Latin honors. To be eligible, students must have completed 90 or more units for a letter grade at the University of California and must have attained an overall grade-point average at graduation that places them in the top five percent of school graduates (3.936 GPA or better) for summa cum laude, the next five percent for (3.888 GPA or better) magna cum laude, or the next 10 percent (3.782 GPA or better) for cum laude. Course work taken on the Education Abroad Program is applied toward Latin honors at graduation. The minimum GPAs required are subject to change on an annual basis. Required GPAs in effect in the graduating year (fall, winter, spring, summer) determine student eligibility. Students should consult their Degree Audits, or the Registrar’s Latin honors web page for the most current Latin honors calculations.

Graduate Study

Admission
In addition to requiring that applicants hold a bachelor’s degree from an accredited U.S. institution or an equivalent degree or professional title from an international institution, each department in the school has limitations and additional requirements. Individuals interested in concurrent degrees must be admitted to both programs. Detailed information can be found in program requirements for UCLA graduate degrees.

For information on the proficiency in English requirements for international graduate students, see Graduate Admission in the Graduate Study chapter.

Degree Requirements
Requirements to fulfill each degree objective vary according to the degree and the department. For complete degree requirements, see program requirements for UCLA graduate degrees.

Research Centers
The school houses a number of research centers where faculty members from across campus pursue issues of mutual interest. In addition to their focus on practical policy problems, the research centers also offer opportunities for student financial aid in the form of research assistant positions, grants, and fellowships.
Institute on Inequality and Democracy

The Institute on Inequality and Democracy, organized in 2016, advances radical democracy in an unequal world through research, critical thought, and alliances with social movements and racial justice activism. Institute programs and projects convene multiple disciplines, narrative forms, and styles of scholarship and practice, while focusing on four research priorities: housing justice, predatory financialization, policing and incarceration, and decolonizing the university. The Institute aims to analyze and transform the divides and disposessions of our times, in the university and in our cities, across the global south and global north.

Luskin Center for Innovation

The Luskin Center for Innovation (LCI) conducts rigorous research and timely outreach that informs environmental policies for the health of people and the planet. Center faculty, staff, and graduate student researchers evaluate existing and proposed environmental policies to assess their effectiveness, equity impacts, and potential to spur innovation. The center then shares research findings with community leaders and policymakers, who use LCI research to design evidence-based environmental policies. The center often focuses on California, the world’s fifth-largest economy, to support a model of environmental leadership that is relevant globally. Research programs include climate, energy, environmental equity, transportation, urban greening, and water—all linked by the theme of informing effective and equitable solutions to the environmental challenges of our time.

Latino Policy and Politics Initiative

The Latino Policy and Politics Initiative (LPPi) is a comprehensive think tank that addresses the most critical domestic policy challenges facing Latinos and other communities of color in states and localities across the U.S. The initiative leverages UCLA’s cross-disciplinary strengths to create an enterprise-wide home for Latino social policy with expertise in over a dozen issue areas including civil rights, criminal justice, educational equity, health access, and voting and civic participation. The initiative fosters innovative research, leverages policy-relevant expertise, drives civic engagement, and nurtures a leadership pipeline to propel viable policy reforms that expand opportunity for all Americans.

Center for Policy Research on Aging

The Center for Policy Research on Aging (CPRA) was formed to address the significant issues of an aging society through policy analysis, dissemination of information, and technical assistance to the public and private sectors. The demographic challenges of a nation growing older and living longer force society to confront the roles of government and the private sector in serving the increasing number of elderly and their families. The center’s mission is to conduct research; inform policymakers; link communities to local, state, and federal governments; and foster collaboration among UCLA faculty members.

Ralph and Goldy Lewis Center for Regional Policy Studies

The Lewis Center for Regional Policy Studies was founded in 1989, with a $5 million endowment from Ralph and Goldy Lewis, to promote the multidisciplinary study, understanding, and solution of regional policy issues in California. Research projects cover welfare reform, housing, immigration, environment, health insurance, labor and employment, and transportation—with a specific interest on the policy impact on vulnerable populations as a through line.

Institute of Transportation Studies

The UCLA Institute of Transportation Studies (ITS), one of the leading transportation policy research centers in the U.S., was created in 1992 to conduct research and furnish professional education on the social, economic, environmental, and cultural aspects of transportation policy. Each year ITS faculty members, students, and research staff collaborate on a wide array of transportation policy and planning studies, ranging from an analysis of the travel trends and transportation needs of immigrants and low-income workers to the testing and evaluation of innovative fare programs to increase public transit use.

School of the Arts and Architecture

Brett B. Steele, AA Dipl, Dean
School of the Arts and Architecture
8260 Broad Art Center
310-206-6465

The UCLA School of the Arts and Architecture plays a vital role in the cultural and artistic life of the campus and community. Courses and degree programs in four departments—Architecture and Urban Design, Art, Design|Media Arts, and World Arts and Cultures/Dance—offer students unparalleled opportunities to learn from faculty members who rank among the most innovative artists, designers, ethnographers, choreographers, architects, and arts culture and performance scholars of today.
Combining opportunities for hands-on study of creative practice with an academic foundation of the liberal arts, the school offers students the chance to develop an integrated and encompassing understanding of human creativity, the arts, and architecture. Its mission is to educate, empower, and inspire the next generation of citizens to serve as cultural and artistic leaders of the twenty-first century.

The School of the Arts and Architecture includes three public arts units, including the Center for the Art of Performance at UCLA, one of the largest and most diverse performing arts presenters in the nation; and two world-class museums: the UCLA Hammer Museum, which focuses on contemporary and emerging artists, and the Fowler Museum at UCLA, which focuses on tradition-based and contemporary arts of Africa, the Americas, Asia, and the Pacific. School teaching, learning, and public activities are organized across nine buildings and sites at the UCLA campus and beyond.

Departments and Programs

The four departments of the school are integral to the rich and varied cultural life of the UCLA campus. The Architecture and Urban Design Department offers students the opportunity to interrogate contemporary architectural and urban issues in one of the most culturally diverse cities in the world, and to propose possible futures with equal measures of expertise, optimism, and vision. The Art Department offers courses in the history, theory, and practice of visual art across a wide range of media, preparing students for a life of creative making and critical thinking in contemporary art and related fields. The Design|Media Arts Department focuses on digital media and offers a comprehensive, multi-disciplinary approach that emphasizes individual exploration. The World Arts and Cultures/Dance Department offers innovative curricula focusing on the arts as expressions of culture, on the creation of dance and performance, and on fostering relationships between critical theory, activism, and artistic practice.

The school is also home to one undergraduate minor. Through its innovative interdisciplinary coursework and community arts programs, the Visual and Performing Arts Education (VAPAE) minor provides students with experiential opportunities to develop into teaching artists, introducing them to a range of possible careers in the arts while also bringing much needed arts education curricula to students throughout Los Angeles.

Information about academic programs is available from the Office of Student Services.

Teaching Credentials

Students interested in obtaining instructional credentials for California elementary and secondary schools should contact the Teacher Education Program, 1009 Moore Hall.

Degrees

The School of the Arts and Architecture offers the following degrees and undergraduate minor:

Architecture MA, MFA
Architecture and Urban Design MS
Art BA, MFA
Choreographic Inquiry MFA
Culture and Performance MA, PhD
Dance BA
Design|Media Arts BA, MFA
Individual Field BA
World Arts and Cultures BA

Undergraduate Minor

Visual and Performing Arts Education

Undergraduate Admission

In addition to the UC undergraduate application, departments require a supplemental application that involves auditions, portfolios, or evidence of creativity. Information about departmental requirements is available on the school prospective students web page.

Undergraduate Degree Requirements

Students must satisfy UC requirements, school requirements, and department requirements for the Bachelor of Arts degree.

University Requirements

The University of California has two requirements that undergraduate students must satisfy in order to graduate: Entry-Level Writing or English as a Second Language, and American History and Institutions. See Degree Requirements in the Undergraduate Study chapter for details.

Students enrolled in English Composition 1A, 1B, and 2I must take each course for a letter grade.
School Requirements
There are nine requirements that must be satisfied for award of a degree.

<table>
<thead>
<tr>
<th>Degree Requirements</th>
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<tr>
<td><strong>University Requirements</strong></td>
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<tr>
<td>1. Entry-Level Writing or English as a Second Language</td>
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<tr>
<td>2. American History and Institutions</td>
</tr>
<tr>
<td><strong>School Requirements</strong></td>
</tr>
<tr>
<td>1. Unit</td>
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<tr>
<td>2. Scholarship</td>
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<tr>
<td>3. Academic Residence</td>
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<tr>
<td>4. Writing Requirement</td>
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<tr>
<td>Writing I</td>
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<tr>
<td>Writing II</td>
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<tr>
<td>5. Quantitative Reasoning</td>
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<tr>
<td>6. Foreign Language</td>
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<tr>
<td>7. Upper-Division Nonmajor Courses</td>
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<tr>
<td>8. Diversity</td>
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<tr>
<td>9. General Education</td>
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<tr>
<td>Foundations of Arts and Humanities</td>
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<tr>
<td>Foundations of Society and Culture</td>
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<tr>
<td>Foundations of Scientific Inquiry</td>
</tr>
<tr>
<td><strong>Department Requirements</strong></td>
</tr>
<tr>
<td>1. Preparation for the Major</td>
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<tr>
<td>2. The Major</td>
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<tr>
<td>Courses that do not satisfy specific UC, school, or department requirements are referred to as electives and can be used to meet the minimum unit requirement for graduation.</td>
</tr>
</tbody>
</table>

Unit Requirement
Students must complete for credit, with a passing grade, no fewer than 180 units and no more than 216 units, of which at least 64 units must be upper-division courses (numbered 100 through 199). Credit for upper-division tutorials numbered 195 through 199 is limited to a maximum of 8 units in a single term, and a maximum of 32 units total for a letter grade. Each major may have limitations on the number of upper-division tutorials and/or units that may be applied toward degree requirements.

Scholarship Requirement
A 2.0 (C) average is required in all work attempted at the University of California, exclusive of courses in UCLA Extension and those graded Passed/Not Passed. A 2.0 (C) grade-point average is also required in all upper-division courses in the major taken at the University of California, as well as in all courses applied toward the general education and UC requirements.

Academic Residence Requirement
Students are in residence while enrolled and attending classes at UCLA with a declared major in the School of the Arts and Architecture. Of the last 45 units completed for the bachelor’s degree, 35 must be earned while in residence at the school. No more than 18 of the 35 units may be completed in UCLA Summer Sessions.

Courses offered by UCLA Extension may not be applied toward any part of the residence requirements.

Writing Requirement
Students must complete the UC Entry-Level Writing or English as a Second Language (ESL) requirement prior to completing the school writing requirements.

Students admitted to the school are required to complete a two-term writing requirement—Writing I and Writing II. The courses must be taken for a letter grade, and students must receive a C or better grade in each (a C– grade is not acceptable).

Writing I. The Writing I requirement must be satisfied within the first three terms of enrollment by completing English Composition 3, 3D, 3DS, or 3SL with a C or better grade (a C– or Passed grade is not acceptable).

The Writing I requirement may also be satisfied by scoring 4 or 5 on one of the College Board Advanced Placement Examinations in English; a combination of a score of 720 or better on the SAT Reasoning Test, Writing section (last administered in January 2016) and superior performance on the English Composition 3 Proficiency Examination; completing a course equivalent to English Composition 3 with a C or better grade (a C– or Passed grade is not acceptable) taken at another institution; or scoring 5, 6, or 7 on an International Baccalaureate Higher Level Examination.

Students whose native language is not English may need to take English Composition 1A, 1B, and 2! before enrolling in a Writing I course. All courses in the sequence must be passed with a C or better grade (a C– or Passed grade is not acceptable).

Writing II. The Writing II requirement must be satisfied within the first six terms of enrollment by completing one course from a faculty-approved list of Writing II courses and available on the student Degree Audit; see the Registrar’s Writing II requirement web page for details. The course must be completed with a C or better grade (a C– or Passed grade is not acceptable).

Writing II courses also approved for general education may be applied toward the relevant general education foundational area.
Quantitative Reasoning Requirement

Students must demonstrate basic skills in quantitative reasoning. The requirement may be satisfied by completing one approved UCLA course (see list below) for a C or Passed or better grade (a C– or Not Passed grade is not acceptable), or an equivalent transfer course.

The quantitative reasoning requirement may also be satisfied by achieving an SAT Reasoning Test Mathematics section score of 600 or better for exams taken January 2016 or earlier, or achieving an SAT Mathematics section score of 620 or better for exams taken March 2016 or later, or an SAT Subject Test in Mathematics score of 550 or better, or an ACT mathematics exam score of 26 or better. Approved courses include

- Biostatistics 100A, 100B
- Life Sciences 20, 30A, 30B, 40
- Mathematics 2, 3A, 31A, 31AL
- Philosophy 31
- Political Science 6, 6R
- Program in Computing 10A, 10B, 10C
- Public Affairs 60
- Statistics 10, 12, 13

Foreign Language Requirement

Students may meet the foreign language requirement by scoring 3, 4, or 5 on the College Board Advanced Placement (AP) foreign language examination in Chinese, French, German, Italian, Japanese, or Spanish, or scoring 4 or 5 on the AP foreign language examination in Latin; for languages other than Spanish and Portuguese, presenting a UCLA foreign language proficiency examination score indicating competency through level two; or completing one college-level foreign language course equivalent to level two or above at UCLA with a grade of Passed or C or better. Students who want to meet the foreign language requirement with Spanish, and do not have a qualifying AP score, must enroll in Spanish 2. Students who want to meet the foreign language requirement with Portuguese, and do not have a qualifying AP score, must enroll in Portuguese 2. The foreign language requirement must be completed within the first six terms of enrollment.

International students may petition to use an advanced course in their native language for this requirement. Students whose entire secondary education has been completed in a language other than English may petition to be exempt from the foreign language requirement.

Courses that may be used to fulfill this requirement are published on the Registrar's foreign language requirement web page and are available on the student Degree Audit.

Upper-Division Nonmajor Requirement

Students are required to complete a minimum of 12 units of upper-division (100-level) nonmajor courses. Graduate (200-, 400-, and 500-level) courses may not be applied toward this requirement.

Diversity Requirement

The diversity requirement is predicated on the notion that students in the arts must be trained to understand the local, national, and global realities in which they make, understand, interpret, and teach the arts. Those realities include the multicultural, transnational, and global nature of contemporary society. The requirement may be satisfied by taking courses in any of three parts of the student's overall program: general education courses, courses in the major, or upper-division nonmajor elective courses. As such, students are not required to complete an additional course to satisfy the diversity requirement. Courses satisfying this requirement consider intergroup dynamics along with such social dimensions as race, ethnicity, gender, socioeconomic background, religion, sexual orientation, age, and disability; and are relevant to the understanding of these dynamics in contemporary society and culture in the U.S. and around the world.

General Education Requirements

General education (GE) is more than a checklist of required courses. It is a program of study that reveals to students the ways that research scholars in the arts, humanities, social sciences, and natural sciences create and evaluate new knowledge; introduces students to the important ideas and themes of human cultures; fosters appreciation for the many perspectives and diverse voices that may be heard in a democratic society; and develops the intellectual skills that give students the dexterity they need to function in a rapidly changing world.
This entails the ability to make critical and logical assessments of information, both traditional and digital; deliver reasoned and persuasive arguments; and identify, acquire, and use the knowledge necessary to solve problems.

Foundations of Knowledge

General education courses are grouped into three foundational areas: Foundations of the Arts and Humanities, Foundations of Society and Culture, and Foundations of Scientific Inquiry.

Eight courses (38 units minimum) are required. A Writing II or diversity course also approved for general education may be applied toward the relevant general education foundational area.

Students who complete a year-long GE cluster series fulfill the Writing II requirement and complete nearly 50 percent of their general education requirements. Students who do not complete the year-long GE cluster series must meet with an adviser in the Student Services Office to determine applicable GE credit.

Courses listed in more than one category can fulfill GE requirements in only one of the categories.

Foundations of the Arts and Humanities. Three 5-unit courses, one from each subgroup:

- Literary and Cultural Analysis
- Philosophical and Linguistic Analysis
- Visual and Performance Arts Analysis and Practice

Courses in this area supply perspectives and intellectual skills necessary to comprehend and think critically about our situation in the world as human beings. In particular, courses furnish the basic means to appreciate and evaluate the ongoing efforts of humans to explain, translate, and transform their diverse experiences of the world through such media as language, literature, philosophical systems, images, sounds, and performances. The courses introduce students to the historical development and fundamental intellectual and ethical issues associated with the arts and humanities and may also investigate the complex relations between artistic and humanistic expression and other facets of society and culture.

Foundations of Society and Culture. Three 5-unit courses, one from each subgroup and a third course from either subgroup:

- Historical Analysis
- Social Analysis
- Third course from either subgroup

Total = 15 units minimum

Foundations of Scientific Inquiry. Two courses from either subgroup. If both courses are selected from the same subgroup, they must be from different departments.

Total = 8 units minimum

Total GE . . . . . . . . . . . . 8 courses/38 units minimum

A Writing II course also approved for general education may be applied toward the relevant general education foundational area.
Reciprocity with Other UC Campuses

Students who transfer to UCLA from other UC campuses and have met all GE requirements prior to enrolling at UCLA are not required to complete the School of the Arts and Architecture GE requirements. Written verification from the dean at the other UC campus is required. Verification letters should be sent to the UCLA School of the Arts and Architecture, Office of Student Services, Box 951620, Los Angeles, CA 90095-1620.

Intersegmental General Education Transfer Curriculum

Transfer students from California community colleges have the option to fulfill UCLA lower-division GE requirements by completing the Intersegmental General Education Transfer Curriculum (IGETC) prior to transfer. The curriculum consists of a series of subject areas and types of courses that have been agreed on by the University of California and the California community colleges. Although GE or transfer core courses are degree requirements rather than admission requirements, students are advised to fulfill them prior to transfer. The IGETC significantly eases the transfer process, as all UCLA GE requirements are fulfilled when students complete the IGETC courses. Students who select the IGETC must complete it entirely before enrolling at UCLA. Otherwise, they must fulfill the School of the Arts and Architecture GE requirements.

Department Requirements

Departments generally set two types of requirements that must be satisfied for award of a degree: preparation for the major (lower-division courses) and the major (upper-division courses). Preparation for the major courses should be completed before beginning upper-division work.

Preparation for the Major

A major requires completion of a set of courses known as preparation for the major. Each department sets its own preparation for the major requirements; see the Curricula and Courses chapter.

The Major

A major is composed of no fewer than 56 units, including at least 36 units of upper-division courses.

Students must complete their major with a scholarship grade-point average of at least 2.0 (C) in all courses in order to remain in the major. Each course in the major department must be taken for a letter grade.

As changes in major requirements occur, students are expected to satisfy the new requirements insofar as possible. Hardship cases should be discussed with the department adviser, and petitions for adjustment should be submitted to the dean of the school when necessary.

Any department offering a major may require a general final examination.

Individual Majors. Highly motivated students who believe that no single major accommodates their specific interests and goals may propose designing their own major. Proposals are prepared with faculty guidance and sponsorship, and must explain the intent concerning the anticipated program of study and reasons why the academic goals cannot be achieved within an existing major. Proposals must be submitted no later than the end of the sophomore year. Transfer students must complete at least one term of residency at UCLA before proposing an individual major. Students interested in designing an individual major should consult with the school director of student services, 2200 Broad Art Center.

Minors and Double Majors. Students may petition for a minor and/or double major on an individual basis. It is strongly recommended that students pursuing a minor or double major enroll in 15 to 20 units per term. Students should contact the Student Services Office for an outline of criteria required for the petition.

Policies and Regulations

Degree requirements are subject to policies and regulations, including the following:

Student Responsibility

Students should take advantage of academic support resources, but they are ultimately responsible for keeping informed of and complying with the rules, regulations, and policies affecting their academic standing.

Study List

Each term the study list must include from 12 to 20 units. The school has no provision for part-time enrollment. After the first term, students may petition to carry more than 20 units if they have an overall grade-point average of 3.0 (B) or better and have attained at least a 3.0 (B) grade-point average in the preceding term with all courses completed and passed. Students should contact the Student Services Office no later than the end of the second week of instruction to request additional units.

Minimum Progress

Students are expected to complete satisfactorily at least 36 units during any three consecutive terms in residence; they are placed on probation if they fail to pass these units. Stu-
Students are subject to dismissal if they fail to pass at least 32 units in three consecutive regular terms in residence. In addition, students are held to the minimum grade-point average and progress toward degree policies described in the Academic Policies chapter.

Changing a Major

Students in good academic standing who wish to change their major may petition to do so, provided they can complete the new major within the 216-unit limit and normal time to degree (12 terms for students who entered as freshmen; six terms for students who entered as transfers). Petitions must be submitted to and approved by the department or committee in charge of the new major. Admission to certain majors may be closed or restricted. Changes are normally not permitted if students are on probation or have begun their last term.

Concurrent Enrollment

Enrollment at a non-UC institution or at UCLA Extension while enrolled at UCLA is not permitted.

Credit Limitations

The following credit limitations apply to all undergraduate students enrolled in the school:

Advanced Placement Examinations. Credit earned through the College Board Advanced Placement (AP) Examinations may be applied toward certain UC/school requirements. Consult with an adviser in the Student Services Office to determine applicable credit. Portions of AP Examination credit may be evaluated by corresponding UCLA course numbers. If students take the equivalent UCLA course, unit credit for such duplication is deducted before graduation. See the school AP table for UCLA course equivalents.

Graduate Courses. Undergraduate students who wish to take courses numbered in the 200 series for credit toward a specific degree requirement must petition for advance approval of the department chair and the dean of the school and must meet specific qualifications. Courses numbered in the 400 and 500 series may not be applied toward the degree.

Academic Counseling Services

The School of the Arts and Architecture offers advising, program planning in the major and general education requirements, and individual meetings with school and departmental advisers from matriculation through graduation. For academic counseling information, contact the Student Services Office, 2200 Broad Art Center.

Honors

Undergraduate students who achieve scholastic distinction may qualify for the following honors and programs:

Dean’s Honors

The Dean’s Honors list recognizes high scholastic achievement in any one term. The following criteria are used to note Dean’s Honors on student records: a 3.8 grade-point average (GPA) for less than 16 units of work (3.7 GPA for 16 or more units), with at least 12 letter-graded units. Students are not eligible for Dean’s Honors in any given term if they receive an Incomplete or a Not Passed (NP) grade, change a grade, or repeat a course. Dean’s Honors are automatically recorded on the transcript for the appropriate term.

Latin Honors

Latin Honors are awarded at graduation to students with superior grade-point averages. To be eligible, students must have completed 90 or more units for a letter grade at the University of California and must have attained an overall grade-point average at graduation that places them in the top five percent of the school (GPA of 3.951 or better) for summa cum laude, the next five percent (GPA of 3.907 or better) for magna cum laude, or the next 10 percent (GPA of 3.851 or better) for cum laude. The minimum GPAs required are subject to change on an annual basis. Required GPAs in effect in the graduating year determine student eligibility. Students should contact the Student Services Office or see the Registrar’s honors web page for the most current calculations of Latin honors.

Departmental Scholar Program

Exceptionally promising juniors or seniors may be nominated as Departmental Scholars to pursue bachelor’s and master’s degree programs simultaneously. Qualifications include completion of 24 courses (96 quarter units) at UCLA or the equivalent at a similar institution and the requirements in preparation for the major. Students must also have at least one term of coursework remaining at UCLA. To obtain both the bachelor’s and master’s degrees students must be provisionally admitted to the Graduate Division, fulfill requirements for each program, and maintain a minimum 3.0 (B) average. No course may be used to fulfill requirements for both degrees. Interested students should consult their department well in advance of application dates for graduate admission. Students should contact the Student Services Office in 2200 Broad Art Center for details.
Graduate Study
The advanced degree programs offer graduate students unique research opportunities when combined with special resources, such as the Young Research Library, Arts Library special collections, and UCLA exhibit venues.

Fellowships, grants, and assistantships are available through the departments and the dean of the Graduate Division.

Admission
In addition to requiring that applicants hold a bachelor’s degree from an accredited U.S. institution or an equivalent degree of professional title from an international institution, each department in the school has limitations and additional requirements. In general, samples of creative work (auditions, portfolios, computer programs, etc.) are required. Detailed information is available on individual department websites and in program requirements for UCLA graduate degrees.

For information on the proficiency in English requirements for international graduate students, see Graduate Admission in the Graduate Study chapter.

Degree Requirements
Requirements to fulfill each degree objective vary according to the degree and the department. For complete degree requirements, see program requirements for UCLA graduate degrees.

Research Centers
Ten interdisciplinary research centers—the Art and Global Health Center, Art|Sci Center, cityLAB, Conditional Space Studio, Counterforce Lab, Experiential Technologies Center, Game Lab, Grunwald Center for the Graphic Arts, NOW Institute, and xLAB—as well as the renowned Murphy Sculpture Garden—are part of the school. They offer students the opportunity to broaden and deepen their experience of the arts and architecture while at UCLA.

In addition to offering a rich and diverse environment on campus, the school encourages students to participate in community outreach programs designed around concerts, exhibitions, symposia, and dance productions presented in cooperation with groups throughout the greater Los Angeles area.

School of Dentistry
Paul H. Krebsbach, DDS, PhD, Dean
School of Dentistry
53-038 Dentistry
310-206-6063

The UCLA School of Dentistry has a national and international reputation for its teaching, research activities, and public service that prepare dental students for professional careers dedicated to patient care, leadership, and service. The curriculum prepares students for changes in treatment modalities and health care delivery systems. From the moment training begins, students actively participate in preventive and clinical dental care and soon make valuable contributions to the clinical health team. Clinical instruction emphasizes the comprehensive care of patients. Students interact with their colleagues, faculty members, and dental auxiliary personnel in much the same way as they later will interact in a private or group practice.

Students may undertake programs designed to meet their special interests; mandatory selectives encourage advanced training in an area of particular interest and service learning. In addition to basic and applied research programs within the school, students participate in community service programs such as the Wilson-Jennings-Bloomfield UCLA Venice Dental Center. Graduate programs and resident specialty programs foster new lines of research that lead to better treatment options. An active continuing education program, directed by UCLA faculty members, offers a variety of hands-on courses for members of the dental profession and their auxiliaries.

Degrees and Programs
The School of Dentistry offers the following degrees:
Dental Surgery DDS
Oral Biology MS, PhD

Articulated Degree Programs
Oral Biology MS/Dentistry DDS
Oral Biology MS/Dentistry Certificate
Oral Biology PhD/Dentistry Certificate
Oral Biology PhD/Dentistry DDS

Concurrent Degree Programs
Dentistry DDS/Management MBA

In addition, the school has a Professional Program for International Dentists (PPID) and a number of dental specialty residency programs. For information on the MS and PhD
programs in Oral Biology, for which admission to the School of Dentistry is not required, see program requirements for UCLA graduate degrees.

Pre-Dental Curriculum

For details on the three-year pre-dental curriculum, see Career Center pre-health.

DDS Degree

The UCLA dental curriculum leading to the degree of Doctor of Dental Surgery (DDS) is based on the quarter system. The course of study usually takes four academic years of approximately nine months each, with three required summer quarters between the first/second, second/third, and third/fourth years. The curriculum is designed to give students experience in all phases of clinical dentistry.

The dental curriculum consists of three principal areas: basic health sciences courses, didactic dental courses, and clinical experience. The first two years of the curriculum are chiefly devoted to didactic, laboratory, and general clinical coursework. The final two years emphasize training and instruction in clinical fields, including endodontics, fixed prosthodontics, operative dentistry, oral diagnosis and treatment planning, oral radiology, oral and maxillofacial surgery, anesthesia, orthodontics, pediatric dentistry, periodontics, and removable prosthodontics.

Postgraduate Programs

Opportunities for postgraduate study include a one-year general practice residency program; a one-year advanced education in general dentistry program; a one-year residency in maxillofacial prosthodontics; a six-year oral and maxillofacial surgery residency training program; three-year prosthodontics, periodontics, orthodontics, and dental anesthesiology programs; two-year programs in the specialties of endodontics, oral radiology, and orofacial pain and dysfunction; and a 26-month program in pediatric dentistry.

Information on postgraduate programs can be obtained by visiting the school post-DDS programs web page.

School of Law

Jennifer L. Mnookin, JD, PhD, Dean
School of Law
1242 Law Building
310-825-4841

By any standard, UCLA School of Law is recognized as one of the nation’s great law schools. Each year a lively, talented, and diverse law student population assembles in a rigorous, innovative, and supportive environment. Faculty members frequently receive awards for teaching excellence, and are highly regarded University-wide and nationally. They also are recognized worldwide for their scholarship in a broad spectrum of fields that dramatically affect the world—constitutional law, environmental law and policy, human rights, criminal law, corporate law, employment law, international law, immigration law, and intellectual property, to name a few. The structure of U.S. democracy; the underpinnings of individual liberties and regulation of business; the powerless and homeless; the many permutations of a race-conscious society—all are subjects of investigation and study. Faculty members are committed to being intellectually and professionally demanding of students and supportive at the same time, encouraging and fostering a genuine spirit of collaboration and community.

Law students select courses from an intellectually rich curriculum. Courses are taught in both traditional and clinical settings, with some offered as part of coordinated concurrent degree programs or specializations in business law and policy; critical race studies; environmental law and policy; international and comparative law; law and philosophy; media, entertainment, technology, and sports law; and public interest law and policy. Situated at a major gateway to the Pacific Rim, and part of an outstanding research university, UCLA School of Law affords law students myriad interdisciplinary opportunities in the classroom and through independent research.

The school’s nationally recognized experiential education program offers sophisticated courses that help students develop applied lawyering skills, focus on solving client problems, and gain from their UCLA education more of what they will ultimately face as lawyers and policy makers. The experiential education curriculum includes courses in interviewing, counseling, negotiation, business transactions, criminal and civil trial advocacy, community-based
lawyering, environmental law, human rights, and international justice. Clinics and simulations offer students the opportunity to provide direct representation to clients in areas including immigration rights, veterans’ rights, and legal work on behalf of documentary filmmakers and musicians, among other programs.

The technologically advanced, spacious, and comfortable Hugh and Hazel Darling Law Library—replete with natural lighting and views—houses an extensive collection of legal materials.

Successful professional placement of graduates is a hallmark of the law school. Approximately 400 interviewers from law firms, corporations, government agencies, and public interest organizations across the country visit campus annually. More than 18,000 UCLA graduates work in coveted positions in California and around the world, serving in law firms and government agencies and working as in-house counsel, business executives, law professors, judges, and lawmakers.

Degrees
The School of Law offers the following degrees:
Doctor of Juridical Science SJD
Juris Doctor JD
Master of Laws LLM
Master of Legal Studies MLS

Concurrent Degree Programs
Law JD/African American Studies MA
Law JD/American Indian Studies MA
Law JD/Education MEd, MA, EdD, or PhD
Law JD/Management MBA
Law JD/Philosophy PhD
Law JD/Public Health MPH
Law JD/Public Policy MPP
Law JD/Social Welfare MSW
Law JD/Urban and Regional Planning MURP

In addition to the concurrent programs above, students may design a tailored program from other disciplines in the UCLA curriculum or from another high-quality institution; this must be arranged in consultation with the School of Law and the other selected program.

Detailed information about academic programs, course titles and descriptions, fees, and the semester-system calendar are available on JD degrees and specializations.

Doctor of Juridical Science Degree
The Doctor of Juridical Science (SJD) degree program is designed for those seeking to pursue careers as teachers and scholars of law. The highly selective program is open only to applicants who possess a distinguished prior academic record in law, show promise of outstanding scholarship, and demonstrate a high potential for completing a scholarly dissertation of required quality. Applicants must hold a JD degree or foreign equivalent and an LLM degree (or be enrolled in a program leading to an LLM degree).

Juris Doctor Degree
UCLA School of Law has as one of its central purposes the training of attorneys who attain high levels of professional excellence and integrity, and who exercise civic responsibility in myriad ways over long careers.

Admission
Students must have received a bachelor’s degree from a university or college of approved standing before beginning work in the school. Students are required to take the Law School Admission Test (LSAT), although students concurrently applying to or already in a UCLA graduate program may submit their Graduate Record Exam (GRE) score in lieu of an LSAT score.

The school seeks to admit students of outstanding intellectual ability who bring a wide range of backgrounds, experiences, and perspectives to the classroom and the legal profession. Through long experience, the faculty has concluded that the quality of the education of each student is affected in significant ways by the presence of vital diverse viewpoints. Students of all backgrounds choose to come to UCLA School of Law in significant part because of the school’s outstanding achievements in creating a highly diverse educational environment.

In evaluating each applicant the school places substantial weight on traditional measures of academic ability, namely grades and LSAT (or GRE) scores. It also recognizes in its evaluation that other factors and attributes contribute greatly to a person’s ability to succeed as a law student and lawyer. When assessing academic promise and achievement, the applicant’s entire file is considered, including letters of recommendation; whether economic, physical, or other challenges have been overcome; scholarly achievements such as graduate study, awards, or publications; and the rigor of the undergraduate educational program.

In addition, the school considers attributes that may contribute to assembling a diverse class. Special emphasis is placed on socioeconomic disadvantage in the evaluation. Also considered are work experience and career achievement,
community or public service, career goals (with particular attention to the likelihood that applicants will represent those in underrepresented communities), significant hardships overcome, evidence of and potential for leadership, language ability, unusual life experiences, and any other factors (except those deemed inadmissible by the Regents or by other applicable law) that indicate the applicant may significantly diversify the student body or make a distinctive contribution to the school or the legal profession.

Residence and Unit Requirements
Candidates for the Juris Doctor degree must pursue resident law school study for six semesters and successfully complete 87 units, at least 64 of which must be earned in regularly scheduled law class sessions. The residence requirements may be satisfied as follows: six semesters in regular session in this school; or two semesters in regular session (or equivalent) in a school that is accredited by the American Bar Association, coupled with four semesters in regular session (or equivalent) in this school.

Every first-year student must take the full schedule of required courses; second- and third-year students are required to take a minimum of 12 units and may not take more than 16 units each semester. The second- and third-year curriculum is elective, except for a required course in professional responsibility and a substantial analytical writing requirement. In addition to the courses in the regular law school curriculum, students may take two courses for credit in other UCLA disciplines. Graduate students may enroll in upper-division law courses on a limited basis. Law courses are not open to non-UCLA students. Auditing of law courses is not permitted.

Attendance and Grades
The right to take examinations and the privilege of continuing as a student in the school are conditioned on regular classroom attendance. Information on the grading system, which is based on a letter-grade scale of A+ to F, and standards for satisfactory performance and for graduation may be obtained from the assistant dean for academic affairs and operations.

Curriculum
Courses of instruction are offered within the school and supervised educational experiences outside it in an effort to enable students to think in new and clarifying ways and to prepare them for careers of practice and public service. To this end, the school employs several instructional techniques in a variety of subject areas.

In the first year of their legal education, students undertake intensive study of legal reasoning in fields that have historically dominated legal thought. Students begin with a pioneering week-long orientation program that immerses them in the fundamentals of the law school learning process. From there they embark on a formative first year of courses that historically have laid the foundation for law of all kinds: civil procedure, constitutional law, contracts, criminal law, and property and torts. In addition, an elective on modes of legal inquiry in the second semester serves as a gateway to the upper-division curriculum.

In the second and third years, students have an opportunity to engage in a number of different fields of law and law-related study. All of the courses in the second- and third-year curricula are elective, with the exception of the legal profession and substantial analytical writing requirements.

Master of Laws Degree
The School of Law offers a Master of Laws (LLM) degree program for international and domestic law school graduates who wish to pursue a year of graduate legal education. The program allows students to specialize their studies in fields such as entertainment law, international and comparative law, and four separate business law subjects; or to design their own specialization in a field of their choice.

Master of Legal Studies Degree
The Master of Legal Studies (MLS) degree program is designed for non-lawyer professionals in business, government, and the nonprofit sector who seek to advance their careers and capabilities by obtaining an advanced degree and a deep understanding of the legal and regulatory issues that impact their industry or field of interest. Full-time students can finish the degree in one academic year, part-time students may take as many as four years. An MLS degree does not entitle the holder to sit for the bar exam or become a licensed lawyer.
Academic Specializations for JD Degree

Business Law and Policy
The Business Law and Policy specializations are designed for students who wish to focus their schooling in a particular area of business law and ultimately earn a certificate of completion with their degree. Students may choose from two specializations: business law and taxation. Approximately 70 courses and seminars are offered. In addition, there are two recommended tracks: corporate law and bankruptcy and commercial law, which offer additional guidance to students in course selection for the business law specializations. Business law materials are integrated to varying degrees in the law school’s first-year curriculum, typically in property, contracts, and torts. The second- and third-year curricula in the specialization include courses covering a wide variety of legal and business issues, ranging from regulation of markets to the design of business transactions.

Critical Race Studies
UCLA School of Law is the only American law school to offer an advanced curriculum that fosters students’ systematic and rigorous study in the area of critical race studies. With many faculty members who have been instrumental in pioneering and advancing critical race theory, the Critical Race Studies specialization is essential to promoting insightful, intelligent public conversation about race relations. It is appropriate for law students who seek advanced study and/or practice in race and the law, critical race theory, civil rights, public policy, and other legal practice areas that are likely to involve working with racial minority clients and communities or working to combat racial inequality.

International and Comparative Law
The International and Comparative Law program is one of the best in the nation. An expansive law faculty, course offerings, colloquia and symposia, student-edited journals, externships, foreign exchange offerings, and a broad community of interested students from around the world constitute a rich milieu in which to learn about the field. The International and Comparative Law specialization builds on these strengths, and directs students to coursework that may range from international business to comparative constitutional law to international human rights.

Law and Philosophy
The Law and Philosophy specialization is designed for students who want to supplement their legal studies by exploring more theoretical issues concerning the philosophical foundations of law. It is invaluable to those students interested in attending graduate programs or exploring a career in academia. The specialization exposes students to material on the nature of law and legal systems, legal methodologies, and the theoretical underpinnings and justifications of particular doctrinal areas such as constitutional law, criminal law, and contract. Students need not have any prior background in philosophy, but a strong interest in the subject is recommended.

Media, Entertainment, and Technology Law and Policy
Los Angeles is the center of the entertainment industry. The specialization is the most comprehensive, advanced, and innovative approach to the study of entertainment and media law in the country. Students who fulfill the requirements have a solid grounding in the law, customs, theory, and policy in the motion picture, television, music, and other industries involved in creative and artistic matters. The program also prepares students who choose to work in nonprofit institutions, government, or academia in the area of entertainment, media, and intellectual property law.

Public Interest Law and Policy
Recognizing the considerable debate about the proper role of the law in creating and sustaining a just society, the David J. Epstein Program in Public Interest Law and Policy specialization strives to offer its students an innovative and intellectually ambitious curriculum that prepares them to engage in sophisticated representation of traditionally underserved clients and interests. The specialization, one of the nation’s top such programs, has a competitive admissions process. Graduates have received prestigious public interest law fellowships, including the Skadden and Equal Justice Works postgraduate fellowships, and work in a variety of settings, including nonprofit organizations, government agencies, think tanks, and private public interest firms. Graduates work throughout the world in a broad range of social justice issues such as homelessness prevention; immigrants’ rights; health-care access; poverty; workers’ rights; international human rights; criminal justice; lesbian, gay, bisexual, transgender, and queer rights; and more. Faculty members are leaders in their respective fields, and have distinguished themselves by the quality of their practical legal experience, scholarship, and teaching.
Academic Specializations for LLM Degree

Business Law
The Business Law specialization is designed to allow students to focus in one of four tracks: business law, bankruptcy, securities regulation, and taxation. Approximately 70 courses and seminars are offered in the specialization. The four tracks are designed to offer guidance to students in course selection, as well as highlight the specialization’s curricular strengths. The advanced curricula include courses covering a wide variety of legal and business issues, ranging from regulation of markets to the design of business transactions. The Lowell Milken Institute for Business Law and Policy prepares students for outstanding careers and leadership in business law; as well as in business, the nonprofit sector, and philanthropy. The institute simultaneously serves as a dynamic hub of research and strategy for practitioners, scholars, and experts across a variety of disciplines.

Critical Race Studies
UCLA School of Law is the only American law school to offer an advanced curriculum that fosters students’ systematic and rigorous study in the area of critical race studies. With many faculty members who have been instrumental in pioneering and advancing critical race theory, the Critical Race Studies specialization is essential to promoting insightful, intelligent public conversation about race relations. It is appropriate for law students who seek advanced study and/or practice in race and the law, critical race theory, civil rights, public policy, and other legal practice areas that are likely to involve working with racial minority clients and communities or working to combat racial inequality.

International and Comparative Law
The International and Comparative Law program is one of the best in the nation. An expansive law faculty, course offerings, colloquia and symposia, student-edited journals, externships, foreign exchange offerings, and a broad community of interested students from around the world constitute a rich milieu in which to learn about the field. The International and Comparative Law specialization builds on these strengths, and directs students to coursework that may range from international business to comparative constitutional law to international human rights.

Law and Sexuality
The Law and Sexuality specialization builds on the role of the school as a leader in the field of sexual orientation and gender identity law and scholarship. The goal of the specialization is to expand the quality and extent of legal knowledge and public discourse on issues related to sexuality and law. It is affiliated with the Williams Institute, a national think tank dedicated to conducting rigorous, independent research on sexual orientation and gender identity law and public policy. Students can take classes offered by faculty members and scholars associated with the institute, and participate in a range of institute activities including the speaker series and annual conference, moot court competition, and the Dukeminier Awards journal. Staff from the institute work with LLM students to secure internships in the Los Angeles area and to establish connections between LLM students and international experts and organizations working in their geographic or topic area. The specialization involves coursework on comparative and/or international law with focus on sexuality issues.

Media, Entertainment, and Technology Law and Policy
Los Angeles is the center of the entertainment industry. The specialization offers the most comprehensive, advanced, and innovative approach to the study of entertainment and media law in the world. Students who fulfill the requirements have a solid grounding in the law, custom, theory, and policy in the motion picture, television, music, and other industries involved in creative and artistic matters. The program also prepares students who choose to work in nonprofit institutions, government, or academia in the area of entertainment, media, and intellectual property law.

Public Interest Law
Exploring the proper role of the law in creating and sustaining a just society, the Public Interest Law specialization strives to offer its students an innovative and intellectually ambitious curriculum that prepares them to engage in sophisticated representation of traditionally underserved clients and interests. The specialization, one of the nation’s top such programs, has a competitive admissions process. Students represent a broad range of political and ideological perspectives. Graduates’ impact is far reaching as they work on a broad range of social justice issues such as women’s rights; immigrants’ rights; poverty; health-care access; international human rights; criminal justice; lesbian, gay, bisexual, transgender, and queer rights; and more.
Research Centers, Institutes, and Programs

Center for Immigration Law and Policy
The Center for Immigration Law and Policy supports UCLA Law’s nationally renowned immigration scholars and enhances the school’s existing and wide-ranging immigration programs, which include the Immigrant Family Legal Clinic at the Robert F. Kennedy Community Schools in Los Angeles; service-learning trips to Tijuana, Mexico and the border region of Texas; and the Immigrants’ Rights Policy Clinic. The center publishes briefings and reports on immigration policy, hosts conferences and symposia featuring top national scholars, and collaborates with Southern California organizations working in the field.

Center for Law and Economics
The mission of the Center for Law and Economics is to foster academic scholarship exploring how economics can help us better understand and improve our laws. UCLA has one of the richest law and economics traditions in the world, and many of the founders of law and economics have made UCLA their academic home. The center, along with the Anderson Graduate School of Management and School of Law Lowell Milken Institute for Business Law and Policy, sponsors the UCLA Law, Economics, and Organization Workshop, where speakers present their latest works-in-progress in the broad area of law and economics as it relates to business organizations.

Criminal Justice Program
The Criminal Justice Program addresses a wide spectrum of issues in criminal law with a vigorous program of education, policy work, and research. Areas of focus include police and digital surveillance, the relationship between criminal law and immigration enforcement, trial and appellate advocacy, criminal defense, expert witnesses and wrongful convictions, sentencing, the death penalty, fines, prison law, collateral consequences of criminal convictions and prisoner reentry, juvenile justice, international and transnational crimes, criminal justice reform in the U.S. and abroad, and critical race studies.

Critical Race Studies Program
Throughout American history, race has profoundly affected the lives of individuals, growth of social institutions, substance of culture, and workings of our political economy. Not surprisingly, this impact has been substantially mediated through the law and legal institutions. To understand the deep interconnections between race and law and, particularly the ways in which race and law are mutually constitutive, is an extraordinary intellectual challenge with substantial practical implications. In a nation that is becoming more racially diverse and finds global issues at the forefront of political debate, these issues promise to remain central to the work of law practitioners and the research of legal scholars. The only one of its kind in the U.S., the Critical Race Studies Program is proud that some of the original architects of critical race theory are faculty members. Established in 2000, the program is a training ground for a new generation of practitioners, scholars, and advocates committed to racial justice theory and practice; and is a multifaceted program that augments a rigorous course of study with research colloquia, symposia, interdisciplinary collaborations, and community partnerships in order to integrate theory and practice.

David J. Epstein Program in Public Interest Law and Policy
The school’s highly selective David J. Epstein Program in Public Interest Law and Policy was established in 1997 in response to the need to better train public-interest lawyers. It quickly became one of the nation’s most innovative and successful law school public-interest programs, engaging students in an array of social justice issues. The program strives to ensure that its students pursue an innovative and intellectually ambitious curriculum, and extracurricular involvement that best prepares them to engage in sophisticated representation of traditionally underserved clients and interests. Beyond the formal coursework, the program offers an array of opportunities for students to hear from leading public-interest practitioners and scholars, work on current policy problems, and become involved in public-interest activities within and outside the School of Law. The program also sponsors a series of forums, symposia, and activities that focus on social justice issues in which all students, faculty, alumni, and the broader community participate.

Emmett Institute on Climate Change and the Environment
The Emmett Institute on Climate Change and the Environment is the leading law-school center focused on climate change and other critical environmental issues. Founded in 2008, the institute works across disciplines to develop and promote research and policy tools useful to decision makers locally, statewide, nationally, and beyond. The institute houses the school’s leading environmental programs, including the Frank G. Wells Environmental Law Clinic, a vital training ground for environmental lawyering. Taking advantage of its home at one of California’s top law schools, the institute has particular expertise in the cutting-edge
steps taken by California to lead the way toward meaningful reductions of greenhouse gas emissions. Lawmakers, the broader legal community, business leaders, academics, and the media rely on the institute as a trusted resource to analyze and answer questions about policy and law issues related to climate change and other environmental challenges.

**Empirical Research Group**

UCLA School of Law is one of the only law schools in the country to offer its faculty members the support of trained statisticians to further empirical research. The Empirical Research Group (ERG) is a methodology-oriented research center that specializes in the design and execution of quantitative research in law and public policy, and enables faculty members to include robust empirical analysis in their legal scholarship. Articles and reports published by faculty members working with ERG have covered topics as diverse as bankruptcy, legal aid, pollution prevention, tax policy, gay rights, the living wage, and campaign finance disclosure. Articles, reports, working papers, and supporting data are posted on the ERG website. In addition to faculty scholarship, ERG trains law students as research assistants in empirical methods such as sampling, data collection, and statistics, and works closely with law students who conduct their own empirical research.

**Experiential Education Program**

The School of Law has long been recognized for its innovative approach to experiential teaching that transforms the classroom into a real-world laboratory through the integration of theory and practice. It has been a national leader in clinical teaching since the early 1970s, and continues to offer rigorous practical training across a wide range of practice areas. Students gain crucial firsthand experience that prepares them for future careers, learning from faculty members whose knowledge and expertise place them at the forefront of experiential education.

From the first year, students have opportunities to receive training and hands-on experience by participating in the El Centro Legal Clinics. El Centro places students with public-interest legal services organizations to provide legal assistance to underserved individuals, families, and communities. Second- and third-year students can participate in a broad array of clinical and experiential courses that encompass all areas of legal practice—litigation, transactional, and public interest. In addition, second- and third-year students can do part-time and full-time externships, working for judges, government agencies, public interest law firms, and nonprofit organizations.

The experiential education program is led by exceptional faculty members—visionary scholars who have contributed the cornerstone ideas that form the basis of clinical training, as well as a new generation of leaders who are bringing experiential education into areas of the legal profession that have long remained outside the scope of hands-on training.

**Externships and Field Placements**

Through the School of Law’s extensive and diversified externship program, students can work in a supervised environment with a wide variety of employers and in a diverse range of practice areas. Students are able to extern with judges, government agencies, nonprofit organizations, or in some circumstances, entertainment and other in-house placements. They also may participate in the UCDC Law Program, a full-time externship program in Washington, DC. The field placement program brings together faculty members, students, and practicing lawyers to collaborate and connect classroom learning with practice opportunities.

**International and Comparative Law Program**

The International and Comparative Law Program offers a wealth of courses, seminars, and clinics, prominent symposia, international moot court opportunities, and highly regarded student-edited journals that address the emerging challenges of a globalized world. Permanent faculty members offer numerous international and comparative law courses such as international business transactions, national security law, international environmental law, international criminal law, European Union law, and Islamic law. The study of international and comparative law is further strengthened by the opportunity to take courses in other UCLA departments. Some of the country’s best work in international economics, politics, and business occurs at UCLA, and many law students find it valuable to complement their law school work with coursework in other departments. Students may also pursue joint degrees with other departments with the approval of the law school administration.

**Law and Philosophy Program**

The School of Law and the Philosophy Department offer an exciting program in law and philosophy that takes advantage of the law faculty’s strength and depth in the subject, and the school’s close relationship to the Philosophy Department. The program has many dimensions, including a wide range of courses at the intersection of law and philosophy and a legal theory workshop, open to all members of the law school and Philosophy Department, in which leading scholars present works in progress.
Lowell Milken Institute for Business Law and Policy

The central mission of the Lowell Milken Institute for Business Law and Policy is to influence national legal and policy debate over critical issues affecting the regulation and governance of business. The institute seeks to fulfill this mission by promoting innovative research at the intersection of law and business, by a highly respected and widely recognized business law faculty; by offering a unique blend of policy and practice-oriented courses designed to prepare law students to be leaders in the new economy; and by hosting timely conferences and scholarly events on matters that advance the public discussion.

Native Nations Law and Policy Center

The Native Nations Law and Policy Center supports Native nations to enhance their governmental institutions and laws, strengthen their cultural resource protections, and address critical public policy issues by bringing together UCLA academic resources and the knowledge and experience of tribal leaders and knowledge-holders. The center serves as the home for the Tribal Legal Development Clinic and Tribal Appellate Court Clinic that involve students in projects such as constitution drafting, code development, and serving as law clerks for Native nation clients.

Office of Public Interest Programs

UCLA School of Law has a long-standing commitment to public service, and is committed to cultivating an environment that encourages all of its students and alumni to better serve society in myriad ways. Students gain significant exposure and experience in public service through clinical courses, a pro bono program, an externship program, extensive public interest advising and informational programming, and numerous student organizations. The Office of Public Interest Programs, hub of the school’s public interest efforts, hosts a variety of career-oriented programs and relevant public interest forums and events in which students, faculty, alumni, and the broader community participate. The office also hosts the annual Southern California Public Interest Career Day, which attracts more than 110 public service employers and some 1,000 students from around the region.

Program on Understanding Law, Science, and Evidence

Founded in 2009, the Program on Understanding Law, Science, and Evidence (PULSE) explores the many connections between law and science, technology, and evidence. PULSE engages in interdisciplinary research, discussion, and programming to examine how basic facts about our world, furnished through science and credited as evidence, influence various venues of law and policymaking.

The Promise Institute for Human Rights

The Promise Institute for Human Rights, founded with a visionary $20 million gift in 2017, trains human rights lawyers and leaders, generates vital scholarship, and develops programs for on-the-ground assistance to address the most pressing contemporary human rights concerns of our times—including genocide studies, international migration and refugee crises, and post-conflict human rights. Through cross-disciplinary work, the institute explores the complex relationships between economic development, health, democracy, rule of law, and human rights. Students participate in a wide range of clinics, experiential programs, research opportunities, and fellowships.

Resnick Center for Food Law and Policy

The Resnick Center for Food Law and Policy is dedicated to studying and advancing law and policy solutions to improve the modern food system. A national think tank at the school, the program develops key legal and policy research and tools to foster a food system, from farm to the fork, that is healthy both for consumers and the environment.

UCLA Institute for Law, Technology, and Public Policy

The UCLA Institute for Technology, Law, and Policy performs cross-disciplinary research on the ways that new and emerging technologies affect society, privacy, law, and public policy. The institute is a collaboration between UCLA School of Law and the UCLA Samueli School of Engineering. The institute brings together faculty and students from the law and engineering schools to conduct research, convene events, and engage the wider academic community and the public about the benefits and risks of technologies including artificial intelligence and machine learning, robotics, cybersecurity, and digital media and communications.

Williams Institute on Sexual Orientation and Gender Identity Law and Public Policy

The Williams Institute on Sexual Orientation and Gender Identity Law and Public Policy is the only think tank of its kind dedicated to the field of sexual orientation law and public policy. The institute supports legal scholarship, legal research, policy analysis, and education regarding sexual orientation discrimination and other legal issues that affect
lesbian and gay people. The institute began with the recognition that issues central to sexual orientation law have profound implications for the development of the law and public policy in general. Drawing on the intellectual and material resources of UCLA, the institute serves as a national center for the interdisciplinary exploration of these issues by scholars, judges, practitioners, advocates, and students.

Ziffren Institute for Media, Entertainment, Technology, and Sports Law

The Ziffren Institute for Media, Entertainment, Technology, and Sports Law supports and expands the curricular offerings of the Media, Entertainment, Technology, and Sports Law specialization. The program helps students interested in learning more about entertainment law to earn externships with entertainment-related businesses, brings influential speakers to campus, and sponsors the industry’s top legal conference on entertainment issues, the annual UCLA Entertainment Symposium. Students run an entertainment-related journal, the UCLA Entertainment Law Review; and the student organization, the Entertainment Law Association.

Ziman Center for Real Estate

Reflecting a growing interdisciplinary focus at UCLA, the School of Law formed a partnership in 2005 with the Anderson Graduate School of Management to create the Ziman Center for Real Estate. The center is firmly grounded in the scholarship and teaching missions of both schools, and offers practical application principles that help real estate industry professionals, public officials, and business people make critical policy and business decisions. The center truly bridges the divide between research and practice, and offers students a full range of coursework that supplies a holistic view of real estate issues.

School of Nursing

Linda P. Sarna, RN, PhD, FAAN, Dean

School of Nursing
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310-825-7181
Student Affairs e-mail

The UCLA School of Nursing enjoys a national and international reputation for excellence in teaching, research, and clinical practice. A strong scientific basis underlies the teaching of nursing practice, leadership, and research. Related clinical experiences are arranged within the Ronald Reagan UCLA Medical Center, its affiliates, and in selected community sites.

The bachelor’s degree program prepares nurses as generalists with special skills in primary, secondary, and tertiary prevention and care within a population-based context; leadership; and evidence-based practice. The master’s degree program prepares nurses as generalists in hospital-based care or for advanced nursing practice as nurse practitioners or clinical specialists in a variety of settings and specialized areas of health care. The PhD program prepares scholars who conduct original research, generate new theories, and build the scientific basis for professional nursing practice. Research is both basic and applied. The DNP program prepares nurses who are currently functioning at an advanced level of practice as nurse practitioners, clinical nurse specialists, or nurse administrators. The professional practice doctorate is designed to develop competencies for advanced clinical and leadership roles beyond the master’s degree necessary for the higher levels of patient safety and quality of patient care. Leadership, health system knowledge, and quality—as well as health care policy and critical content—are emphasized in the curriculum.

The school has an exceptionally qualified faculty; many members have national and international reputations for excellence. The school is consistently ranked high for its teaching and research programs. The innovative curriculum is responsive to national needs in health care and the diversity of the patient population. Graduates of the program are sought by health care institutions and educational programs, and many alumni have become leaders in the field. Education in this research university, with its full range of academic disciplines, offers a rich environment for preparation in the health sciences.

History and Accreditation

In 1949, the Regents of the University of California authorized the School of Nursing as one of the professional schools of the UCLA Center for Health Sciences. This action paved the way in 1950 for the opening of an undergraduate traditional program in nursing leading to the Bachelor of Science (BS) degree. In 1997, the original traditional BS program curriculum was revised to meet the educational needs of students who are registered nurses with Associate Degrees or diplomas in nursing. In 2006, the school reinstated a traditional/prelicensure BS program with admission at the freshman level. In 2010, the BS (Generic/Prelicensure) program was renamed to the BS (Prelicensure) program.

In 1951, a graduate program leading to the Master of Science (MS) degree in Nursing was established to prepare baccalaureate graduates for advanced practice nursing roles. In 1966, the Master of Nursing (MN) degree was established as
an alternate to the MS degree, which was discontinued in 1969. In 1996, the master’s degree designation was changed from MN to Master of Science in Nursing (MSN), which is still awarded to graduates prepared as nurse practitioners and clinical nurse specialists. In 2006, the school launched the master’s entry clinical nurse (MECN)/prelicensure option within the MSN degree program, which is designed for prelicensure students with bachelor’s degrees or higher education in another discipline.

In 1986, the Doctor of Nursing Science (DNSc) degree program was approved, and in 1987 the first doctoral students were admitted. In 1995, the doctorate degree designation was changed from DNSc to PhD in Nursing. In 2013, an en-route MS option was established within the existing PhD program. In 2015, UCLA approved conversion of the DNSc degree to a PhD for former DNSc graduates.

In 2018, the Doctor of Nursing Practice (DNP) program was approved. Graduates of the DNP program will be the leaders for the translation of research into practice. The DNP degree is designed to meet the dynamic needs of the national health care system to improve quality of care, promote patient safety, and reduce cost.

The prelicensure (BS and MECN) and advanced practice master’s programs are approved by the California Board of Registered Nursing. In 2011, the Commission on Collegiate Nursing Education (CCNE) accredited the existing bachelor’s and master’s degree programs for a term of 10 years, the longest award period that can be granted.

**Degrees**

The School of Nursing offers the following degrees:

- Nursing BS, MS, MSN, PhD
- Nursing Practice DNP

**Concurrent Degree Program**

- Nursing MSN/Management MBA

Admission is currently suspended to the Nursing and Management concurrent degree.

**Philosophy of the School**

The School of Nursing is guided by a philosophy that embodies the mission and goals of the University of California. The philosophy addresses nursing, the clients of nursing, and nursing students. The school is committed to an interdisciplinary learning environment.

Nursing encompasses clinical practice, education, research, consultation, leadership, management, and service to the profession; and to the local and global community. It involves individuals, families, groups, organizations, and communities as clients. The profession must consider the human and physical environments that interact with these clients who may have health conditions that range from wellness to illness. Nursing activities must therefore include health promotion and maintenance, intervention and treatment, rehabilitation and restoration, and palliation. At an advanced-practice level, nursing involves comprehensive health care that encompasses the responsibility and accountability for continuity of care across the health-illness spectrum.

Nursing research is both applied and basic; it has as its core actual or potential human responses to illness, and as its goal the development of nursing science. Guided by ethical standards that consider the perspectives of the client, the health care provider, and the larger society, nursing has a social mission that encompasses the right and responsibility to provide leadership in health policy and health care to all its clients regardless of disease status, gender, race, or culture.

People who receive client-centered nursing care are complex individuals who exist in relationship to others in their family and community. This complexity of person involves biological, behavioral, emotional, sociocultural, and spiritual dimensions. Each individual reflects a unique combination of these dimensions that interact dynamically with the environment. The clients of nursing are autonomous decision makers who have certain values and knowledge about themselves that are relevant and essential to successful health care outcomes. As a result, persons have a right and a responsibility to participate collaboratively in their care with the nurse and other health professionals.

Successful nursing students are active learners who bring unique gender, cultural, and ethnic life experiences to the professional practice of nursing. Students at all levels learn relevant theory, acquire practice skills, and are socialized into the profession of nursing. Increasing levels of complexity and sophistication of learning and socialization are
expected of students in the different programs. Whether at the beginning practice, advanced practice, or scholar level, nursing students learn to apply knowledge, skills, and professional attitudes in their practice that may include education, administration, and research. While students have the right and responsibility to participate in their own learning, faculty members have the right and responsibility to structure the teaching/learning environment to facilitate learning. Individual academic counseling and a variety of one-on-one, small-group, and interactive learning formats assist students to meet program and individual learning goals.

Undergraduate Admission

New undergraduate students are admitted in fall quarter only. BS (Prelicensure) students are admitted at the freshman and junior levels. See Nursing in the Curricula and Courses chapter for additional admission requirements.

Undergraduate Degree Requirements

Students must satisfy UC requirements, school requirements, and major requirements for award of a Bachelor of Science degree.

University Requirements

The University of California has two requirements that undergraduate students must satisfy in order to graduate: Entry-Level Writing or English as a Second Language, and American History and Institutions. See Degree Requirements in the Undergraduate Study chapter for details. Students enrolled in English Composition 1A, 1B, and 2I must take each course for a letter grade.

School Requirements

There are six requirements that must be satisfied for award of a degree.

Unit Requirement

Students must complete with a passing grade a minimum of 180 units. At least 83 of the 180 units must be upper-division courses numbered 100 through 199. A maximum of 216 units is permitted. Students with advanced placement or international baccalaureate credit may exceed the unit maximum by the amount of that credit.

Scholarship Requirement

A 2.0 (C) grade-point average is required in all work attempted at the University of California, exclusive of courses in UCLA Extension and those graded Passed/Not Passed. A 2.0 (C) grade-point average is also required in all upper-division courses in the major taken at the University of California, as well as in all courses applied toward the general education and UC requirements. Each required nursing course in the school must be completed with a C or better grade (a C– grade is not acceptable). Elective courses may be taken on a Passed/Not Passed basis with prior approval, according to the policy stated in the Academic Policies chapter.

Academic Residence Requirement

Students are in residence while enrolled and attending classes at UCLA with a declared major in the School of Nursing, and must complete all units in the junior and senior years in residence at the school.

Writing Requirement

Students must complete the UC Entry-Level Writing or English as a Second Language (ESL) requirement prior to completing the school writing requirement. Students admitted to the school are required to complete a two-term writing requirement—Writing I and Writing II. Two courses in English composition are required for graduation. Both courses must be taken for letter grades, and students must receive a grade of C or better in each (a C– grade is not acceptable).
Writing I. The Writing I requirement must be satisfied within the first three terms of enrollment by completing English Composition 3, 3D, 3DS, or 3SL with a C or better grade (a C– or Passed grade is not acceptable).

The Writing I requirement may also be satisfied by scoring 4 or 5 on one of the College Board Advanced Placement Examinations in English; a combination of a score of 720 or better on the SAT Reasoning Test, Writing section (last administered in January 2016) and superior performance on the English Composition 3 Proficiency Examination; completing a course equivalent to English Composition 3 with a C or better grade (a C– or Passed grade is not acceptable) taken at another institution; or scoring 5, 6, or 7 on an International Baccalaureate Higher Level Examination.

Students whose native language is not English may need to take English Composition 1A, 1B, and 2I before enrolling in a Writing I course. All courses in the sequence must be passed with a C or better grade (a C– or Passed grade is not acceptable).

Qualifying examination scores and courses are determined by the school Faculty Executive Committee.

Writing II. The Writing II requirement must be satisfied within seven terms of enrollment by completing one course from a faculty-approved list of Writing II courses and available in the Student Affairs Office; see the Registrar’s Writing II requirement web page for details. The course must be completed with a C or better grade (a C– or Passed grade is not acceptable).

Writing II courses also approved for general education credit may be applied toward the relevant general education foundational area.

Transfer students with 90 or more units who have completed the Intersegmental General Education Transfer Curriculum (IGETC) will have satisfied the Writing II requirement. No transfer student is admitted to the school without completing, with a C or better grade (a C– grade is not acceptable), a college-level quantitative reasoning course that Undergraduate Admission accepts as equivalent to those approved by the Faculty Executive Committee. Approved courses include

- Biostatistics 100A, 100B
- Life Sciences 20, 30A, 30B, 40
- Mathematics 2, 3A, 31A, 31AL
- Philosophy 31
- Political Science 6, 6R
- Program in Computing 10A, 10B, 10C
- Public Affairs 60
- Statistics 10, 12, 13

General Education Requirements

General education (GE) is more than a checklist of required courses. It is a program of study that reveals to students the ways that research scholars in the arts, humanities, social sciences, and natural sciences create and evaluate new knowledge; introduces students to the important ideas and themes of human cultures; fosters appreciation for the many perspectives and diverse voices that may be heard in a democratic society; and develops the intellectual skills that give students the dexterity they need to function in a rapidly changing world.

This entails the ability to make critical and logical assessments of information, both traditional and digital; deliver reasoned and persuasive arguments; and identify, acquire, and use the knowledge necessary to solve problems.

Foundations of Knowledge

General education courses are grouped into three foundational areas: Foundations of the Arts and Humanities, Foundations of Society and Culture, and Foundations of Scientific Inquiry.

Ten courses (48 units minimum) are required. A course taken to meet the Writing II requirement may also be applied toward a GE requirement. Preparation for the major courses may overlap with the foundation courses.
Students must meet with the student affairs officer in the Student Affairs Office to determine the applicability of GE cluster courses toward Writing II or GE requirements.

Courses listed in more than one category can fulfill GE requirements in only one of the categories.

**Foundations of the Arts and Humanities.** Three 5-unit courses, one from each subgroup:

- Literary and Cultural Analysis
- Philosophical and Linguistic Analysis
- Visual and Performance Arts Analysis and Practice

Courses in this area supply perspectives and intellectual skills necessary to comprehend and think critically about our situation in the world as human beings. In particular, courses furnish the basic means to appreciate and evaluate the ongoing efforts of humans to explain, translate, and transform their diverse experiences of the world through such media as language, literature, philosophical systems, images, sounds, and performances. The courses introduce students to the historical development and fundamental intellectual and ethical issues associated with the arts and humanities and may also investigate the complex relations between artistic and humanistic expression and other facets of society and culture.

**Foundations of Society and Culture.** Three 5-unit courses, one from each subgroup and a third course from either subgroup:

- Historical Analysis
- Social Analysis

Courses in this area introduce students to the ways in which humans organize, structure, rationalize, and govern their diverse societies and cultures over time. Courses focus on a particular historical question, societal problem, or topic of political and economic concern in an effort to demonstrate how issues are objectified for study, how data is collected and analyzed, and how new understandings of social phenomena are achieved and evaluated. Because communication skills are essential in the nursing profession, Communication 10 is recommended for this foundational area.

**Foundations of Scientific Inquiry.** Four courses, two from each subgroup:

- Life Sciences
- Physical Sciences

Courses in this area ensure that students gain a fundamental understanding of how scientists formulate and answer questions about the operation of both the physical and biological world. Courses also deal with some of the most important issues, developments, and methodologies in contemporary science.

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<thead>
<tr>
<th>General Education Requirements</th>
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<tr>
<td><strong>Foundations of the Arts and Humanities</strong></td>
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<tr>
<td>Literary and Cultural Analysis</td>
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<tr>
<td>Philosophical and Linguistic Analysis</td>
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<tr>
<td>Visual and Performance Arts Analysis and Practice</td>
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<tr>
<td>Total = 15 units minimum</td>
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<tr>
<td><strong>Foundations of Society and Culture</strong></td>
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<tr>
<td>Historical Analysis</td>
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<tr>
<td>Social Analysis</td>
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<tr>
<td>Third course from either subgroup</td>
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<tr>
<td>Total = 15 units minimum</td>
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<tr>
<td><strong>Foundations of Scientific Inquiry</strong></td>
</tr>
<tr>
<td>Life Sciences</td>
</tr>
<tr>
<td>Physical Sciences</td>
</tr>
<tr>
<td>Total = 18 units minimum</td>
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<tr>
<td><strong>Total GE</strong></td>
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One of the 10 courses may be a GE-approved Writing II course in an appropriate foundational area selected from a list published in the Schedule of Classes and available in the Student Affairs Office.

Preparation for the major courses may overlap with GE foundation courses.

**Foundations Course Lists.** Creating and maintaining a general education curriculum is a dynamic process; consequently, courses are frequently added to the list. For the most current list of approved courses that satisfy the Foundations of Knowledge GE plan, consult with an academic counselor or see the Schedule of Classes.

**Intersegmental General Education Transfer Curriculum**

Transfer students from California community colleges must fulfill UCLA lower-division GE requirements by completing the Intersegmental General Education Transfer Curriculum (IGETC) prior to transfer. The curriculum consists of a series of subject areas and types of courses that have been agreed on by the University of California and the California community colleges. Because of course sequencing and the rigor of the program, students must fulfill the general education requirements prior to transfer.

Additional requirements are listed under Admission and Preparation for the Major in the Curricula and Courses chapter.

**Major Requirements**

There are two types of requirements that must be satisfied for award of a degree: preparation for the major and the major. See the Curricula and Courses chapter for details.
Policies and Regulations

Degree requirements are subject to policies and regulations, including the following:

Student Responsibility

Students should take advantage of academic support resources, but they are ultimately responsible for keeping informed of and complying with the rules, regulations, and policies affecting their academic standing.

Study List

The presentation of study lists by the students and their acceptance by the school evidences an obligation on the part of the students to faithfully perform the designated work to the best of their ability. Withdrawal from, or neglect of, any course entered on the study list—or a change in program could lead to a delay in degree completion.

Students are expected to follow the course sequence specified for their program. After the first term, they may petition to carry a study list exceeding 20 units, provided they have an overall grade-point average of 3.0 (B) or better and have attained at least a 3.0 (B) grade-point average in the preceding term with all courses passed.

Minimum Progress

Students are expected to complete satisfactorily at least 36 units during any three consecutive terms in residence; they are placed on probation if they fail to pass these units. Students are subject to dismissal if they fail to pass at least 32 units in three consecutive regular terms in residence.

Concurrent Enrollment

Enrollment at a non-UC institution or UCLA Extension while enrolled at UCLA is not permitted except in extraordinary circumstances. No credit is given for courses taken concurrently elsewhere without the approval of the school.

Credit Limitations

The following credit limitations apply to all undergraduate students enrolled in the school:

Advanced Placement Examinations. Credit earned through the College Board Advanced Placement (AP) Examinations may not be applied toward the general education requirements. Portions of AP Examination credit may be evaluated by corresponding UCLA course numbers (e.g., History 1C). If students take the equivalent UCLA course, unit credit for such duplication is deducted before graduation. See the school AP table for UCLA course equivalents.

Counseling Services

The school gives direction and furnishes information to interested potential applicants to the BS program through admissions information sessions. The schedule for these sessions, program information, and applications are available at the school website. Applicants may contact the Nursing Student Affairs Office by e-mail.

On entry, students are assigned a faculty adviser to aid in planning their total program. Advisers and student affairs officers continue meeting with students each term to evaluate progress, identify academic and personal needs and match them with available school and UCLA resources, confirm UC and course requirements, and maximize the students’ abilities to reach educational and professional goals. Due to the heavy course load that school programs require, students are advised against working full time.

Honors

Undergraduate students who achieve scholastic distinction may qualify for the following honors:

Dean’s Honors

The Dean’s Honors list recognizes high scholastic achievement in any one term. The following criteria are used to note Dean’s Honors on student records: a 3.75 grade-point average (GPA) in any one term, with at least 12 graded units. Students are not eligible for Dean’s Honors in any given term if they receive an Incomplete or a Not Passed (NP) grade, change a grade, or repeat a course. Dean’s Honors are automatically recorded on the transcript for the appropriate term.

Latin Honors

Students who have achieved scholastic distinction may be awarded the bachelor’s degree with Latin honors. To be eligible, students must have completed 98 or more units for a letter grade at the University of California and must have attained an overall grade-point average at graduation that places them in the top five percent of school graduates (GPA of 3.936 or better) for summa cum laude, the next five percent (GPA of 3.888 or better) for magna cum laude, or the next 10 percent (GPA of 3.782 or better) for cum laude. Coursework taken on the Education Abroad Program is applied toward Latin honors at graduation. The minimum GPAs required are subject to change on an annual basis. Required GPAs in effect in the graduating year (fall, winter, spring, summer) determine student eligibility. Students should consult their Degree Audits, or the Registrar’s honors web page, for the most current calculations of Latin honors.
Graduate Study

The Master of Science in Nursing (MSN) degree program offers prelicensure and postlicensure options. The master’s entry clinical nurse (MECN)/prelicensure program is designed for students with a bachelor’s degree in another discipline who wish to become registered nurses. The advanced practice registered nurse (APRN)/postlicensure program is for registered nurses with a bachelor’s degree in nursing who wish to prepare for an advanced practice role, such as nurse practitioner or clinical nurse specialist.

The PhD program, which includes an en-route MS option, prepares scholars who do original research, generate new theories, and build the scientific basis for professional nursing practice. Research is both basic and applied.

The DNP program prepares nurses who are currently functioning at an advanced level of practice as nurse practitioners, clinical nurse specialists, or nurse administrators. Leadership, health system knowledge, quality, and health care policy are critical content emphasized in the curriculum. The DNP degree is designed to meet the dynamic needs of the national health care system to improve quality of care, promote patient safety, and reduce cost.

Admission

Detailed information about the graduate academic programs is included in program requirements for UCLA graduate degrees.

For information on proficiency in English requirements for international graduate students, see Graduate Admission in the Graduate Study chapter.

Degree Requirements

For complete degree requirements, see program requirements for UCLA graduate degrees.

School of Theater, Film, and Television

Brian E. Kite, MFA, Interim Dean

School of Theater, Film, and Television
102 East Melnitz Building
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Information e-mail

The UCLA School of Theater, Film, and Television consists of the Department of Theater and the Department of Film, Television, and Digital Media. Both are recognized national centers for higher education in production and performance as well as history, theory, and criticism.

Whether exploring the ancient and sacred roots of theater or the latest secular rituals enacted by popular film, creating a dramatic character for the bare stage or a dramatic narrative on screen, writing scripts or scholarly articles, or making digital movies or designing websites, all students in the school study both the aesthetics and cultural significance of theater, film, and television.

Through an intensive multidisciplinary curriculum, the school defines the inherent differences of theater, film, television, and new media; affirms their similarities; and encourages their interaction. As expressive art forms, modes of communication, and cultural interventions, theater, film and television, and digital media have in common the ability and power to reflect and shape perception of a complex, diverse, and ever-changing world. As artists and scholars, faculty believe that the school has an obligation to reflect on this power and to use it responsibly.

Situated in the diverse and culturally rich environment of Los Angeles—and drawing on the many resources of the campus at large (including the Center for the Art of Performance at UCLA, Geffen Playhouse, and UCLA Film and Television Archive)—the school offers the ideal setting for students to engage in the study and practice of art forms essential to a healthy and dynamic society.

Departments and Programs

The Department of Theater and the Department of Film, Television, and Digital Media are essential components of the rich intellectual, cultural, and professional life of UCLA. Depending on the degree involved, school programs are either strongly professional in nature, or oriented toward advanced scholarly study and research in an atmosphere that recognizes and often draws on studio practice.

Students in undergraduate courses receive a broadly based, liberal arts education within the context of either theater or film and television.

The Master of Fine Arts (MFA) degree programs prepare talented and highly motivated students for careers in the worlds of theater, film, television, and digital production. The MA and PhD programs engage students in critical study and research of these media, including their history, aesthetics, and theory; and prepare students for advanced research within the context of college and university teaching, as well as for writing and research in a variety of media-related professions.

In the Department of Theater, approximately 300 undergraduate and 83 graduate students interact with over 40 faculty members, outstanding guests of national and inter-
national standing, and a professional staff of 35 in an exciting artistic community of theater production and study. The theater and performance studies program offers CPhil and PhD degrees for advanced scholarly study of theater and performance. Resources include four Macgowan Hall complex theaters with the latest technologies needed for creation, control, and integration of scenery, lighting, and sound. Areas of emphasis in the Master of Fine Arts program include acting, design, directing, and playwriting.

The Department of Film, Television, and Digital Media includes both production and critical studies programs, with approximately 275 graduate and 100 undergraduate students. Its 50 faculty members include leading scholars as well as members of the Los Angeles and international film and television professional communities. In production, graduate specializations are offered in the areas of film and television production, screenwriting, animation, and the producers program. The cinema and media studies program offers MA and PhD degrees for advanced scholarly study of film and television. Department resources in Melnitz Hall include three sound stages; three television studios; extensive editing, scoring, and viewing facilities; a complete animation laboratory for traditional, stop-motion, and computer-generated animation; and a laboratory and research facility for digital media.

The MA and PhD programs are supported by UCLA library collections and the UCLA Film and Television Archive, the largest in the U.S. outside the Library of Congress. This archive forms a unique and priceless resource for research and classroom instruction. MA and PhD faculty members and students also participate in various campus organized research units.

Teaching Credentials

Students interested in obtaining instructional credentials for California elementary and secondary schools should contact the Teacher Education Program, 1009 Moore Hall.

Degrees

The School of Theater, Film, and Television offers the following degrees and undergraduate minors:

Film and Television BA, MA, MFA, CPhil, PhD
Individual Field BA
Theater BA, MFA
Theater and Performance Studies CPhil, PhD

Undergraduate Minors

Film, Television, and Digital Media
Theater

Undergraduate Admission

In addition to the UC undergraduate application, departments require applicants to submit additional supporting materials. Information on departmental requirements is available on the school admissions web page.

Undergraduate Degree Requirements

Students must satisfy UC requirements, school requirements, and department requirements for a Bachelor of Arts degree.

University Requirements

The University of California has two requirements that undergraduate students must satisfy in order to graduate: Entry-Level Writing or English as a Second Language, and American History and Institutions. See Degree Requirements in the Undergraduate Study chapter for details.

Students enrolled in English Composition 1A, 1B, and 2I must take each course for a letter grade.

School Requirements

There are seven requirements that must be satisfied for award of a degree.

Unit Requirement

Students must satisfactorily complete for credit a minimum of 180 units for the bachelor’s degree. At least 64 of the 180 units must be upper-division courses numbered 100 through 199. A maximum of 216 units is permitted. Students with Advanced Placement Examination or International Baccalaureate Examination (transfer) credit may exceed the unit maximum by the amount of that credit.
Scholarship Requirement

Students must earn at least a 2.0 (C) grade-point average in all courses undertaken at the University of California for receipt of the bachelor’s degree, and in all upper-division courses in the major, and in all courses applied toward the general education requirements.

Academic Residence Requirement

Students are in residence while enrolled and attending classes at UCLA with a declared major in the School of Theater, Film, and Television. Of the last 45 units completed for the bachelor’s degree, 35 must be earned in residence at the school. No more than 18 of the 35 units may be completed in UCLA summer sessions.

Courses offered by UCLA Extension may not be applied toward any part of the residence requirements.

Writing Requirement

Students must complete the UC Entry-Level Writing or English as a Second Language (ESL) requirement prior to completing the school writing requirement.

Students admitted to the school are required to complete a two-term writing requirement—Writing I and Writing II. Two courses in English composition are required for graduation. Both courses must be taken for a letter grade, and students must receive a C or better grade in each (a C– grade is not acceptable).

Writing I. The Writing I requirement must be satisfied within the first three terms of enrollment by completing English Composition 3, 3D, 3DS, or 3SL with a C or better grade (a C– or Passed grade is not acceptable).

The Writing I requirement may also be satisfied by scoring 4 or 5 on one of the College Board Advanced Placement Examinations in English; a combination of a score of 720 or better on the SAT Reasoning Test, Writing section (last administered in January 2016) and superior performance on the English Composition 3 Proficiency Examination; completing a course equivalent to English Composition 3 with a C or better grade (a C– or Passed grade is not acceptable) taken at another institution; or scoring 5, 6, or 7 on an International Baccalaureate Higher Level Examination.

Students whose native language is not English may need to take English Composition 1A, 1B, and 2I before enrolling in a Writing I course. All courses in the sequence must be passed with a C or better grade (a C– or Passed grade is not acceptable).

Writing II. The Writing II requirement must be satisfied within the first six terms of enrollment by completing one course from a faculty-approved list of Writing II courses; see the Registrar’s Writing II requirement web page for details. The course must be completed with a C or better grade (a C– or Passed grade is not acceptable).

Applicable Writing II courses may also fulfill the upper-division nonmajor requirement and, if approved for general education (GE) credit, may fulfill a GE requirement.

Transfer students with 90 or more units who have completed the Intersegmental General Education Transfer Curriculum (IGETC) will have satisfied the Writing I and Writing II requirements. No transfer student is admitted to the school without completing, with a C or better grade (a C– grade is not acceptable), a college-level writing course that Undergraduate Admission accepts as equivalent to English Composition 3.

Foreign Language Requirement

Students may meet the foreign language requirement by scoring 3, 4, or 5 on the College Board Advanced Placement (AP) foreign language examination in Chinese, French, German, Italian, Japanese, or Spanish, or scoring 4 or 5 on the AP foreign language examination in Latin; presenting a UCLA foreign language proficiency examination score indicating competency through level three; or completing one college-level foreign language course equivalent to level three or above at UCLA with a grade of Passed or C or better.
Transfer students with 90 or more units who have completed the Intersegmental General Education Transfer Curriculum (IGETC) will have satisfied the foreign language requirement.

International students may petition to use an advanced course in their native language for this requirement. Students whose entire secondary education has been completed in a language other than English may petition to be exempt from the foreign language requirement.

Courses that may be used to fulfill this requirement are published on the Registrar’s foreign language requirement web page.

### Upper-Division Nonmajor Requirement

Students must complete at least three upper-division nonmajor courses (100-level) for a minimum of 12 units. Graduate (200-level) courses may not be applied toward this requirement.

A course used to satisfy the upper-division nonmajor requirement may also be used to satisfy the Writing II requirement.

A course used to satisfy the upper-division nonmajor requirement may not also be applied toward a foundation area in general education.

### General Education Requirements

**General education** (GE) is more than a checklist of required courses. It is a program of study that reveals to students the ways that research scholars in the arts, humanities, social sciences, and natural sciences create and evaluate new knowledge; introduces students to the important ideas and themes of human cultures; fosters appreciation for the many perspectives and diverse voices that may be heard in a democratic society; and develops the intellectual skills that give students the dexterity they need to function in a rapidly changing world.

This entails the ability to make critical and logical assessments of information, both traditional and digital; deliver reasoned and persuasive arguments; and identify, acquire, and use the knowledge necessary to solve problems.

### Foundations of Knowledge

General education courses are grouped into three foundational areas: Foundations of the Arts and Humanities, Foundations of Society and Culture, and Foundations of Scientific Inquiry.

Ten courses (48 units minimum) are required. GE-approved Writing II courses may fulfill an appropriate foundational area. See the foundational area descriptions below for a breakdown of courses required.

Courses listed in more than one category can fulfill GE requirements in only one of the categories. A course used to satisfy a major requirement may not also be applied toward a GE requirement.

Students who successfully complete a year-long GE cluster series fulfill the Writing II requirement and complete 40 percent of their general education requirements.

**Foundations of the Arts and Humanities.** Five 5-unit courses, with no more than two from any one subgroup:

- Literary and Cultural Analysis
- Philosophical and Linguistic Analysis
- Visual and Performance Arts Analysis and Practice

Courses in this area supply perspectives and intellectual skills necessary to comprehend and think critically about our situation in the world as human beings. In particular, courses furnish the basic means to appreciate and evaluate the ongoing efforts of humans to explain, translate, and transform their diverse experiences of the world through such media as language, literature, philosophical systems, images, sounds, and performances. The courses introduce students to the historical development and fundamental intellectual and ethical issues associated with the arts and humanities and may also investigate the complex relations between artistic and humanistic expression and other facets of society and culture.

**General Education Requirements**

**Foundations of the Arts and Humanities**
- Literary and Cultural Analysis
- Philosophical and Linguistic Analysis
- Visual and Performance Arts Analysis and Practice

No more than two courses from any one subgroup.

Total = 25 units minimum

**Foundations of Society and Culture**
- Historical Analysis . . . . . . . . . . . . . . . . . . . . . . . . 1 course
- Social Analysis . . . . . . . . . . . . . . . . . . . . . . . . . . . . 1 course
- Third course from either subgroup . . . . . . . . . . . . . . . . 1 course

Total = 15 units minimum

**Foundations of Scientific Inquiry**
- Life Sciences . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 1 course
- Physical Sciences . . . . . . . . . . . . . . . . . . . . . . . . . . . 1 course

Total = 8 units minimum

Total GE .......... 10 courses/48 units minimum

A course taken to meet the Writing II requirement may not also be applied toward a GE requirement.
Foundations of Society and Culture. Three 5-unit courses, one from each subgroup and a third course from either subgroup:

- Historical Analysis
- Social Analysis

Courses in this area introduce students to the ways in which humans organize, structure, rationalize, and govern their diverse societies and cultures over time. Courses focus on a particular historical question, societal problem, or topic of political and economic concern in an effort to demonstrate how issues are objectified for study, how data is collected and analyzed, and how new understandings of social phenomena are achieved and evaluated.

Foundations of Scientific Inquiry. Two courses (8 units minimum), one from each subgroup:

- Life Sciences
- Physical Sciences

Courses in this area ensure that students gain a fundamental understanding of how scientists formulate and answer questions about the operation of both the physical and biological world. Courses also deal with some of the most important issues, developments, and methodologies in contemporary science, addressing such topics as the origin of the universe, environmental degradation, and the decoding of the human genome. Through lectures, laboratory experiences, writing, and intensive discussions, students consider the important roles played by the laws of physics and chemistry in society, biology, Earth and environmental sciences, and astrophysics and cosmology.

Foundations Course Lists. Creating and maintaining a general education curriculum is a dynamic process; consequently, courses are frequently added to the list. For the most current list of approved courses that satisfy the Foundations of Knowledge GE plan, consult with an academic counselor or see the Schedule of Classes.

Intersegmental General Education Transfer Curriculum

Transfer students from California community colleges have the option to fulfill UCLA lower-division GE requirements by completing the Intersegmental General Education Transfer Curriculum (IGETC) prior to transfer. The curriculum consists of a series of subject areas and types of courses that have been agreed on by the University of California and the California community colleges. Although GE courses are degree requirements rather than admission requirements, students are advised to fulfill them prior to transfer. The IGETC significantly eases the transfer process, as all UCLA GE requirements are fulfilled when students complete the IGETC courses. Students who select the IGETC must complete it entirely before enrolling at UCLA. Otherwise, they must fulfill the School of Theater, Film, and Television GE requirements.

Department Requirements

Departments generally set two types of requirements that must be satisfied for award of a degree: preparation for the major (lower-division courses) and the major (upper-division courses). Preparation for the major courses should be completed before beginning upper-division work.

Preparation for the Major

A major requires completion of a set of courses known as preparation for the major, which should be completed before upper-division work is undertaken. Each department sets its own preparation for the major requirements; see the Curricula and Courses chapter.

The Major

A major is composed of no fewer than 56 units, including at least 36 units of upper-division courses.

Students must complete their major with a scholarship grade-point average of at least 2.0 (C) in all courses in order to remain in the major. Each course in the school must be taken for a letter grade.

As changes in major requirements occur, students are expected to satisfy the new requirements insofar as possible. Hardship cases should be discussed with the department adviser, and petitions for adjustments should be submitted to the dean of the school when necessary.

Any department offering a major may require a general final examination.

Double Majors. Double majors in the School of Theater, Film, and Television and other academic units are not permitted.
Policies and Regulations

Degree requirements are subject to policies and regulations, including the following:

Student Responsibility

Students should take advantage of academic support resources, but they are ultimately responsible for keeping informed of and complying with the rules, regulations, and policies affecting their academic standing.

Study List

The study list is a record of classes that a student is taking for a particular term. Each term the study list must include from 12 to 19 units. The school has no provision for part-time enrollment. After the first term, students may petition to enroll in more than 19 units (up to 22 units maximum) if they have an overall grade-point average of 3.0 (B) or better and have attained at least a 3.0 (B) grade-point average in the preceding term with all courses passed. Excess units petitions must be filed and approved by the Student Services Office no later than the end of the third week of instruction.

First-term transfer students from any other UC campus may carry excess units on the same basis as students who have completed one or more terms at UCLA; however, they are not encouraged to do so.

Minimum Progress

During a regular term of enrollment, undergraduate students are required to enroll in a minimum of 12 units.

Students are expected to complete satisfactorily at least 36 units during any three consecutive terms in residence; they are placed on probation if they fail to pass these units. Students are subject to dismissal if they fail to pass at least 32 units in three consecutive regular terms in residence.

Changing a Major

Students in good academic standing who wish to change their major may petition to do so, provided they can complete the new major within the 216-unit limit. Petitions must be submitted to and approved by the department or committee in charge of the new major. Admission to certain majors may be closed or restricted; changes are normally not permitted if students are on probation or have begun their last term.

Students in the Theater major are not allowed to change their major to Film and Television at the end of their sophomore year.

Concurrent Enrollment

Enrollment at a non-UC institution or UCLA Extension while enrolled at UCLA is not permitted except in extraordinary circumstances. No credit is given for courses taken concurrently elsewhere without the approval of the school.

Credit Limitations

The following credit limitations apply to all undergraduate students enrolled in the school:

Advanced Placement Examinations. Credit earned through the College Board Advanced Placement (AP) Examinations may be applied toward certain UC/school requirements. Consult with a counselor in the Student Services Office to determine applicable credit. Portions of AP Examination credit may be evaluated by corresponding UCLA course numbers. If students take the equivalent UCLA course, unit credit for such duplication is deducted before graduation. See the school AP table for UCLA course equivalents.

Graduate Courses. Undergraduate students who wish to take graduate courses (200 level) for credit toward the bachelor’s degree must petition for advance approval of the department chair and the dean of the school, and must meet specific qualifications. Courses numbered in the 300, 400, and 500 series are not open for credit to undergraduate students.

UCLA Extension. Extension courses with the prefix X on those numbered in the 1 through 199, 200, 300, 400, or 800 series may not be applied toward the degree.

Upper-Division Tutorials. Credit for upper-division tutorials numbered 195 through 199 is limited to a maximum of 8 units in a single term, and a maximum of 32 units total for a letter grade.

Counseling Services

The school offers advising, program planning in the major and general education requirements, and individual meetings with departmental counselors, including a yearly degree check. Prior to enrollment in classes, each new student is assigned to a counselor in the major department. For additional counseling information, contact the Student Services Office, 103 East Melnitz Building.

Honors

Undergraduate students who achieve scholastic distinction may qualify for the following honors and programs:
Dean’s Honors

Dean’s Honors are awarded each term to students who complete their program of study with distinction according to criteria established by the dean of the school.

Latin Honors

Students who have achieved scholastic distinction may be awarded the bachelor’s degree with Latin honors. To be eligible, students must have completed 90 or more units for a letter grade at the University of California and must have attained an overall grade-point average at graduation that places them in the top five percent of school graduates (GPA of 3.946 or better) for *summa cum laude*, the next five percent (GPA of 3.913 or better) for *magna cum laude*, and the next 10 percent (GPA of 3.853 or better) for *cum laude*. Coursework taken on the Education Abroad Program is applied toward Latin honors at graduation. The minimum GPAs required are subject to change on an annual basis. Required GPAs in effect in the graduating year (fall, winter, spring, summer) determine student eligibility. Students should consult their Degree Audits, or the Registrar’s *honors* web page, for the most current calculations of Latin honors.

Graduate Study

The advanced degree programs offer graduate students with unique research opportunities when combined with special resources such as the Young Research Library, UCLA Film and Television Archive, Geffen Playhouse, Arts Library special collections, and UCLA exhibit and performance venues. Fellowships, grants, and assistantships are available through the dean of the Graduate Division. Student scholarship awards are available through the School of Theater, Film, and Television.

Admission

In addition to requiring that applicants hold a bachelor’s degree from an accredited U.S. institution or an equivalent degree of professional title from an international institution, each department in the school has limitations and additional requirements. Detailed information can be found in *program requirements for UCLA graduate degrees*.

For information on the proficiency in English requirements for international graduate students, see *Graduate Admission* in the Graduate Study chapter.

Degree Requirements

Requirements to fulfill each degree objective vary according to the degree and the department. For complete degree requirements, see *program requirements for UCLA graduate degrees*. 
Curricula and Courses

Course Lists
Departments and programs are listed alphabetically, with the College or school administering the program identified in the program heading. Curricula and courses are listed under each program. Every effort has been made to ensure the accuracy of the information presented. However, all courses, course descriptions, instructor designations, and curricular degree requirements described herein are subject to change or deletion without notice. Changes to course descriptions are available at the Registrar’s course descriptions web page. For current class offerings by term, see the Schedule of Classes.

For complete graduate degree requirements, see program requirements for UCLA graduate degrees.

Undergraduate Course Numbering
Undergraduate courses are classified as lower division and upper division. Lower-division courses (numbered 1–99) are often surveys offering preliminary introduction to the subject field. They are designed primarily for freshmen and sophomores, though upper-division students may enroll for unit and grade credit. Lower-division courses may not be applied toward graduate degrees.

Upper-division courses (numbered 100–199) are open to all students who have met the requisites stated in department requirements or the course description. Preparation generally includes at least one lower-division course in the subject or two years of college work. With approval of the major department, graduate students may take 100-series courses toward satisfaction of master’s degree requirements.

Undergraduate Seminars and Tutorials
Fiat Lux freshman seminars (numbered 19) are taught by faculty in areas of their expertise. They introduce freshmen to topics of intellectual importance and enable them to participate in critical discussion of these topics with a small group of peers. The seminar series takes its name from the motto of the University of California: Fiat Lux—Let There be Light!

Sophomore seminars (numbered 88) are department-sponsored courses designed to provide sophomores with the opportunity to participate in small seminars to enhance writing, verbal, and analytical skills.

Honors seminars and tutorials (numbered 89/189 and 89HC/189HC) are primarily designed for students in the College Honors Program. They are adjunct to lecture courses and explore lecture top-ics in more depth through supplemental readings, papers, or other activities.

Student Research Program tutorials (numbered 99) offer students entry-level research experiences. Students serve as apprentices working with an individual faculty member or in a research group. Students are graded on a Passed/Not Passed (P/NP) basis.

Upper-division seminars (numbered 190–194) are small seminars with between 15 and 20 students that focus on research practice or issues. Many are designed to be taken along with a tutorial course in the 195–199 series.

Upper-division tutorials (numbered 195–199) offer advanced opportunities for research through faculty-supervised internships and apprenticeships as well as honors research, directed research, and senior projects. Courses are structured by the instructor and student at the time they are initiated and are open to juniors (with a minimum 3.0 grade-point average in the major field), seniors, and graduate students. To enroll, students submit a contract (through MyUCLA) and have it approved by both the instructor and department chair.

Note: For current course descriptions, see the Registrar’s course descriptions web page.

Graduate Course Numbering
Graduate courses numbered 200–299 are generally open only to graduate students who have completed basic undergraduate courses in the subject. Courses and seminars in the 200 series can fulfill the minimum graduate course requirement for any advanced degree.

With departmental and instructor consent, and subject to requirements in the appropriate College or school, undergraduate students may enroll in 200-series courses for unit credit toward the bachelor’s degree. If students take a graduate course as an undergraduate, they may not apply that same course later toward a higher degree.

Graduate courses numbered 300–399 are highly specialized teacher-training courses that are not applicable toward UC minimum requirements for graduate degrees. They are acceptable toward the bachelor’s degree only at the discretion of the individual College or school.

Graduate courses numbered 400–499 are designed for professional programs leading to graduate degrees other than the MA, MS, and PhD. These courses may not be used to satisfy minimum graduate course requirements for the MA or MS degree but may apply as electives.

Individual study and research courses (numbered 500–599) are reserved for advanced study and are not open to undergraduate students. Courses are numbered as follows: 595/596, directed individual study or research; 597, preparation for master’s comprehensive or doctoral qualifying examination; 598, master’s thesis research and preparation; and 599, doctoral dissertation research and preparation. Courses numbered 501 are not individual study and research but are cooperative programs held in conjunction with USC. See individual department sections for specific limitations on 500-series courses.

Note: These definitions do not apply to courses in the School of Law, which maintains its own course numbering system.

Temporary Course Offerings
Courses that are temporary in nature, such as one-term-only or one-year-only, are not in the catalog. Their descriptions can be found in the Schedule of Classes.

Concurrent and Multiple-Listed Courses
Concurrently-scheduled courses (identified by a capital C before the course number) are pairs of courses, usually within a single department or program, for which credit is given at two levels—undergraduate and graduate. Concurrently-scheduled courses are offered at the same time and place with the same instructor, but work levels and performance standards are evaluated differently for students at each level. (Concurrently-scheduled courses as described here should not be confused with concurrent courses offered through UCLA Extension.)

Multiple-listed courses (identified by a capital M before the course number) are courses offered jointly by more than one department and/or subject area. They need not have identical course numbers, but all other aspects of the course—such as title, units, requisites, format, and level—must be the same. For example, Language in Culture is offered by the Anthropology Department (Anthropology M150) and the Linguistics Department (Linguistics M146). The course is listed under both departments.

UCLA Extension Courses
In general, students may not attend UCLA Extension for degree credit if they are enrolled in UCLA regular session at the same time. However, certain Extension courses (numbered 1–199), prefixed by XL or XLC in the Extension catalog, yield credit toward the bachelor’s degree. For details, see UCLA Extension in the Academic Policies chapter. Graduate students may petition to apply up to two XLC courses toward the master’s degree.
AEROSPACE STUDIES — AIR FORCE ROTC

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Scope and Objectives

In accordance with the National Defense Act of 1920 and with the concurrence of the Regents of the University of California, a unit of the Army Senior Division Reserve Officers’ Training Corps (ROTC) was established on the Los Angeles campus of the University of California in July 1920. Navy and Air Force units were established in 1938 and 1949 respectively.

This voluntary training in the Air Force ROTC program allows students to qualify for an officer’s commission in the Air Force while completing their college education. The ROTC curricula are not considered academic majors, but ROTC courses may be taken as free electives and applied toward the total course requirements of a major. For students contracted in the Aerospace Studies Department, 36 units of aerospace studies credit may be applied toward the requirements for the bachelor’s degree. The ROTC program is also available through UCLA Extension.

All three ROTC departments offer voluntary four- and three-year programs for freshmen and sophomores. The Army and Navy/Marine Corps also offer a two-year program for current and transfer students. All have leadership laboratories that teach leadership and management skills.

All commissions are reserve commissions. Active duty obligation following commissioning varies depending on branch of service and designated career field or occupational specialty.

Scholarships

ROTC scholarships are awarded on a competitive basis to U.S. citizens regardless of parents’ income. Scholarships cover tuition, a book allowance, fees, and a tax-free monetary allowance during the academic year. Applications for scholarships may be obtained online or by calling 310-825-1742. Completed applications should be submitted prior to August 15 for early consideration and no later than December 1 of the year preceding college matriculation.

Air Force ROTC Program

Air Force ROTC offers selected students the opportunity to develop those attributes essential to positions of high responsibility as commissioned officers in the U.S. Air Force. This includes understanding Air Force history, doctrine, operating principles, and national security policies, demonstrating the ability to apply modern principles of management and human relations in the Air Force environment, and mastering of leadership theory and techniques. Students must demonstrate dedication to their assignments, willingness to accept responsibility, and the ability to think critically and communicate with clarity and precision.

Undergraduate Study

The Air Force ROTC program is available to full-time students with at least three years of undergraduate and/or graduate study remaining and consists of one to two years of the General Military Course, or GMC (Aerospace Studies 1A, 1B, 1C, 20A, 20B, and 20C), followed by a two-year Professional Officer Course, or POC (Aerospace Studies 130A, 130B, 130C, 140A, 140B, and 140C). For students completing the program in four years, GMC participation requires one hour of academic class and two hours of leadership laboratory each week during the academic year. For students completing the program in three years, GMC participation requires taking one course from Aerospace Studies 1A, 1B, or 1C, one course from 20A, 20B, or 20C, and two hours of leadership laboratory each week during the academic year. Students incur no military obligation for GMC participation unless they qualify and accept an Air Force ROTC scholarship during or after their sophomore year.

Students who complete the GMC and wish to enter the POC attend a field training course the summer following GMC completion. There is no obligation to apply. U.S. citizenship is required. Students are selected on a competitive basis with consideration given to academic major, grade-point average, aptitude examination scores, performance during an officer board interview, and a physical fitness test. Students selected for summer field training are given meals, quarters, clothing, and travel and incidental expenses. Subjects covered at field training include junior officer training, aircraft and aircrew orientation, career orientation, survival training, base functions, Air Force environment, and physical training.

POC participation requires three hours of academic class and two hours of leadership laboratory each week during the academic year. Students in the POC incur a military obligation and are paid a monthly stipend during the academic year. Graduation and successful completion of the POC leads to a commission as a second lieutenant. Cadets then report to one of the challenging assignments in the Air Force.

Aerospace Studies

Lower-Division Courses

Freshman Year

A. Leadership Laboratory. (No credit) Laboratory, three hours. Mandatory for and limited to Air Force ROTC cadets. Provides cadets with practical command and staff leadership experiences through performance of various tasks within framework of organized cadet corps. As integral part of aerospace studies curriculum, provides experiences designed to develop leadership potential and serves as orientation to active duty. P/NP grading.

1A-1B-1C. Heritage and Values. (2–2–2) Lecture, one hour. Introduction to U.S. Air Force. Examination of general aspects of Department of Air Force, leadership, benefits, and opportunities for officers. Foundation for becoming airmen by outlining heritage and values. Provides historical perspective through lessons on war and U.S. military, Air Force operations, principles of war, and airpower. Provides students with understanding for employment of air and space power, from institutional, doctrinal, and historical perspective. Students are introduced to Air Force way of life and gain knowledge on what it means to be airmen. P/NP or letter grading.

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

Sophomore Year

20A-20B-20C. Team and Leadership Fundamentals. (2–2–2) Lecture, one hour. Designed to provide fundamental understanding of both leadership and team building. Cadets are taught many layers of leadership, including listening, understanding themselves, being good follower and efficient problem solving. Students apply these leadership perspectives when completing team building activities and discussing conflict management. Demonstration of basic verbal and written communication skills. P/NP or letter grading.

Upper-Division Courses

130A-130B-130C. Air Force Leadership Studies. (4–4–4) Lecture, three hours. Designed to provide cadets with leadership overview. Basic leadership skills for cadets beginning leadership role in detachment. Lessons on military relationships, and rules that military members must follow when interacting with enlisted members and officers. Continuation of advanced skills and ethics training in preparation for becoming officer and supervisor. Introduction to variety of leadership topics in preparation to be effective leaders. P/NP or letter grading.

140A-140B-140C. National Security Affairs/Preparation for Active Duty. (4–4–4) Lecture, three hours. Designed to provide cadets with leadership overview. Basic leadership skills for cadets beginning leadership role in detachment. Lessons on military relationships, and rules that military members must follow when interacting with enlisted members and officers. Continuation of advanced skills and ethics training in preparation for becoming officer and supervisor. Introduction to variety of leadership topics in preparation to be effective leaders. P/NP or letter grading.

197. Individual Studies in Aerospace Studies. (2 or 4) Tutorial, three hours. Limited to juniors/seniors. Individual intensive study, with scheduled meetings to be arranged between faculty member and student. Assignment of reading and tangible evidence of mastery of subject matter required. May be repeated for credit. Individual contract required. P/NP or letter grading.

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164 / Aerospace Studies – Air Force ROTC
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Scope and Objectives
The Department of African American Studies offers a Bachelor of Arts degree, an undergraduate African American Studies minor, a Master of Arts degree, and a concurrent degree program (African American Studies MA/Law JD). A major or minor in this field offers a broadening of cultural experiences and perspectives for those seeking more information about African Americans and the African diaspora. Career-wise, all students profit from African American studies courses in an era when employers and academic institutions are actively seeking those with multicultural and interdisciplinary skills and backgrounds.

The fundamental goal of the African American Studies curriculum is to offer students a comprehensive and multidisciplinary introduction to the crucial social, cultural, and social justice issues facing African Americans and their counterparts in other areas of the African diaspora today. The curriculum is designed to meet this goal in two primary ways. First, it offers students an interdisciplinary exposure to particular features of the African American experience. Core courses offer an in-depth understanding of historical, anthropological, sociological, psychological, economic, and political aspects of African America. The curriculum also offers opportunities to study the literary, musical, and artistic heritage of peoples of African descent. Second, students analyze key issues through additional courses that bring to bear concepts, theories, and methods of traditional academic disciplines in areas such as cultural analysis and production, social justice, and public policy. Students may also do individualized study with a professor and/or an internship for course credit.

Undergraduate Study

African American Studies BA

Learning Outcomes
The African American Studies major has the following learning outcomes:

- Critical understanding of key historical moments in the field
- Critical engagement with humanistic and social-scientific approaches to the study of the African American experience
- Ability to perform research and use critical writing skills
- Critical understanding of the concepts of race and racism, and their relationship to other identities such as class, gender, and sexual orientation
- Knowledge of key African American aesthetic, literary, musical, and other cultural traditions
- Knowledge of key social-scientific theories that explain and describe the African American experience

Preparation for the Major
Required: Two courses from African American Studies M5, 6, M10A.

Transfer Students
Transfer applicants to the African American Studies major with 90 or more units must complete the following introductory courses if possible prior to admission to UCLA: one African American studies or civilizations of Africa course or equivalent.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

The Major
Required: Twelve upper-division courses as follows:
(1) two history and/or literature courses selected from African American Studies M104A through M104D, M150D, M158A through M158E, M179A, (2) two upper-division breadth courses from any of the following departments or programs: American Indian Studies, Asian American Studies, Chicana and Chicano Studies, or Gender Studies, and (3) a concentration of five courses in one of the following tracks and three courses in the other: (a)humanities—African American Studies M102, M103A, M103B, M103E, M104A through M104E, M107, M109, M111, M135A, M135B, M150D, M158A through M158E, M179A, 188A, 188B, C191, and (b) social sciences—African American Studies M114C, M118, M120, M144, M150D, M154C, M158A through M158E, M159P, M164, M165, M167, M172, M173, M178, M179A, 188A, 188B, C191, M194A, M194B.

No more than 8 graded units of African American Studies 195, 197, 198, and 199 may be applied toward the major.

Students are encouraged to engage in a culminating activity, such as an internship, independent study, honors thesis, service learning course, Center for American Politics and Public Policy program, University of California Center Sacramento program, Education Abroad Program, or other African American studies-related project or performance course.

Hons Program
African American Studies majors with grade-point averages of 3.5 or better are eligible for the honors option that requires the completion of a senior thesis under the guidance of an African American Studies faculty member. Students must take African American Studies 198 (independent study course) with an approved professor who oversees the thesis requirement. For more information, contact the student affairs officer in the department.

African American Studies Minor
The African American Studies minor is designed for students who wish to augment their major program of study with courses from various disciplines germane to African American studies.

To enter the minor, students must be in good academic standing (2.0 grade-point average), have completed 45 units, and file a petition with the African American Studies student affairs officer.

Required Lower-Division Courses (9 to 10 units):
Two courses from African American Studies M5, 6, M10A.

Required Upper-Division Courses (20 to 25 units):
Five upper-division African American studies courses.

No more than 4 graded units of African American Studies 195, 197, and 199 may be applied toward the minor.

A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor, and at least 16 units applied toward the minor must be
taken in residence at UCLA. Transfer credit for any of the above is subject to program approval; consult with the student affairs officer before enrolling in any courses for the minor.

Each minor course must be taken for a letter grade, and students must have an overall grade-point average of 2.0 or better in the minor. Successful completion of the minor is indicated on the transcript and diploma.

Graduate Study

Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Division website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Graduate Degrees

The Department of African American Studies offers the Master of Arts (MA) degree in African American Studies. A concurrent degree program (African American Studies MA/Law JD) is also offered.

African American Studies

Lower-Division Courses

1. Introduction to Black Studies. (5) Lecture, three hours; discussion, one hour. Introduction of methods, theories, conceptual frameworks, and key debates in black studies. Interrogation of how race structures notions of identity and meaning of blackness in relation to class, gender, and sexuality; essential role of African people in development of capitalism, liberalism, and democracy; what various disciplinary lenses and epistemologies history, literature, sociology, geography, cultural studies, political theory, philosophy, etc. reflect about experiences of black people in modern world. Key thinkers and ideas from across humanities and social sciences are highlighted. P/NP or letter grading.

2. American Studies MA/Law JD. Lecture, five hours. Course M6A is requisite to M6B. Designed for juniors/seniors. Exploration of extant materials on history and literature of theater and cinema, specifically in Los Angeles; issues of representation and co-option; examination of African American plays from 1920s until birth of modern civil rights era. Examination of socio-historical context out of which black musical theater emerged and critical essays that illustrate development of African American playwrights and their significant involvement in creation of diversified American theatrical tradition. Letter grading.

3. Early African American Literature. (5) (Same as English M104A.) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisite: English Composition 3 or 3H. Introductory survey of American literature from 18th through World War I, including oral and written forms (folktales, spirituals, sermons; fiction, poetry, essays), by authors such as Phillis Wheatley, Frances Harper, Frederick Douglass, Harriet Jacobs, Frances Ellen Watkins Harper, James Baldwin, Gwendolyn Brooks, and Ralph Ellison. P/NP or letter grading.

4. African American Literature from Harlem Renaissance to 1960s. (5) (Same as English M104B.) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisite: English Composition 3 or 3H. Introductory survey of African American literary expression from late 1950s through 1970s. Topics include rise of Black Arts Movement of 1960s and emergence of black women’s writing in early 1970s, with focus on authors such as Lorraine Hansberry, Amiri Baraka, Alice Walker, Gloria Naylor, Ishmael Reed, Audre Lorde, Paule Marshall, and Ernest Gaines. P/NP or letter grading.

5. Contemporary African American Literature. (5) (Same as English M104C.) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisite: English Composition 3 or 3H. Introductory survey of African American literary expression from 1980s to present covering range of genres, with emphasis on diversity of perspectives and styles that have emerged over past 30 years or so. Authors may include Toni Morrison, August Wilson, Octavia Butler, Anna Deavere Smith, June Jordan, Charles Johnson, Dante Prince, Rita Dove, Ntozake Shange, and more. P/NP or letter grading.

Upper-Division Courses

6. African American Theater History: Minstrel Stage to Rise of American Musical. (4) (Same as Theater M103B.) Lecture, three hours. Designed for juniors/seniors. Exploration of extant materials on history and literature of theater and cinema, specifically in Los Angeles; issues of representation and co-option; examination of African American plays from 1920s until birth of modern civil rights era. Examination of socio-historical context out of which black musical theater emerged and critical essays that illustrate development of African American playwrights and their significant involvement in creation of diversified American theatrical tradition. Letter grading.

7. African American Theatre History: Minstrel Stage to Rise of American Musical. (4) (Same as Theater M103B.) Lecture, three hours. Designed for juniors/seniors. Exploration of extant materials on history and literature of theater and cinema, specifically in Los Angeles; issues of representation and co-option; examination of African American plays from 1920s until birth of modern civil rights era. Examination of socio-historical context out of which black musical theater emerged and critical essays that illustrate development of African American playwrights and their significant involvement in creation of diversified American theatrical tradition. Letter grading.

8. Modern African American Drama: Harlem Renaissance to Black Arts Movement. (4) (Same as Theater M103D.) Lecture, three hours. Survey and examination of African American plays from 1920s until birth of modern civil rights era. Examination of socio-historical context out of which black musical theater emerged and critical essays that illustrate development of African American playwrights and their significant involvement in creation of diversified American theatrical tradition. Letter grading.

9. Topics in African American Literature and Culture. (5) (Same as English M104E.) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisite: English Composition 3 or 3H. Introductory survey of African American literary expression from late 1950s through 1970s. Topics include rise of Black Arts Movement of 1960s and emergence of black women’s writing in early 1970s, with focus on authors such as Lorraine Hansberry, Amiri Baraka, Alice Walker, Gloria Naylor, Ishmael Reed, Audre Lorde, Paule Marshall, and Ernest Gaines. P/NP or letter grading.

10. Contemporary African American Literature. (5) (Same as English M104D.) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisite: English Composition 3 or 3H. Introductory survey of African American literary expression from 1980s to present covering range of genres, with emphasis on diversity of perspectives and styles that have emerged over past 30 years or so. Authors may include Toni Morrison, August Wilson, Octavia Butler, Anna Deavere Smith, June Jordan, Charles Johnson, Dante Prince, Rita Dove, Ntozake Shange, and more. P/NP or letter grading.

11. Topics in African American Literature and Culture. (5) (Same as English M104E.) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisite: English Composition 3 or 3H. Topics include rise of Black Arts Movement of 1960s and emergence of black women’s writing in early 1970s, with focus on authors such as Lorraine Hansberry, Amiri Baraka, Alice Walker, Gloria Naylor, Ishmael Reed, Audre Lorde, Paule Marshall, and Ernest Gaines. P/NP or letter grading.
105A. Ideology and Black Consciousness. (4) Lecture, three hours; discussion, one hour. How do we know what we know? Why do we think what we think? Where did all of our concepts and beliefs come from? A tax-}

105B. Issues in African-Panther Biography and Autobiog-}

ography. (4) Seminar, four hours. Introduction of his-

tory of political philosophy of Pan-Africanism—from its origins in 19th century. Critical reading of biographical and
dramatic texts, with focus on U.S. and elsewhere in Afri-

can diaspora. Drawing on interdisciplinary black studies scholarship of range of writers that may in-
clude B. Wells, Carter G. Woodson, Claudia Jones, W.E.B. Du Bois, Ngugi wa Thiongo’s, Steve Biko, Frantz Fanon, Walter Rodney, George Jackson, An-
gela Davis, Jacob H. Carruthers, Stuart Hall, and Sylvia Wynter, to understand function of representa-
tion, language, and ideology in creation of social meaning and role of literature, media, education, and
popular culture in organization of black consciousness and exercise of power. P/NP or letter grading.

106A. Africa and World. (4) Lecture, four hours; dis-
cussion, one hour. Introduction to historical and con-
temporary Africa, with focus on modern history, poli-
tics, and contemporary African diaspora, modern movement and migration, and debates on racial and geographic divide between Arab north and south of Sahara. P/NP or letter grading.

107. Cultural History of Race. (5) Same as Ethno-
musicology M107. Lecture, four hours; discussion, one hour. Introduction to development of rap music and hip-hop culture, with emphasis on musical and verbal qualities, philosophical and sociological theories, gender representation, and influences on cinema and popular culture. P/NP or letter grading.

108. Jazz and Political Imagination. (4) Lecture, three hours; discussion, one hour. How has jazz come to symbolize so many different political tendencies—
surrealism, socialism, etc., throughout 20th century? How do historians uncover black women's historical
lives? How is difference constructed through interre-
course and within social processes? Women's experiences within major historical transi-
s in American history, exploration of key themes, including gender formation, sexuality, labor and class, collective action, gender, race, reproduction, and role of law. How have intersecting forms of oppression impacted black women's historical lives? How is difference constructed through interre-
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course and within social processes?
nomic conditions of black community, (2) to analyze important political issues facing black Americans, (3) to sharpen students’ analytical skills. P/NP or letter grading.


M150D. Recent African American Urban History: Funk Music and Politics of Black Popular Culture. (4) (Same as Anthro- M150D.) Lecture, four hours. Examination of funk music and African American urban life. Exposing students to funk music as a means to understand the social and political context of black life in the United States. Letter grading.

M154C. Black Experience in Latin America and Carib- bean I. (4) (Same as Political Science M184A.) Lecture, three or four hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Culture, history, politics, and identity of African Americans in Spanish and Lusophone Caribbean, South America, and Central America. Exploration of issues of identity in context of Afro/Latino migration to U.S. P/NP or letter grading.

M154D. Black Experience in Latin America and Carib- bean II. (4) (Same as Political Science M184B.) Lecture, three or four hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Examin- ation of issues regarding race and ethnicity in Latin America, with emphasis on comparisons to U.S. and within Latin America. Covers populations of Afri- can and indigenous origins, with emphasis on former. P/NP or letter grading.

M155A. Comparative Strain Systems. (4) (Same as History M150A.) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Examination of strain theories of various New World slave societies, with emphasis on outlining similar- ities and differences among legal status, treatment, and slave cultures of North American, Caribbean, and Latin American regions. P/NP or letter grading.

M158B-M158C. Introduction to Afro-American His- tory. (4–4) (Same as History M150B-M150C.) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Survey of Afro-American history, with a focus on three great moments of Afro-American life: transition from Africa to New World slavery, transition from slavery to freedom, and transition from rural to urban milieu. P/NP or letter grading.

M158E. African American Nationalism in First Half of 20th Century. (4) (Same as History M150E.) Lecture, three hours; discussion, one hour (when sched- uled). Designed for students interested in examining African American search in first half of 20th century for national/group cohesion through collect- ively built institutions, associations, organized protest movements, and ideological self-definition. P/NP or letter grading.

M159P. Constructing Race. (4) (Same as Anthro- pology M144P and Asian American Studies M169.) Lecture, three hours; discussion, one hour (when scheduled). Examination of race, socially constructed category, from anthropological perspective. Consider- ation of development of racial categories over time and in different regions, racial passing, multiracial identity in contemporary society, black lives matter movement, and ideology of black identity. P/NP or letter grading.


M165. Sociology of Race and Labor. (4) (Same as Labor Studies M165 and Sociology M165S.) Lecture, three hours; discussion, one hour. Limited to juniors/ seniors. Examination of racial/ethnic, gender/sex, class/eth- nicity, employment, and U.S. labor movement. Anal- ysis of underlying racial divisions in workforce and how they evolved historically. Consideration of cir- cumstances in the U.S. where African American workers have expe- rience different consequences of race, ethnicity, gender, and class. It also covers the social, economic, and political impacts of globalization on these dynamics. P/NP or letter grading.


M170A. Diasporic Nonfiction: Media Engagements with Memory and Displacement I. (4) (Same as Chi- cana and Chicano Studies M140D.) Lecture, three hours. Video production course, with emphasis on au- tobiographical, critical, and performance-based modes of narration, making, drawing on prac- tices of diasporic filmmakers who have grappled with suppressed collective memories of displacement, trauma, exile, and migration. What does it mean to make videos about memory in places where direct cues to memory are absent? Introduction to concepts from films and readings. Production assign- ments and screenings, with focus on questions of how to represent history, memory, family dynamics, and lived experience across borders, and inter- acts of diasporic subjects. In Progress grading (credit to be given only on completion of course M170B).

M170B. Diasporic Nonfiction: Media Engagements with Memory and Displacement II. (4) (Same as Chi- cana and Chicana Studies M140B.) Seminar, three hours. Required prerequisite: course M170A. Students complete 20- to 30-minute video projects about issues of memory and displacement and its interac- tion with memory and displacement. Team work is required. P/NP or letter grading.

M172. Afro-American Woman in U.S. (4) (Same as Gender Studies M172 and Psychology M172.) Lecture, two and one half hours. Designed for juniors/sen- iors. Impact of social, psychological, political, and economic forces which impact on interpersonal rela- tionships of African-American women as members of large society and as members of their biological and ethnic group. P/NP or letter grading.

M173. Nonviolence and Social Movements. (4) (Same as Chicana and Chicano Studies M173 and Labor Studies M173.) Lecture, three hours; discus- sion, one hour. Overview of nonviolent resistance and its impact on social movements both historically and in its present context in contemporary society, featuring lectures, conversations, films, readings, and guest speakers. Exploration of historical and contemporary contributions of civil rights struggles and role of nonviolent action throughout recent U.S. history. Examination of partic- ular lessons of nonviolent movements as they impact social change organizing in Los Angeles. P/NP or letter grading.

174. Intraracial Differences in 20th-Century Black America. (4) Lecture, four hours. Discussion of evolu- tion of black social movements in African American com- munity by focusing on evolution of differences—spe- cifically class differences—that have minimized black progress when compared with other races and cul- tures like Asians and Jews. Examination of problems and plight of lower-class blacks in stark juxtaposition with black leadership and African Americans occupying higher socioeconomic levels. Letter grading.

175. Racial and Ethnic Disparities in Healthcare. (4) Lecture, four hours. Designed for students who are seeking to become healthcare professionals so they can understand importance of race and ethnicity im- pact delivery of healthcare. Focus on need to increase diversity of health professions workforce as means to address racial disparities. P/NP or letter grading.

176. Race, Racism, and Law. (4) Lecture, four hours; discussion, one hour. Throughout African American history, race relations have been inextricably linked to law. Examination of history of racism and law in the United States and in other countries. Focus on how law and social policy have involved various legal institutions, especially U.S. Supreme Court. Lawyers on all sides have often played pivotal roles in establishing legal standards de- fining political, economic, social, and psychological status of African Americans (and other racial and ethnic minorities). Historical overview and in-depth exam- ination of selected major highlights of these legal developments, including Constitutional sources of racism, legal foundations establishing and eliminating slavery, major Supreme Court decisions before and after civil rights era, and contemporary legal retreat for civil rights protections. Comparative analysis in- process and legal profession in broader historical and political context. Letter grading.

177. African Americans in Higher Education. (4) Lecture, four hours. Discussion and exploration of challenges facing black students at predominately white institutions (PWI’s), ways in which Proposition 209 has affected black student community, spaces on and off campus that empower students, and issues of access and equity in higher education. Critical discus- sions about student experiences/concerns/challenges at UCLA, addressing specific strategies for success, and notions of empowerment that provide context for students from underrepresented backgrounds at pre- dominantly white universities. Letter grading.

M178. Sociology of Caribbean. (4) (Same as So- ciology M178.) Lecture, three hours; discussion, one hour. Limited to juniors/seniors. Historical sociology of Caribbean, with emphasis on colonialism and decolo- nization, development and underdevelopment, race- making institutions and evolution of race relations, na- tionalism and migration. P/NP or letter grading.

M179A. Topics in African American Literature. (5) (Same as English M191A.) Seminar, three or four hours. Enforced requisite: English Composition 3 or 3H. Variable specialized studies course in African American literature. Topics may include Harlem Rena- issance, African American literature in Nadir, black women’s writing, contemporary African American fic- tion, African American poetry. May be repeated for credit with topic or instructor change. P/NP or letter grading.

184A. Research in Black Life, Institutions, and Cul- ture. (4) Seminar, three hours. Interdisciplinary over- view of black studies research perspectives and re- search methods. P/NP or letter grading.

188A. Special Courses in African American Stud- ies. (4) Lecture, three hours; discussion, one hour. Program-sponsored experimental or temporary courses such as those taught by visiting faculty mem- bers. May be repeated for credit with topic change, P/ NP or letter grading.

188B. Race and Public Policy. (8) Seminar, three hours. Exploration of range of public policies con- cerned with promoting civil rights of racial minorities, with focus on education, voting, and housing. Why did such policies initially arise? How have these since de- veloped? How effective have they been in closing racial gaps? How can we foster development of knowledge for thinking through contemporary debates surrounding policies that seek to redress racial dis- crimination in U.S. P/NP or letter grading.

1885A. Individual Studies for USIE Facilitators. (1) To be arranged. Enforced corequisite: Honors College 101E. Limited to junior/senior USIE facilita- tors. Individual study in regularly scheduled meetings with faculty mentor to discuss selected USIE seminar
topic, conduct preparatory research, and align preparation of syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.


188SC. Individual Studies for USIE Facilitators. (2) Tutorial, to be arranged. Enforced requisite: course 188SB. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor while facilitating USIE 88S course. Individual contract with faculty mentor required. May not be repeated. Letter grading.

189. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be repeated for credit. Limited to eligible students. Honors content noted on transcript. P/NP or letter grading.

189HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed to provide individual tutorial lecture course with individual study with faculty member. May be repeated for credit. Limited to eligible students. Letter grading.

194A. Language, Literacy, and Human Development Research Group Seminars (5) (Same as Education M194A.) Seminar, three hours; laboratory, two hours (when scheduled). Research seminar designed to provide opportunity to combine theory and practice in study of human development in educational contexts. Focus on relationship between theories of development, culture, and language. May be taken independently for credit. Letter grading.

194B. Culture, Gender, and Human Development Research Group Seminars (5) (Same as Education M194B.) Seminar, three hours; laboratory, two hours (when scheduled). Research seminar designed to provide opportunity to combine theory and practice in study of human development in educational contexts. Focus on relationship between theories of development, culture, and gender. May be taken independently for credit. Letter grading.

194C. Culture, Communications, and Human Development Research Group Seminars (5) (Same as Education M194C.) Seminar, three hours; laboratory, two hours (when scheduled). Research seminar designed to provide opportunity to combine theory and practice in study of human development in educational contexts. Focus on relationship between theories of development, culture, and gender. May be taken independently for credit. Letter grading.

195. Community or Corporate Internships in Afro-American Studies. (4) Tutorial, four hours. Preparation: 3.0 grade-point average in major. Limited to junior/senior majors. Internship in supervised setting in community agency or business. Students meet on regular basis with instructor and provide periodic reports of their experience. Eight units may be applied toward major requirements. May be repeated for credit. Individual contract with supervising faculty member required. P/NP or letter grading.

195CE. Comparative Approaches to Community and Corporate Internships. (4) (Same as American Indian Studies M195CE, Chicana and Chicano Studies M195CE, and Gender Studies M195CE.) Tutorial, one hour; fieldwork, eight to 10 hours. Limited to juniors/seniors. In- ternships in corporate, governmental, or non-profit setting cooperating through Center for Community Learning. Comparative study of race, gender, and indigeneity in relation to contemporary workplace dynamics. Students complete weekly written assignments, attend bimonthly meetings with graduate student coordinator, and write final research paper. Faculty sponsor and graduate student coordinator construct series of reading assignments that examine issues related to internship. Individual contract with supervising faculty member required. P/NP or letter grading.

196. Research Apprenticeship in Afro-American Studies. (4) Tutorial, three hours. Limited to juniors/seniors. Enrolled research apprenticeship under guidance of faculty mentor with African-American Studies major or minor. Short-term research project culminating in term paper in African American studies or related field required. Research may be in part or totally in relation to faculty member’s research. May be repeated for credit. Individual contract required. Letter grading.

197. Individual Studies in Afro-American Studies. (2 to 8) Tutorial, four hours. Preparation: 3.0 grade-point average in major. Limited to juniors/seniors. Individual intensive study, with scheduled meetings to be arranged between student and faculty mentor. Assessed reading and tangible evidence of mastery of subject matter required. Eight units may be applied toward major requirements. May be repeated for credit. Individual contract required. Letter grading.

198. Honors Research in Afro-American Studies. (2 to 4) Tutorial, four hours. Limited to juniors/seniors. Development and completion of honors thesis or comprehensive research project under direct supervision of faculty member. May be repeated for credit. Individual contract required. Letter grading.

199. Directed Research or Senior Project in Afro-American Studies. (2 to 4) Tutorial, to be arranged with faculty member who directs study. Preparation: 3.0 grade-point average in major. Limited to juniors/seniors. Supervised individual research or investigation of large project under guidance of faculty mentor. Culminating paper or project required. Eight units may be applied toward major requirements. May be repeated for maximum of 16 units. Individual contract required. P/NP or letter grading.

Graduate Courses

M200A. Advanced Historiography: Afro-American History. (4) (Same as Sociology M262.) Seminar, four hours. May be repeated for credit. S/U or letter grading.

M200B. Political Economy of Race. (4) (Same as History M256C.) Seminar, four hours. Examination of historiography of history of capitalism and history of African diaspora overlapping concerns with organization of race and racial states in contemporary world, development of modern imperialism—and emergence of global black resistance to both. Themes and topics considered may include capitalism and question of slavery; law, regulations, and legal pluralism in organization of markets and nations; uneven development and nature of black sovereignty; history of regimes of gender and sexuality in social and capital reproduction; modalities of capital accumulation and production of space; racial violence and territorial expansion; emancipation and growth of empire; history of regimes of property and property forms of debt; capitalism and history of anti-blackness; racism, neoliberalism, and governmentality; and emergence and content of black radical tradition and its critiques of capitalist forms of domination. S/U or letter grading.

M200C. Black Families and Relationships. (4) (Same as Sociology M262.) Seminar, three hours. Evaluation of social, cultural, and historical forces that affect socialization, stability, and interaction in black intimate relationships. Historical framework from black feminism to analysis of economic and other expectations for partners in cohabiting and other types of unions. Examination of family life forms in intersection of class, color, and gender. Requisites: S/U or letter grading.

M202. Critical Theory of African Diaspora. (4) (Same as Anthropology M245S.) Seminar, four hours. Introduction to variety of ideas that underlie articulation of a critical perspective on the African diaspora. Structured through understanding of African diaspora as historical formation, with focus on African diaspora as distinct intellectual project. Exploration of ways scholars have conceptualized and theorized diachronic condition of black peoples. Consideration of who belongs to African diaspora community, and how this community is imagined. S/U or letter grading.

CM213. Narratives of Justice: Disrupting School-to-Prison Pipeline—Arts, Activism, and Agency. (4) (Same as Education CM229B.) Lecture, four hours; discussion, one hour. Exploration of policies and practices, art and activism, and other forms of agency engaging school-to-prison pipeline. Concurrently scheduled with course CM113. S/U or letter grading.

CM213B. Legislative Theater for Race and Gender Justice. (8) (Same as World Arts and Cultures CM213B.) Lecture, three hours; discussion, one hour (when scheduled). Exploration and generation of an interactive range of methods and arts-based strategies with participants from UCLA and broader Los Angeles community in order to research and influence public policy and legislative change. Students and campus partners create and perform legislative theater addressing issues of race, gender, and criminal justice system. Critical text, collaborative work, and creative methods are used to engage perspectives on justice. Analysis of diverse and growing body of work on systems of justice through research, writing, workshops, performances, and critique of original writings and performances developed in response to visiting scholars and community partners. Concurrently scheduled with course CM113B. S/U or letter grading.

CM235A. African American Art before 1900. (4) (Same as Art History CM235A.) Lecture, three hours. Detailed inquiry into work to circa 1900 of African American artists whose works provide insightful and critical commentary on major features of American life and society. Concurrently scheduled with course CM135A. S/U or letter grading.

CM235B. African American Art, 1900 to 1963. (4) (Same as Art History CM235B.) Lecture, three hours. Detailed inquiry into work of African American artists from Columbian Exposition to 1963 March on Washington within context of social, political, and cultural engagement, as well as in codification of modern black life in U.S. Concurrently scheduled with course CM135B. S/U or letter grading.

M240. Assessment and Treatment of African American Families. (3) (Same as Psychiatry M240.) Seminar, two hours. Designed for graduate students. Course aids mental health professionals and trainees in evaluation and treatment of African American families in terms of their cultural milieu, historical background, and economic status. Didactic presentations by instructors and invited guests form basis for supervised evaluation and case management with African American children and families. Letter grading.

241. Special Topics in Afro-American Studies. (4) Lecture, four hours; discussion, one hour. Intensive research and study of major themes and issues in various areas of Afro-American studies. S/U or letter grading.

M256. Topics in African American Art. (4) (Same as Art History M236.) Seminar; three hours. Requisite: course CM235A or CM235B. Topics in African American art from 18th century to present. May be repeated for credit with consent of graduate adviser. S/U or letter grading.

270A. Survey of Afro-American Research. (4) Seminar, three hours. Overview of research methodologies in humanities and social sciences, with firsthand reports from faculty in various fields. Introduction to research in and related to African-American studies and application of such research. Letter grading.


375. Teaching Apprentice Practicum. (1 to 4) Seminar, to be arranged. Preparation: apprentice personnel employment as teaching assistant, associate, or fellow. Teaching apprenticeship under active guidance and supervision of regular faculty member responsible for curriculum and instruction at UCLA. May be repeated for credit. S/U grading.

596. Directed Readings and Tutorials. (4) Tutorial, to be arranged. Provides students with umbrella under which they can pursue specialized interests from which there is insufficient demand to warrant formal courses. S/U or letter grading.

597. Preparation for MA Comprehensive Examination. (4 or 8) Tutorial, to be arranged. Limited to graduate students. May not be applied toward MA course requirements. S/U grading.

598. Research for and Preparation of MA Thesis. (4 or 8) Tutorial, to be arranged. Limited to graduate students. May not be applied toward MA course requirements. S/U grading.

African Studies

Scope and Objectives

The intellectual objective of the African Studies MA program is to provide graduate students with the opportunity to engage in intensive study and research on Africa on an interdisciplinary basis. The program offers African area courses in a wide range of disciplines, including the fine arts, social sciences, humanities, and professional fields. A concurrent degree program is also offered where students can work for the MA in African Studies and the Master of Public Health (MPH) at the same time. Academic flexibility draws many students to the program. Because there are more than 50 active faculty members on campus with African interest and experience in many disciplines, students have multiple options to design individualized programs suited to their specific interests.

Information on the undergraduate major and minor in African and Middle Eastern Studies and the minor in African Studies can be found in the International and Area Studies section.

Graduate Study

Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Division website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Graduate Degrees

The African Studies Program offers the Master of Arts (MA) degree in African Studies. A concurrent degree program (African Studies MA/Public Health MPH) is also offered.

African Studies

Graduate Courses


201B. Africa and Professions. (4) Seminar, three hours. Exploration of key contributions and debates of academic disciplines in African studies, with emphasis on professional dimension. Review of discipline's literature, resources, career opportunities, and professionals themselves. Letter grading.

296. Africanist Working Group. (1) Research group meeting, one hour. Collaborative exploration and discussion of current research and literature on modern Africa. Specific projects determined by research being conducted by working group participants. Activities include designing and refining research proposals, gathering and analyzing data, and interpreting and reporting results, as well as presenting research to receive critical feedback from other class participants. May be repeated for credit. S/U grading.

375. Teaching Apprentice Practicum. (1 to 4) Seminar, to be arranged. Preparation: apprentice personnel employment as teaching assistant, associate, or fellow. Teaching apprenticeship under active guidance and supervision of regular faculty member responsible for curriculum and instruction at UCLA. May be repeated for credit. S/U grading.

596. Directed Individual Study or Research. (2 to 8) Tutorial, to be arranged. Limited to graduate African studies students. May be repeated, but only 4 units may be applied toward minimum graduate course requirement. S/U or letter grading.

597. Preparation for MA Comprehensive Examination. (4) Tutorial, to be arranged. Limited to graduate African studies students. Normally taken only during term in which student is being examined. May not be applied toward minimum graduate course requirement. S/U grading.

598. Research for and Preparation of MA Thesis. (4) Tutorial, to be arranged. Limited to graduate African studies students. Normally taken only during term in which student intends to complete MA thesis. May not be applied toward minimum graduate course requirement. S/U grading.
American Indian Studies

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Randall K.Q. Akee, PhD, Chair

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Randall K.Q. Akee, PhD (Public Policy)
Tria Blu Waika, PhD (World Arts and Cultures/Dance)
Jesica R. Cattelino, PhD (Anthropology)
Elin K. Debenport, PhD (Anthropology)
Nanibaa’ A. Garrison, PhD (Medicine, Society and Genetics)
Mishuana N. Goeman, PhD (Gender Studies)
Paul V. Krekorian, PhD (Anthropology)
Benjamin L. Madley, PhD (History)
Ananda M. Marin, DrPH (Education)
Kyle T. Mays, PhD (African American Studies)
Nancy M. Mithio, PhD (Gender Studies)
Angela R. Riley, JD (Law)
Desi Rodriguez-Lonebear, PhD (Sociology)
Gregson T. Shachner, PhD (Anthropology)
David Delgado Shorter, PhD (Anthropology, Gender Studies, World Arts and Cultures/Dance)
Shannon E. Speed, PhD, ex officio (Anthropology, Gender Studies)

Scope and Objectives

Because UCLA possesses a substantial number of faculty members in the humanities and social sciences engaged in teaching and conducting research on American Indians, the nation’s first interdepartmental MA program in American Indian Studies was established here.

The Bachelor of Arts degree and the undergraduate American Indian Studies minor offer a general introduction to Native American cultures, the traditional disciplines or careers in research, administration, public service, and community service related to American Indian communities.

The Master of Arts program draws primarily on existing courses in the participating departments, where research and research methodologies are of primary concern. Students are exposed to Indian-related research in a number of different disciplines; demonstration of research skills is required. Students graduate with the training they need to teach Native American studies or to serve in an administrative capacity in Indian programs or organizations. The MA program ranks among the top Indian studies programs in the country.

Undergraduate Study

The American Indian Studies major is a designated capstone major. Seniors complete a research/service experience and participate in a tutorial where faculty members help them relate their course-derived academic experience to their original research/service efforts involving Native American communities. Through their capstone work, students demonstrate their skills at analyzing and synthesizing knowledge, show their capacity to work collaboratively with peers, and display their capacity to relate their academic research and discourse to Native American community needs and concerns. Students present their work at the academic year-end Research Symposium sponsored by the American Indian Studies Interdepartmental Program.

American Indian Studies BA

Capstone Major

The American Indian Studies BA program is designed to offer a coherent and comprehensive curriculum in American Indian cultures, societies, and contemporary issues in addition to valuable background in more traditional disciplines such as anthropology, art history, economics, education, history, law, linguistics, literature, sociology, and world arts and cultures. Students acquire a critical knowledge of the concepts, theories, and methods that have produced knowledge about American Indians in the traditional disciplines. Students are encouraged to develop a concentration—or special expertise—in these fields to accompany the major.

The curriculum encompasses the cultural, historical, political, and social experiences of Native Americans in the Americas. Through courses on Native American literature, languages, theater, and contemporary societies and through more culturally specific courses on Californians, cultures of the Pueblo southwest, and so on, the major offers an in-depth and broad knowledge on the experience of Native Americans not only in the U.S. and Canada but in Mexico and elsewhere in Latin America as well.

Given the increasingly multicultural society of the U.S. and the economic revitalization of many Native American communities, a knowledge of American Indian studies greatly enhances the professional and scholarly contributions attainable for those seeking postgraduate degrees in various related disciplines and fields.

Learning Outcomes

The American Indian Studies major has the following learning outcomes:

- Demonstrated analysis and knowledge-synthesis skills gained through completion of written capstone thesis
- Identification of a key idea or theme of interest drawn from coursework
- Effective public presentation of selected theme in final paper and/or project
- Relation of academic research and discourse to Native American communities’ needs and concerns
- Communication of statistical and quantitative information to appropriate communities
- Display capacity to work collectively with peers to effectively analyze and synthesize knowledge

Preparation for the Major

Required: American Indian Studies M10 and two courses from Anthropology 3, Gender Studies 10, Political Science 40, Statistics 12. Each course must be completed with a grade of C or better.

Transfer Students

Transfer applicants to the American Indian Studies major with 90 or more units must complete as many of the following introductory courses as possible prior to admission to UCLA: one introduction to American Indian studies course and two courses from culture and society, introduction to gender studies, introduction to American politics, or introduction to statistical methods.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

The Major

Requirements are distributed according to certain categories to create a breadth of knowledge. Students are required to take a research methods course to become familiar with scholarly techniques of knowledge production and to critically regard academic research, as well as a course in either ethnic/race/gender relations or comparative indigenous studies. Additional courses are selected in the social sciences and humanities according to a distributional formula that encourages further specialization within either of these two broad areas while simultaneously adding additional breadth. Finally, American Indian Studies C225L prioritizes the experiential dimension of involvement in Native American communities (either urban, reservation, or rancheria) through work that supplies service experience and/or supervised internship opportunities.

The 12 courses must fit one of the following regional emphasis patterns: (1) Native North America—eight courses, including those mentioned below and additional electives on Native North American topics or (2) indigenous peoples of the Americas—eight courses, including at least four dealing with indigenous people in Central America and/or South America.

Students must complete 12 upper-division courses (48 units) as follows, with no more than 32 units from American Indian studies courses:

1. Ten core courses (40 units), including (a) American Indian Studies M161, (b) two language courses from Anthropology M150, 155, Linguistics 114, (c) two history or law courses from American Indian Studies 140, 158, History 149A, 149B, 157B, (d) one social sciences course from American Indian Studies C120, C122, C130, C175, C178, Anthropology 160A, or 162, (e) two expressive culture courses from American Indian Studies 180, Art History 137, CM139A, C139B, English 106, Ethnomusicology 106A, 106B, Theatre 103F, 107, (f) one methodology course from Anthropology 138P, Art History 100, Community Health Sciences 181, Comparative Literature 100, Linguistics 160, Political Science 170A, Sociology 106A, 113, or World Arts and Cultures 195, and (g) either one ethnic/race/gender relations course (African American Studies M164, Anthropology M145Q, 145S, Asian American Studies 130A, M130B, M130C, 131A, 132A, 133, 134, Chicana and...
American Indian Studies Minor

The American Indian Studies minor is designed for students who wish to augment their major program of study in the College of Letters and Science with a group of related courses from various disciplines germane to American Indian studies. The minor exposes students to Indian-related research and literature in a number of different disciplines, such as American Indian studies, anthropology, economics, history, political science, sociology, and theater.

To enter the minor, students must be in good academic standing (2.0 grade-point average), have completed 45 units, and file a petition at the American Indian Studies Center, 3220 Campbell Hall. All degree requirements, including the specific requirements for this minor, must be fulfilled within the unit maximum set forth by the College of Letters and Science.

Required Lower-Division Course (5 units): American Indian Studies M10 with a grade of C or better.

Required Upper-Division Courses (28 units): Seven courses selected from the following: (1) one American Indian languages and communication systems course (Anthropology 155 or Linguistics 114); (2) three history and social sciences courses from American Indian Studies C120, C21, C22SL, C30, C40, C58, C70, C175, C178, Anthropology 113Q, 113R, 114P, 114Q, 115B, Gender Studies 130, History 149A, 149E, 1578, Sociology M161; (3) three humanistic perspectives on language and expressive culture courses from American Indian Studies 180, Art History 137, CM139A, English 104, 180, Ethnomusicology 106A, 106B, Theater 103F.

A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor, and at least 16 units applied toward the minor must be taken in residence. Transfer credit for any of the above is subject to program approval; consult with the interdepartmental adviser before enrolling in any courses for the minor.

Each minor course must be taken for a letter grade, and students must have a cumulative grade-point average of 2.0 or better in the minor. Successful completion of the minor is indicated on the transcript and diploma.

Graduate Study

Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Division website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Graduate Degrees

The American Indian Studies Program offers the Master of Arts (MA) degree in American Indian Studies. A concurrent degree program (American Indian Studies MA/Law JD) is also offered.

American Indian Studies Lower-Division Courses

M10. Introduction to American Indian Studies. (5) (Same as World Arts and Cultures M23.) Lecture, three hours; discussion, one hour; activity, one hour. Survey of selected Native North American cultures from pre-Western contact to contemporary period, with particular emphasis on early cultural diversity and diverse patterns of political, linguistic, social, legal, and cultural change in postcontact period. P/NP or letter grading.

M18. Leadership and Student-Initiated Retention. (2) (Same as African American Studies M118, Asian American Studies M168, and Chicana and Chicano Studies M18.) Seminar, two hours. Limited to freshmen/sophomores first-year transfer students. Not open for credit to students with credit for course M118. Exploration of issues in retention at UCLA through lens of student-initiated and student-run programs, efforts, activities, and services. Focus on populations with historically low graduation rates targeted by Campus Retention Committee. May not be applied toward departmental major or minor elective requirements. May be repeated once for credit. Letter grading.

18. Fiat Lux Freshman Seminars. (1) Seminar; one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

89. Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to lower-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

89HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to lower-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Courses

M118. Student-Initiated Retention and Outreach Issues in Higher Education. (4) (Same as African American Studies M118, Asian American Studies M168, and Chicana and Chicano Studies M118.) Lecture, four hours. Exploration of issues in outreach and retention of students in higher education, especially through student-initiated programs, efforts, activities, and services, with focus on UCLA as case. May be repeated twice for credit. Letter grading.

C120. Working in Tribal Communities: Introduction. (4) Lecture, four hours. Through readings, discussion, and Native guest lectures, students learn to participate within Native American communities engaged in political, social, and cultural processes of change and preservation. Development of proposal for Native nation-building project. Concurrently scheduled with course C220. Letter grading.

C121. Working in Tribal Communities: Preparing for Fieldwork. (4) Lecture, four hours. Through readings, discussion, and Native guest lectures, students learn to participate within Native American communities engaged in political, social, and cultural processes of change and preservation. Development of proposal for Native nation-building project. Concurrently scheduled with course C220. Letter grading.

C122SL. Working in Tribal Communities: Service Learning. (4) Seminar, one hour; fieldwork, four hours. Enforced requisite: course C121. Recommended: course C220. Participation in community service learning project within Native American communities and organizations where students are mentored and supported by faculty members, other students, and project directors toward community service learning tasks and contributing to project activities. May be repeated with consent of instructor. Concurrently scheduled with course C222SL. Letter grading.

M123. Afro-Indigenous History: from Enslavement and Settlement to Black Lives Matter and Indigenous Sovereignty. (4) (Same as African American Studies M121.) Lecture, four hours; discussion, one hour. Examination of how race was developed through enslavement of African-descent and indigenous people in U.S. and beyond. Examination of key episodes in history. Using articles, books, documentaries, and contemporary popular culture, examination of relationship between peoples of African descent and indigenous people. Study takes broad, thematic approach. Topics include first encounters in Americas and ideologies that led to enslavement and dispossession; period of enslavement and indigenous removal in 19th century; mid-20th-century social movements; and contemporary manifestations, especially solidarity shown by Black Lives Matter and Dakota Access Pipeline protestors. P/NP or letter grading.

C130. California Indian Strategies for Contemporary Challenges. (4) Seminar, three hours. Through readings, discussion, and Native guest lectures, introduction to contemporary issues and processes of self-directed social change and political, cultural, legal, and community service learning projects within Native American communities and organizations.

140. Federal Indian Law and Policy. (4) Lecture, four hours. Through readings, discussion, and Native guest lecturers, introduction to fundamental concepts and history of federal Indian law and policy. Investigation of contemporary policies and legal issues and exploration of Native responses to policy and law. Letter grading.

C145. Contemporary Indigenous Nations. (4) Seminar, three hours. Introduction to topics on contemporaneous indigenous nations, including social movements, political and social change and continuity, nation building, Navajo Code Talkers, contemporary development, education, and socialization, international relations, comparative policy, colonialism, migration, nationalism, and corporate identities, and other social and cultural processes seen as distinct from ethnicity, race, class, and nation, with focus on indigenous communities that have maintained self-government, territory, and culture. Investigation and search for analytic and policy patterns that give greater understanding and knowledge about current conditions and social and cultural processes of indigenous nations. Concurrently scheduled with course C245. Letter grading.

158. Nation Building. (4) Lecture; fieldwork/research, nine hours. Limited to junior/senior American Indian Studies majors. Examination of historical interplay of federal policies with tribal cultures that have shaped development of American Indian tribal nations. Current developments within Indian nations, including restructuring government, developing economies, and asserting cultural sovereignty to be self-determining, and required community-based projects. Letter grading.

M161. Comparative American Indian Societies. (4) (Same as Sociology M161.) Lecture, three hours. Required: course M10 or Sociology 1. Comparative and historical study of economic, health, and cultural change in indigenous North American societies. Several theories of social change, applied to selected case studies. Letter or P/NP grading.

M162. Language Endangerment and Linguistic Revitalization. (4) (Same as Anthropology M156.) Lecture, three hours; activity, one hour. Requisites: course M10, Anthropology 4. Examination of causes and consequences of language loss and revitalization. Study of current worldwide loss of linguistic diversity and revelation of kinds of efforts that members of threatened heritage language communities have produced in their attempt to revitalize these languages. Exploration of how many languages are shifting away from smaller indigenous and tribal languages. Since loss of such languages means both reduction of cultural as well as linguistic diversity, many affected communities have engaged in various language renewal practices. Examination of some diverse strategies that have been attempted, including immersion, language and culture classes, master-apprentice, interactive multimedia, mass media approaches, and language policy reforms. Evaluation of effectiveness of these measures and of very imagery used to discuss language endangerment. P/NP or letter grading.

CM168. Healthcare for American Indians. (4) (Same as Health Policy M168.) Lecture, two hours; discussion, one hour. Identification of traditional health beliefs, health practices, and healthcare systems of American Indian tribes to understand role of U.S. government in Indian health care. Investigation of health problems and the implementation of health care delivery systems. May be repeated for credit with topic change and approval of interdepartmental chair. Letter grading.

C170. California Indian History. (4) Lecture, four hours. Introduction to overview of California Indian history, focusing on community histories, and contemporary California Indian history through readings, discussion, and Native guest lecturers. May be repeated for credit with topic change and consent of interdepartmental chair. Concurrently scheduled with course C270. Letter grading.

C175. Cultures of Native Southern California. (4) Lecture, three hours. Introduction to Southern California indigenous societies through readings, discussion, guest lecturers, and direct community participation. May be repeated for credit with topic and/or instructor change. Consent of interdepartmental chair. Concurrently scheduled with course C275. Letter grading.

C176. California Experiences in Native Cultural Resource Management. (4) Seminar, three hours. Exploration of implementation and creation of laws that address Native resource management in California, such as California Environmental Quality Act (CEQA), Native American Graves Protection and Repatriation Act (NAGPRA), AB 978 (California NAGPRA), American Indian Religious Freedom Act, National Environmental Policy Act (NEPA), and National Historic Preservation Act (NHPA), from applied standpoint. To understand goals and challenges of these laws, examination of series of cases from California sites. Concurrently scheduled with course C278. Letter grading.

180. Introduction to and Practicum in Native American Languages. (4) Lecture, three hours; laboratory, one hour. Development of competence in oral and written forms for communication, read, and write at elementary level in Native American languages. Introduction to both phonological and grammatical structures, vocabulary, and cultural patterns of selected Native American Indian language. May be repeated with language change and approval of interdepartmental chair. Letter grading.

M186. Indigenous Film. (5) (Same as World Arts and Cultures M187.) Lecture, four hours; discussion, one hour. Introduction to study of indigenous filmic images and representations, with focus on selected ethnographic, documentary, animated, and feature films ranging from 1920 to present. P/NP or letter grading.

M187. Indigenous. (4) Lecture, four hours. Topics selected from following: Myth and Folklore of Indigenous Societies; Contemporary American Indian Literature; Social Science Perspectives of American Indian Life; Law and American Indian; History of American Indians (cultural area); Dance and Music of American Indians (cultural area); American Indian Policy. Consult Schedule of Classes for topics and instructors. May be repeated for credit. Letter grading.

M187A. Special Topics in American Indian and Gender Studies. (4) (Same as Gender Studies M185A.) Lecture, three hours. Variable topics in American Indian and Gender Studies. May be repeated for credit with topic and/or instructor change. P/NP or letter grading.

189. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to under-graduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

189HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Directed individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

195. Community Internships in American Indian Studies. (4) Tutorial, two hours; fieldwork, eight hours. Required course for American Indian Studies majors. Community internship in supervised setting in community agency. Students meet on regular basis with instructor and provide periodic reports on their experience. Designed to integrate the student experience, learning to gain firsthand knowledge of diversity, complexity, and variety of needs of American Indian communities. May be repeated for maximum of 6 units. Individual contract with supervising faculty member required. P/NP grading.

M195CE. Comparative Approaches to Community and Corporate Internships. (4) (Same as African American Studies M195CE, Asian American Studies M195CE, Chicana and Chicano Studies M195CE, and Gender Studies M195CE) Tutorial, one hour; fieldwork, eight to 10 hours. Limited to juniors/seniors. Internship in corporate, governmental, or nonprofit setting coordinated through Center for Community Learning. Comparative study of race, gender, and indigeneity in relation to contemporary workplace dynamics. Students complete formal assignments, attend biweekly meetings with graduate student coordinator, and write final research paper. Faculty supervisor and graduate student coordinator construct series of reading assignments that examine issues related to internship site. Individual contract with supervising faculty member required. P/NP or letter grading.

197. Individual Studies in American Indian Studies. (2 to 4) Tutorial, three hours. Limited to juniors/seniors. Individual intensive study, with scheduled meetings to be arranged between faculty member and student. Assigned readings and tangible evidence of mastery of subject matter may be repeated for maximum of 16 units. Individual contract required. P/NP or letter grading.

198A-198B. Honors Research in American Indian Studies. (4) Tutorial, one hour; activity, three hours. Required as a course for senior honors program. Course work required to be completed prior to 198B, which is enforced requisite to 198C. Limited to senior honors program students. Development and completion of honors thesis or comprehensive research project under direct supervision of faculty member. Each course may be repeated for credit. Individual contract required. Letter grading.

199. Directed Research or Senior Project in American Indian Studies. (2 to 6) Tutorial, one hour. Limited to juniors/seniors. Supervised individual research or investigation under guidance of faculty mentor. Cumulative paper or project required. May be repeated for maximum of 7 units. Individual contract required. P/NP or letter grading.

199C. Individual Studies: Capstone Synthesis. (4) Tutorial, three hours. Preparation: successful completion of eight upper-division major courses. Limited to seniors in American Indian Studies. Faculty members help students relate their course-derived academic experience to their original research/service efforts involving Native American communities. Completion of research paper and presentation of student work at year-end Research Symposium required. Must be taken in conjunction with American Indian Studies C122S, or an alternative upper-division course approved by program chair and academic coordinator. Individual contract required. Letter grading.

Graduate Courses

M200A. Advanced Historiography: American Indian Peoples. (4) (Same as History M200W) Lecture, 90 minutes; seminar, 90 minutes. Introduction to culture history of North American Indians and review of Indian concepts of history. Stereotypical approach to content and methodologies related to Indian past that is interdisciplinary and multivocal in its scope. Letter grading.

M200B. Cultural World Views of Native America. (4) (Same as English M266.) Seminar, three hours. Exploration of written literary texts from oral cultures and other expressive cultural forms—dance, art, song, religious and expressive cultural forms—dance, art, song, religious and medicinal ritual—in selected Native American Indian and gender studies. May be repeated for credit. Individual contract required. Letter grading.

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198A-198B. Honors Research in American Indian Studies. (4) Tutorial, one hour; activity, three hours. Required as a course for senior honors program. Course work required to be completed prior to 198B, which is enforced requisite to 198C. Limited to senior honors program students. Development and completion of honors thesis or comprehensive research project under direct supervision of faculty member. Each course may be repeated for credit. Individual contract required. Letter grading.

199. Directed Research or Senior Project in American Indian Studies. (2 to 6) Tutorial, one hour. Limited to juniors/seniors. Supervised individual research or investigation under guidance of faculty mentor. Cumulative paper or project required. May be repeated for maximum of 7 units. Individual contract required. P/NP or letter grading.

199C. Individual Studies: Capstone Synthesis. (4) Tutorial, three hours. Preparation: successful completion of eight upper-division major courses. Limited to seniors in American Indian Studies. Faculty members help students relate their course-derived academic experience to their original research/service efforts involving Native American communities. Completion of research paper and presentation of student work at year-end Research Symposium required. Must be taken in conjunction with American Indian Studies C122S, or an alternative upper-division course approved by program chair and academic coordinator. Individual contract required. Letter grading.
C222SL. Working in Tribal Communities: Service Learning. (4) Seminar, one hour fieldwork, four hours. Enforced requisite: course C221. Recommended: course C220. Participation in community service learning project within Native American communities and organizations where students are mentored and supported by faculty members, other students, and project directors toward completing assigned service learning tasks and contributing to project activities. May be repeated with consent of instructor. Concurrently scheduled with course C122SL. S/U or letter grading.

C228A-228B. Tribal Legal Systems. (228A: 3 or 4/228B: 1 or 2) Lecture, three hours. Course C228A is enforced requisite to 228B. Study of traditional and contemporary legal systems of Native American tribal nations. Detailed examination of several different tribal systems, including Navajo, Cherokee, Iroquois, and Hopi, with emphasis on diversity of tribal legal regimes, comparisons with Anglo-American legal systems, changes in tribal systems during period of contact with non-Natives, and relationships between tribal legal systems and their aspects of their cultures, such as religion and social structure. Independent research paper with focus on contemporary or historical topic. Concurrently scheduled with Law 528. In Progress (228A) and S/U or letter (228B) grading.

C230. California Indian Strategies for Contemporary Challenges. (4) Seminar, three hours. Through readings, discussion, and Native guest lecturers, introduction to contemporary issues and processes of self-directed social change and political, cultural, legal, and economic processes of nation building in contemporary California Native communities. Consideration of how regional characteristics, history, and culture affect contemporary issues facing Native American communities. May be repeated with consent of instructor. Concurrently scheduled with course C130. S/U or letter grading.

C238A-238B. Tribal Legal Development Clinic. (238A: 3 or 4/238B: 1 or 2) Lecture, three hours. Course C238A is enforced requisite to 238B. Students provide non-legal support and research to Native American communities. Projects include development and modification of tribal legal codes and constitutional provisions, creation of tribal dispute resolution processes, and drafting of intergovernmental agreements. Legislative drafting and cross-cultural representation skills emphasized. Faculty members meet with tribal leaders to inform them of availability of clinic services and determine whether clinic services are necessary for the tribe's legal needs. Once students are assigned to particular projects, they meet with relevant tribal officials and community groups with travel funds supplied. Students learn tribal perspectives on legal issues, including federal constraints on activities of tribal legal institutions, and culture of tribe they are representing to be able to craft legislation and other documents that meet tribal project needs and concerns. Concurrently scheduled with Law 728. In Progress (238A) and S/U or letter (238B) grading.

C245. Contemporary Indigenous Nations. (4) Seminar, three hours. Introduction to topics on contemporary indigenous nations, including social movements, political and social change and continuity, nation building, land and justice relations, economic development, education and socialization, international relations, comparative policy, colonialism, migration, national and social identities, and other issues and social cultural processes, seen as distinct from ethnicity, race, or nation. Focus on indigenous communities that have maintained self-government, territory, and culture. Investigation and search for analytic and policy patterns that give greater understanding of knowledge about current conditions and economic development of contemporary indigenous nations. Concurrently scheduled with course C145. S/U or letter grading.

C265. Federal Indian Law I. (4 or 6) Lecture, three to four hours. Overview of federal Indian law, including nature and history of tribe federal legal and political relationship; basic legal definitions within federal Indian law (such as what is Indian country), equality protection, access to resources and self-determination; canons of construction unique to Indian law; tribal sovereignty and its protection; basic questions of federal and state authority within Indian country; and tribal, federal, and state jurisdictions in Indian country according to default rules as well as statutory regimes. May be concurrently scheduled with Law 267. S/U or letter grading.

C266A. Federal Indian Law I. (1 to 8 each) (Same as Law M2667.) Lecture, three hours. Course M2665 is enforced requisite to 266B. Overview of federal Indian law through study of cases and historical and contemporary materials. Basic conflicts among sovereign governments that dominate this area of law, especially conflicts over criminal, civil adjudicative, and regulatory jurisdiction. Special attention to status and sovereignty powers of Indian reservations as recognized under U.S. law. Enforced requisite: federal Indian law protection issues posed by federal and state legislation involving out nation Indians and tribal members. Federal statutory regimes for Indian child welfare. Concurrently scheduled with course C267A and S/U or letter (266B) grading.

C267A-267B. Federal Indian Law II. (1 to 8 each) (Same as Law M268.) Lecture, three hours. Requisites: courses 238A and 238B, or M265A and 265B. Examination in-depth of principles and doctrines of federal Indian law as applied to property rights in land, cultural resources, hunting and fishing rights, economic development. Special jurisdictional regimes established by federal Indian law. Examination of federal Child Welfare Act and Indian Gaming Regulatory Act, addressed. In Progress (267A) and S/U or letter (267B) grading.


C270. California Indian History. (4) Lecture, four hours. Introduction to overview of California Indian history, specific tribal community histories, and/or contemporary California Indian history through readings, discussions posed by federal Indian legislation and policies. May be repeated for credit with topic change and consent of interdepartmental chair. Concurrently scheduled with course C170. S/U or letter grading.

M200C. Contemporary Issues of American Indians. (4) (Same as Anthropology M244P and Sociology M275.) Seminar, three hours. Introduction to most important issues facing American Indians as individuals, communities, tribes, and organizations in contemporary world. Building on historical background presented in course M200A and cultural and expressive experience of American Indians presented in course M200B. Letter grading.

M200D. Letter grading.
national and domestic law governing these issues, addressing such questions as how should cultural property be defined? Can cultural property be protected under existing intellectual property and cultural property regimes? How can we balance protection of cultural property of Indian nations with the need to support cultural expression or scientific advancement? Examination of cultural property of groups in general, with emphasis on cultural property of indigenous peoples, including folklore, traditional knowledge, burial grounds, sacred sites, and ancient ceremonies and traditions. S/U or letter grading.

274. Good Native Governance. (4 or 6) Seminar, three hours. Examination of legal issues integral to governance that Native American nations face in 21st century, including those that impact and shape political sovereignty, economic development, constitutional reform, membership criteria, cultural property protection, sacred sites, religious freedom, and safety and criminal law enforcement, among others. Emphasis on breadth of issues that lawyers working with and for Native nations must confront. Integration and highlighting of legal issues unique to Native nations within California. Materials from traditional law review articles, books, and case studies derived from field research to engage students in multidimensional settings that confront Native societies. May be concurrently scheduled with Law 637. S/U or letter grading.

C275. Cultures of Native Southern California. (4) Lecture, three hours. Introduction to Southern California Native culture and society through readings, discussion, guest lecturers, and direct community participation. May be repeated for credit with topic and/or instructor change and consent of interdepartmental chair. Concurrently scheduled with course C175. S/U or letter grading.

C278. California Experiences in Native Cultural Resource Management. (4) Seminar, three hours. Exploration of creation and implementation of laws that affect cultural resource management in California, such as California Environmental Quality Act (CEQA), Native American Graves Protection and Repatriation Act (NAGPRA), AB 678 (California NAGPRA), American Indian Religious Freedom Act, National Environmental Policy Act (NEPA), and National Historic Preservation Act (NHPA), from applied standpoint. To understand goals and challenges of these laws, examination of series of cases from California sites. Concurrently scheduled with course C178. S/U or letter grading.

375. Teaching Apprentice Practicum. (1 to 4) Seminar, to be arranged. Preparation: apprentice personnel employment as teaching assistant, associate, or fellow. Teaching apprenticeship under active guidance and supervision of regular faculty member responsible for curriculum and instruction at UCLA. May be repeated for credit. S/U grading.


ANESTHESIOLOGY AND PERIOPERATIVE MEDICINE

David Geffen School of Medicine
3304 Reagan UCLA Medical Center
Box 957403
Los Angeles, CA 90095-7403

Anesthesiology and Perioperative Medicine
310-267-8667

Barbara M. Van de Wiele, MD, Interim Chair
Daniel J. Cole, MD, Executive Vice Chair
John Shin, MD, Director, Medical Student Education

Scope and Objectives

The medical student program in the Department of Anesthesiology and Perioperative Medicine focuses on the delivery of perioperative care to surgical patients. During their training in the department, students develop clinical skills of medical management of surgical patients, techniques of monitoring and invasive line placement, and airway management skills. They are assigned to work with an attending anesthesiologist and/or anesthesia resident on a daily basis in one of the operating room locations and participate in the preoperative evaluation and preparation of their patients and development of an anesthetic plan. Students then observe how to prepare for and execute their anesthetic plan. They have opportunity to perform procedures as their abilities and the situation permit. In addition, the department’s Human Patient Simulator provides students with a simulated operating room setting where a variety of clinical situations are initiated so they can practice their clinical skills. Students are also expected to attend clinically oriented lectures on a wide range of anesthesia topics, including physiology, pharmacology, and critical care.

For more details on the Department of Anesthesiology and Perioperative Medicine and a list of the courses offered, see the department website.

Anesthesiology

Lower-Division Courses

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Course

199. Directed Research in Anesthesiology. (2 to 8) Tutorial, two hours. Limited to juniors/seniors. Supervised individual research or investigation under guidance of faculty mentor. Culminating paper required. May be repeated for credit. Individual contract required. P/NP or letter grading.

ANTHROPOLOGY

College of Letters and Science
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Los Angeles, CA 90095-1553

Anthropology
310-825-2055

Department e-mail

C. Jason Throop, PhD, Chair
Erin K. Debenport, PhD, Graduate Vice Chair
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Professors

H. Samy Alim, PhD (David O. Sears Presidential Endowed Professor of Social Sciences)
Andrew Aptor, PhD
H. Clark Barrett, PhD
Philippe I. Bourgois, PhD, in Residence
P. Jeffrey Brantingham, PhD
M. Kamari Clarke, PhD
Jason De Leon, PhD
Alessandro Duranti, PhD
Daniel M.T. Fessler, PhD (Bedari Kindness Institute Endowed Professor)
Alan Page Fiske, PhD
Linda C. Garro, PhD
Akhil Gupta, PhD
Laurie K. Hart, PhD
Douglas W. Hollan, PhD
Christopher M. Kelty, PhD
Paul V. Kroskrity, PhD
Richard G. Leslie, PhD (Marlyn Beaudry-Corbett Endowed Professor of Mesoamerican Archaeology)
Nancy E. Levine, PhD
Purnima Mankekar, PhD
Joseph H. Manso, PhD
Norma C. Mendoza-Denton, PhD
Kyeyoung Park, PhD
Susan E. Perry, PhD
David D. Shorter, PhD
Susan E. Sliyomovics, PhD
Monica L. Smith, PhD (Navin and Pratima Doshi Professor of Indian Studies)
Shannon E. Speed, PhD
James W. Stigler, PhD
C. Jason Throop, PhD
Yunxiang Yan, PhD

Professors Emeriti

Jeanne E. Arnold, PhD
Nicholas G. Blumarine Jones, PhD
Robert Boyd, PhD
Karen B. Brodkin, PhD
Carole H. Browner, PhD
Christopher B. Donnan, PhD
Marjorie Hamness Goodwin, PhD
Sondra Hale, PhD
Allen W. Johnson, PhD
Gail E. Kennedy, PhD
Claudia I. Mitchell-Kerman, PhD
Michael Moerman, PhD
Philip L. Newman, PhD
Elinor Ochs, PhD
Sherry B. Ortner, PhD
Wendell H. Osvald, PhD
Merrick Posnansky, PhD
Dwight W. Read, PhD
Joan B. Silk, PhD
Charles S. Stanish, PhD
Mariko Tamanoi, PhD
Russell Thornton, PhD
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Aomar Boum, PhD
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Erica A. Cartmill, PhD
Jessica R. Cattelino, PhD
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Min Li, PhD
Jessica W. Lynch Alfaro, PhD
Jemima Pierre, PhD
Brooke A. Scelza, PhD
Gregson T. Schachner, PhD

Assistant Professors
Sailih Can Apiksoz, PhD
Hannah C. Appel, PhD
Molly M. Fox, PhD
Brian M. Wood, PhD

Adjunct Professor
Robert B. Lemelson, PhD

Adjunct Associate Professors
Tamar Kremer-Sadlik, PhD
Tritia Toyota, PhD

Adjunct Assistant Professor
Thomas A. Wake, PhD

Scope and Objectives
Anthropology, the broadest of the social sciences, is the study of human kind. One of the strengths of anthropology as a discipline is its holistic or integrative approach; it links the life sciences and the humanities and has strong ties with disciplines ranging from biology and psychology to linguistics, political science, and the fine arts. Anthropological study is appropriate for people with a wide variety of interests: human cultures and civilizations both present and past, human and animal behavior, particular regions of the world such as Africa, Asia, Latin America, Oceania, etc.

The Department of Anthropology recognizes the following four fields in anthropology:
Archaeology is the study of human cultures and the natural, social, ideological, economic, and political environments in which they operated in the recent and distant past. The graduate and undergraduate programs focus on methods of discovery (field and laboratory courses), strategies of analysis pertaining to long-term cultural evolution (theory, analytical, and topical courses), and the unfolding of prehistory in many regions of the world, including North America, Mesoamerica, South America, and several parts of the Old World (regional courses). Faculty members have long-standing interests in the origins and evolution of complexity, including early human adaptations, the political organization of complex hunter/gatherers, the origins of early village life, and the emergence and florescence of ancient cities and states. Faculty members maintain programs of field research involving many students in North America, Mesoamerica, South America, and East and South Asia.

Biological anthropology is the study of humans and other primates from a Darwinian point of view. The program focuses on the evolutionary ecology of early hominids, extant primates, and contemporary humans and includes training in evolutionary theory, behavioral ecology, evolutionary psychology, paleoanthropology, paleoecology, primate behavior, and mathematical modeling. Faculty members associated with the program have engaged in fieldwork in Africa, Central America, and Southeast Asia where ongoing projects include work on primate behavior, hominid evolution, and evolutionary psychology.

Linguistic anthropology is an interdisciplinary field that addresses the manifold ways in which language, interaction, and culture mutually organize each other in different communities worldwide. Linguistic anthropologists at UCLA have a variety of backgrounds and research interests that include face-to-face communication, language contact and change, language and politics, language socialization across the lifespan, verbal art and performance, and the relation of language to ideology, mind, emotion, and identity. Courses are offered in ethnographic approaches to discourse analysis, field methods, language ideology, conversation analysis, language socialization, and communication in urban communities, as well as on cross-cultural language practices.

Sociocultural anthropology concerns the examination and understanding of social and cultural systems and processes, and the human capacities that enable them. Its goal is to understand their operation in specific settings and to understand the experience of individuals who live in these diverse systems. Faculty members have engaged in fieldwork in almost every area of the world, but most notably in Africa, Latin America, East and Southeast Asia, and Oceania. They have also engaged in ethnographic research among Americans with diverse ethnic identities and in various institutional settings.

Bridging the four primary subfields are several other dimensions of anthropological study, including psychocultural anthropology and medical anthropology. Courses are also offered in the history and theory of anthropology and a wide range of anthropological methods.

The department offers Bachelor of Arts and Bachelor of Science degrees and a minor in Anthropology for undergraduate students; the graduate program leads to the Master of Arts and PhD degrees. Studies in anthropology are particularly valuable for students planning careers in which an understanding of human behavior and cultural diversity is desirable, such as business, education, law, medicine, nursing, public health, social welfare, and urban planning. Because of the breadth of outlook, anthropology also offers an ideal basis for those seeking a general education in our increasingly interdependent world.

Preparation for the Major

Required: Anthropology 1, 2, 3, 4. Each course must be taken for a letter grade, and students must have an overall grade-point average of 2.0 or better.

Transfer Students
Transfer applicants to the Anthropology BA major with 90 or more units must complete as many of the following introductory courses as possible prior to admission to UCLA: one human evolution course, one archaeology course, one sociocultural anthropology course, and one culture and communication course.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

The Major

The major is designed for students interested in an anthropological understanding of human behavior. One of the strengths of anthropology is its cross-cultural holistic and integrative approach with many fields, such as biology, history, linguistics, the social sciences, and many of the humanities.

To gain a comprehensive understanding of the discipline as a whole, students must take two courses in the sociocultural anthropology field and one course in each of the other three fields (see Scope and Objectives). Students may take any upper-division course in the given area to fulfill this requirement. Each course must be taken for a letter grade, and students must have an overall grade-point average of 2.0 or better.

Students must complete 11 courses (44 to 52 units) as follows: (1) two upper-division courses in the sociocultural anthropology field and one in each of the other three fields (archaeology, biological anthropology, and linguistic anthropology), (2) one upper-division regional cultures course, (3) one upper-division history/theory course selected from 100, 110, 111, 120, 124Q, 130, 131, 136A, 140, M150, (4) one upper-division methodology course selected

Undergraduate Study
Anthropology BA

Learning Outcomes
The Anthropology major has the following learning outcomes:

• Broad knowledge of archaeological, biological, sociocultural, and linguistic anthropology
• Familiarity with the history, methods, and current theoretical debates in the field
• General knowledge of, and developed skills working with, empirical and anthropological evidence
• Proficiency in library research, data interpretation, synthesis, and writing
• Proficiency formulating and answering relevant questions through critical reasoning, making use of current primary scientific literature, identification of appropriate sources, reading and understanding of papers, and discriminating research quality

Students are strongly encouraged to enroll in 3 to 4 units of 89 and/or 189 courses to gain small seminar experience. Ideally, at least one of the units should be at the upper-division level.

Anthropology BS
Learning Outcomes
The Anthropology major has the following learning outcomes:

• Broad knowledge of archaeological, biological, sociocultural, and linguistic anthropology
• Familiarity with the history, methods, and current theoretical debates in the field
• General knowledge of, and developed skills working with, empirical and anthropological evidence
• Proficiency in library research, interpreting data, synthesis, and writing
• Demonstrated knowledge and understanding of mathematics, physical sciences, and life sciences to meet pre-medical-school requirements
• Proficiency formulating and answering relevant questions through critical reasoning, making use of current primary scientific literature, database searches, identification of appropriate sources, reading and understanding of papers, and discriminating research quality

Preparation for the Major
Required: Anthropology 1, 2, 3, 4; Chemistry and Biochemistry 1A, 14B, 14BL, and 14C, or 20A, 20B, 20L, 30A, and 30AL; Life Sciences 30A, 30B, and 40 or Statistics 13, or Mathematics 3A, 3B, 3C, and Statistics 12, or Mathematics 31A, 31B, and Statistics 12; Physics 5A, 5B, and 5C.

Students must also complete one of two life sciences sequences—either Life Sciences 1, 2, 3, 4, and 23L, or 7A, 7B, 7C, and 23L. They may not substitute courses in either sequence.

Each course must be taken for a letter grade, and students must have an overall grade-point average of 2.0 or better.

Transfer Students
Transfer applicants to the Anthropology BS major with 90 or more units must complete as many of the following introductory courses as possible prior to admission to UCLA: one human evolution course, one archaeology course, one sociocultural anthropology course, one culture and communication course, two general biology courses for majors, one year of calculus, one year of general chemistry with laboratory, one year of general physics with laboratory, and one lower-division organic chemistry course.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

The Major
The major supplies an overview of human evolution and is designed to prepare students for careers in anthropology and the health sciences, including medicine, dentistry, public health, and nursing. Each course must be taken for a letter grade, and students must have an overall grade-point average of 2.0 or better.

Students must complete nine courses as follows: (1) two upper-division courses in the sociocultural anthropology field and one in each of the other three fields (archaeology, biological anthropology, and linguistic anthropology), (2) one upper-division regional cultures course, (3) one upper-division history/theory course selected from 100, 110, 111, 120, 124Q, 130, 131, 136A, 140, M150, and (4) two additional upper-division anthropology courses.

Students are strongly encouraged to enroll in 3 to 4 units of 89 and/or 189 courses to gain small seminar experience. Ideally, at least one of the units should be at the upper-division level.

Honors Program
The honors program offers research-oriented students an opportunity to engage in original research and analysis under the close supervision of faculty members and culminates in an honors thesis. To be admitted students should have a cumulative grade-point average of 3.0 overall and a 3.5 cumulative GPA in their upper-division Anthropology courses. The application for admission must be submitted during fall quarter. Ideal candidates should have junior or senior standing and have completed at least two upper-division anthropology courses. The proposal, research, analysis, and writing of the paper take place over four terms via Anthropology 191HA through 191HD. Course 191HA is taken in winter quarter and 191HB in spring quarter. Research should be done in summer, and courses 191HC and 191HD are taken in fall and winter quarters of the graduation year. Students should contact the departmental honors adviser early in their studies for more information.

Anthropology Minor
Students who wish to take a series of courses in anthropology, but major in another discipline, may be interested in the Anthropology minor. Students select courses from the four fields within anthropological perspective. Formal linguistic methods compared with ethnographically oriented methods focused on context-bound temporal unfolding of communicative activities. Topics include language in everyday life and ritual events, socialization, literacy, multilingualism, miscommunication, political discourse, and art-making as cultural activity. P/np or letter grading.

Anthropology
Lower-Division Courses
1. Human Evolution. (Formerly numbered 7.) Lecture, three hours; discussion, one hour. Required as preparation for both bachelor's degrees. Evolutionary processes and evolutionary past of human species. P/np or letter grading.
2. Archaeology: Introduction. (Formerly numbered 8.) Lecture, three hours; discussion, one hour; fieldwork. Required as preparation for both bachelor's degrees. General survey of field and laboratory methods, theory, and major findings of anthropological archaeology; including case-study guest lectures presented by several campus archaeologists. P/np or letter grading.
3. Culture and Society. (Formerly numbered 9.) Lecture, three hours; discussion, one hour; fieldwork. Required as preparation for both bachelor's degrees. Introduction to study of culture and society in comparative perspective. Examples from societies around world to illustrate basic principles of formation, structure, and distribution of human institutions. Of special concern is contribution and knowledge that cultural diversity makes toward understanding problems of modern world. P/np or letter grading.
4. Culture and Communication. (Formerly numbered 33.) Lecture, three hours; discussion, one hour. Required as preparation for both bachelor's degrees. Introduction to study of communication from anthropological perspective. Formal linguistic methods compared with ethnographically oriented methods focused on context-bound temporal unfolding of communicative activities. Topics include language in everyday life and ritual events, socialization, literacy, multilingualism, miscommunication, political discourse, and art-making as cultural activity. P/np or letter grading.
5. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/np grading.
117Q. Introduction to Archaeological Sciences. (4) (Same as Ancient Near East CM169.) Lecture, three hours. Understanding of newly introduced methods and techniques throughout field of archaeology to implement them and to appreciate and evaluate results of their use by others who have embedded them in their scholarly publications or theoretical models. Systematic instruction in digital data management and mining, scientific analysis of materials (including geological and biochemical techniques), and visual presentation of data and research results (ranging from simple graphs to virtual reality). Concurrently scheduled with course CM210Q. P/NP or letter grading.

117M. Archaeology of Egypt and Sudan. (4) (Formerly numbered M119.) Lecture, three hours. Survey of the historical and cultural development of the Egyptian Kushite and Nubian civilizations from the predynastic to the Roman period. P/NP or letter grading.

118Q. Religion and Urbanism. (4) Lecture, three hours; discussion, one hour (when scheduled). Religion and urbanism are closely intertwined, and both have played a central role in shaping human societies. This course examines the interplay between religious beliefs and practices and the development of urban centers, focusing on the historical and cultural contexts of ancient and modern cities.
The page contains information about courses in Biological Anthropology. It mentions courses with titles such as "Animal Communication," "Behavior in Humans and Other Animals," and "Paleopathology." The courses cover topics ranging from animal behavior to cultural theory. The text also includes references to topics like migration, anthropology of food, and environmental change. The courses are designed for various levels, from introductory to advanced, and are tailored to different areas of interest within the field of anthropology.
on early foundations and historical development of field. Topics include study of personality, pathology and deviance, altered states of consciousness, cognition, motivation, and emotion in different cultural settings. 136B. Current Topics and Research. (For- merly numbered 135S.) Lecture, three hours. Requisites: course 3. Examination of mutual relations between anthropology and recognition of, responses toward, and forms of deviant and abnormal behavior. P/ NP or letter grading.

137P. Anthropology of Deviance and Abnormality. (Formerly numbered 135T.) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Survey of field of psychological anthropology, with emphasis on current topics and research. Topics include study of personality, pathology and deviance, altered states of consciousness, cognition, motivation, and emotion in different cultural settings.

137Q. Psychoanalysis and Anthropology. (Formerly numbered 135.) Lecture, three hours; discussion, one hour (when scheduled). Exploration of mutual relations between anthropology and psychoanalysis, considering both theory and method. History and current developments in psychoanalysis; anthropological critiques of psychoanalytic theory and method, toward cross-cultural psychoanalytic approach. P/ NP or letter grading.

138P. Field Methods in Cultural Anthropology. (Formerly numbered 135T.) Lecture, three hours; discussion, one hour. Designed for juniors/seniors. Introduction to skills and tools of data ascertainment through fieldwork in cultural anthropology. Emphasis on techniques, methods, and concepts of ethnographic research and how basic observational information is systematized for presentation, analysis, and cross-cultural comparison. P/ NP or letter grading.

M139P. Fieldwork in Asian American and Pacific Islander Communities. (Formerly numbered M139P.) (Same as Asian American Studies M143A.) Lecture, three hours; discussion, one hour. Designed for juniors/seniors. Examination of this phenomenon. May be concurrently used with course C244M. P/ NP or letter grading.

140. Study of Social Systems. (Formerly numbered 150.) Lecture, three hours; discussion, one hour (when scheduled). Examination of variation in sociocultural systems, with special emphasis on forms of inequality. Basic frameworks of anthropological analysis; historical context and development of social anthropology discipline. P/ NP or letter grading.

141. Careers in Anthropology. (Formerly numbered 151.) Lecture, three hours. Overview of various career paths for students with degrees in anthropology. Helps students develop academic and professional skills in preparation for future careers after UCLA. Focus on ways in which one can apply anthropological concepts, research methodologies, and analytical skills to range of careers. Guest speakers discuss how they have applied their anthropological degrees to their work outside of academia. P/ NP or letter grading.

142P. Anthropology of Religion. (Formerly numbered 156.) Lecture, three hours. Survey of various methodological perspectives on study of religion ideologies and action systems, including understanding particular religions through descriptive and structural approaches, and identification of social and psychological factors that contribute to variation in religious systems cross-culturally. P/ NP or letter grading.

142Q. Ethnic and Religious Minorities. (Formerly numbered 154.) Lecture, three hours. Analytical overview of ethnic and religious minorities in contemporary Middle East and North African regions structured around sociocultural experiences of ethnic and religious groups to understand their political and economic realities. P/ NP or letter grading.

143. Economic Anthropology. (Formerly numbered 153P) Lecture, three hours. Requisite: course 3. Introduction to anthropological perspectives for understanding role of economic factors to be placed in their larger social, political, and cultural contexts; examination of modes of production, distribution, and consumption of goods and services in their relation to social networks, power structures, and institutions of family, kinship, and class. P/ NP or letter grading.

C144. Method, toward cross-cultural psychoanalytic approach. P/ NP or letter grading.

M144P. Constructing Race. (Formerly numbered M159P) (Same as African American Studies M159P and Asian American Studies M158P) Lecture, three hours; discussion, one hour (when scheduled). Exploration of the socially constructed category, from anthropological perspective. Consideration of development, diversity and contradiction in it by listening to voices of Asian and African American women. P/ NP or letter grading.

144Q. Anthropologists and Racism, Colonialism, and Development of Anthropology in America. (Formerly numbered M143P) Lecture, three hours. Recommended requisite: course 160A. Examination of long-standing contentious relations between American Indians and discipline of anthropology and history of anthropological study of American Indians in United States. Consideration of way anthropologists have contributed to this, and marginalization—eigen projection for Indian American society. P/ NP or letter grading.

C145. Repatriation of Native American Human Remains and Cultural Objects. (Formerly numbered M151Q) Lecture, three hours. Requisite: course 3. Examination of understandings of kinship in cross-cultural perspective and impact of kinship on interpersonal relationships, gender roles, and sociocultural systems. Reconsideration of data from formal ethnographic accounts. P/ NP or letter grading.

M145P. Marriage, Family, and Kinship. (Formerly numbered M151P) (Same as Gender Studies M154P) Lecture, three hours. Requisite: course 3. Examination of understandings of kinship in cross-cultural perspective and impact of kinship on interpersonal relationships, gender roles, and sociocultural systems. Reconsideration of data from formal ethnographic accounts. P/ NP or letter grading.

M145Q. Selected Topics in Gender Systems. (Formerly numbered M154Q) (Same as Gender Studies M154Q) Lecture, three hours. Requisite: course 3. Examination of understandings of kinship in cross-cultural perspective and impact of kinship on interpersonal relationships, gender roles, and sociocultural systems. Reconsideration of data from formal ethnographic accounts. P/ NP or letter grading.


146. Urban Anthropology. (Formerly numbered 151R) Lecture, three hours; discussion, one hour (when scheduled). Designed for junior/senior social sciences majors. Introduction to modern urban life. Examination of notion of urban space in context of social relations by drawing from historical and cross-cultural urban ethnographies. Urban space is understood according to needs and actions of urban subjects. Exploration of ways in which class, gender, race, and geography shape or contest perspectives and priorities on urban issues. P/ NP or letter grading.

147. Development Anthropology. (Formerly numbered 161.) Lecture, three hours; discussion, one hour (when scheduled). Recommended requisite: course 3. Designed for juniors/seniors. Comparative study of planned and unplanned development, in particular as it affects rural societies. Emphasis on impact of capital, technological change and gender differences, economic differentials, and class, urban/rural relations, and migration issues across the issues in light of case studies. P/ NP or letter grading.

154B. Past People and Their Lessons for Our Own Future. (Formerly numbered M158BQ.) Lecture, three hours; discussion, two hours. Recommended prerequisite: course 3. Introduction to sociocultural contexts of historical and religious groups to understand their political, social and economic realities. P/ NP or letter grading.

154D. Past People and Their Lessons for Our Own Future. (Formerly numbered M158Q) Lecture, three hours; discussion, two hours. Examination of modern and past peoples that met varying fates, as background to examination of how other modern peoples are coping or failing to cope with similar issues. P/ NP or letter grading.

154L. Linguistic Anthropology. (Formerly numbered M146L) Lecture, three hours; discussion, one hour; fieldwork, two hours. Requisite: course 4 or Linguistics 20. Study of language as form of culture and its relation to social behavior and to language; emphasis on structure and change. Focus on the relationship of language to other aspects of culture and society. P/ NP or letter grading.

154Q. Linguistic Anthropology. (Formerly numbered M146Q) Lecture, three hours; discussion, one hour. Examination of modern and past peoples that met varying fates, as background to examination of how other modern peoples are coping or failing to cope with similar issues. P/ NP or letter grading.

154R. Linguistic Anthropology. (Formerly numbered M146R) Lecture, three hours; discussion, one hour. Exploration of processes through social and political change and contradiction in it by listening to voices of Japanese women in various historical contexts. P/ NP or letter grading.
which children learn structures and practices of language and become competent participants in linguistic and social worlds around them. Examination of language use and socialization over childhood, across communities of practice, and across different ethnic and socioeconomic groups. Bridges work from anthropology, psychology, linguistics, and cognitive science. Topics include cross-cultural perspectives on child development and wide range of methodological approaches to the investigation of ways in which language development and socialization interface with culture, modality, inequality, education, and cognition. P/ NP or letter grading.

152Q. Language and Social Organization through Life Cycle. (Formerly numbered 149F) Lecture, three hours. Requisite: course 4. Examination of forms of participation and talk-interaction across various phases of life cycle from birth to old age, using video-taped interactions of naturally occurring activities. How language and interaction within specific contexts are used to constitute identity and how interaction order resulting from face-to-face instruction provides building blocks for larger formations that arise from such activities. P/NP or letter grading.

152R. Language, Culture, and Education. (Formerly numbered 149D) Lecture, three hours. Requisite: course 4. Examination of various ways language, culture, and language use influence educational processes and outcomes, but also very conceptions of what normal development processes and desirable educational outcomes are. P/NP or letter grading.

153. Language and Identity. (Formerly numbered 149A) Lecture, three hours. Requisite: course 4. Language as social phenomenon. Introduction to several angles from which language use can be critically examined as integral to interactions between individuals and between social groups. P/NP or letter grading.

154P. Multilingualism: Communities and Histories in Contact. (Formerly numbered 149C) Lecture, three hours; discussion, one hour. Requisite: course 4. Examination of communicative, political, and poetic aspects of use of two or more languages (multilingualism) by individuals and by groups. Broader themes in social theory, anthropological inquiry, sociolinguistics, and literary studies in lectures to contextualize class readings. P/NP or letter grading.

154Q. Gender and Language in Society. (Formerly numbered 149B) Lecture, three hours; discussion, one hour (when scheduled). Requisite: course 4. Examination of role language plays in social construction of gender identities and ways in which gender impacts language use and ideologies. P/NP or letter grading.

154SL. Gender and Language across Communities. (Formerly numbered 149SL) Lecture, three hours; discussion, one hour, required. Requisite: course 4. Examination of gender practices and their contribution to expression of gendered identities in different social groups and situations. Completion of 20 hours of service learning in community service program coordinated through Center for Community Learning required. Active participation in organized service that is conducted in and meets needs of communities. P/NP or letter grading.

155. Native American Languages and Their Speakers. (Formerly numbered C155L) Lecture, three hours, Requisite: course 4 or Native American Indian Studies M10. Introduction and comparative analysis of socio-cultural aspects of language ideologies and language use in Native American communities and societies through Americanization. Examination of cultural diversity of discourse practices for both everyday forms of speaking as well as specialized and particular cultural contexts. Role of language and communication in Native American education contexts is also examined. Considerable attention is paid to Native American verbal art because of its cultural importance. Examination also of language shift away and current efforts by indigenous groups to reclaim and revitalize language. Role of linguistic racism directed at Native American language and socioeconomic influence of nation-states is also examined. P/NP or letter grading.

156L. Language Endangerment and Linguistic Revitalization. (Formerly numbered M165) Lecture, three hours: activity, one hour. Requisites: course 4, American Indian Studies M162.) Lecture, three hours. Examination of causes and consequences of endangerment and revitalization of languages. Projected loss of as many as half of world's languages by end of 21st century can only be explained as outcome of such factors as nationalism, global economic forces, language ideological change, and language shift away from indigenous and smaller indigenous languages. Since loss of such languages means both re-utilization of cultural as well as linguistic diversity, many affected communities have engaged in various language revitalization efforts that have been both successful and unsuccessful. P/NP or letter grading.

156W. Talk and Body. (Formerly numbered M148W) (Same as Communication M123W) Lecture, four hours; discussion, one hour. Requisite: English Composition 3. Relationship between language and human body ranging topics. New approaches to phenomena such as embodiment become possible when body is analyzed, not as isolated entity, but as visible agent whose talk and action are lodged within social and cultural interaction and rich settings where people pursue courses of action that count in their lives, Satisfies Writing II requirement. Letter grading.

158. Culture of Jazz Aesthetics. (Formerly numbered M142R) (Same as Ethnomusicology M130 and Global Jazz Studies M130.) Lecture, three hours. Recommended requisite: course 3 or 4 or Ethnomusicology 20A or 20B or 20C. Aesthetics of jazz from point of view of musicians who shaped jazz as art form in 20th century. Listening to and interacting with professional jazz musicians who answer questions and give musical demonstrations. Analytical resources and historical knowledge of musicians and ethnomusicologists combined with those interested in jazz as cultural tradition, P/NP or letter grading.

159. Selected Topics in Linguistic Anthropology. (Formerly numbered 147L) Lecture, three hours; discussion, one hour (when scheduled). Study of selected topics in linguistic anthropology. Consult Schedule of Classes for topics and instructors. May be repeated for credit with topic change. P/NP or letter grading.

Regional Cultures

160A. Native North Americans. (Formerly numbered 172A) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Consideration of diversity of Native American societies north of Mexico, including their origins, formation, and development. Particular attention to subsistence economies and their relationship to social institutions and cultural practices, especially religion. P/NP or letter grading.

160B. Change and Continuity among Native North Americans. (Formerly numbered 172B) Lecture, three hours. Requisite: course 160A. Consideration of tremendous change Native American societies and cultures have undergone since European contact. Emphasis on patterns of adaptation and continuity as Native Americans confronted colonization and its implications. P/NP or letter grading.

161. Latin American Communities. (Formerly numbered 173Q) Lecture, three hours. Overview of social and cultural anthropology of small communities in Latin America. Similarities and contrasts in social organization and interpersonal relations described in context of economic, political, and cultural environments. P/NP or letter grading.

162. Ethnography of South America. (Formerly numbered 174P) Lecture, three hours. Introduction to ethnography of South American Indians, with special emphasis on Lowland South America. Survey of history and development of man and society in this world area utilizing current cultural and historical perspectives. May be taken for credit with topic change. P/NP or letter grading.

163P. Ideology and Social Change in Contemporary China. (Formerly numbered 175Q) Lecture, three hours. Requisite: course 126 (or scheduled), Introduction to sociocultural changes in China from 1949 to present. Topics include ideology and politics in the post-Mao life, social stratification and mobility, cultural construction of socialist person, changes in courtship, marriage, and family, and political economy of reforms in post-Mao era. P/NP or letter grading.

163Q. Societies of Central Asia. (Formerly numbered 175S) Lecture, three hours. Overview of contemporary Japanese society. General introduction, kinship, marriage and family life, social mobility and education, norms and values, religions, patterns of interpersonal relations, social deviance. P/NP or letter grading.

166P. Sub-Saharan Africa. (Formerly numbered 171.) Lecture, three hours. Issues of ecology and political economy; competing claims of colonialism, nationalism, and current challenges for development; changes in social relations. Examination of Africa's significance to development of anthropology. Cultural background for understanding events in contemporary Africa provided. P/NP or letter grading.

M166Q. Culture Area of Maghrib (North Africa). (Formerly numbered M171P) (Same as Arabic M171 and History M108C.) Lecture, three hours. Designed for juniors/seniors. Introduction to North Africa, especially Morocco, Algeria, Tunisia, and Libya, also known as Maghrib or Timbuktu. Topics include changing notions of personal, tribal, ethnic, linguistic and religious identities; colonialism, decolonization, and decolonial thought; changing representations of Islam, and religions in region's public spaces. P/NP or letter grading.

167. Culture Area of Middle East. (Formerly numbered 176B) Lecture, three hours. Study of Middle East has suggested many historical and developmental history of humankind, evolution of human society, birth of monotheism, and origin of agriculture, trade, and cities. Presentation of anthropological material relevant to understanding Middle East as culture area, and Islam as basis of its shared tradition. P/NP or letter grading.

168P. Cultures of Pacific. (Formerly numbered 177.) Lecture, three hours. Three-week study of the areas of Australia, Melanesia, Polynesia, and Micronesia. General geographical features, prehistory, and language distribution of whole region. Distinctive sociocultural features of each cultural area presented in context of their adaptive significance. P/NP or letter grading.

M168Q. Ethnic Identity and Ethnic Relations in Hawai‘i. (Formerly numbered M177P) (Same as Asian American Studies M143C.) Lecture, three hours; discussion, one hour (when scheduled). Study of theoretical approaches and basic concepts in study of ethnic identity, ethnic relations, historical and contemporary aspects of ethnic identity and ethnic relations in Hawai‘i. Given in Hawai‘i, P/NP or letter grading.

169. Selected Topics in Regional Cultures. (Formerly numbered 178.) Lecture, three hours; discussion, one hour (when scheduled). Study of selected topics in regional cultures. Consult Schedule of Classes for topics and instructors. May be repeated for credit with topic change. P/NP or letter grading.
Specialized Studies

188SA. Individual Studies for USIE Facilitators. (1) Tutorial, to be arranged. Enforced corequisite: Honors College 190E. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to discuss selected USIE seminar topic, conduct preparatory research, and begin preparation of syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.

188SB. Individual Studies for USIE Facilitators. (1) Tutorial, to be arranged. Enforced corequisite: course 188SA. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to finalize course syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.

188SC. Individual Studies for USIE Facilitators. (2) Tutorial, to be arranged. Enforced corequisite: course 188SB. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor while facilitating USIE 885 course. Individual contract with faculty mentor required. May not be repeated. Letter grading.

189. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be repeated for credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

189HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College-Honors Program. Designed as adjunct to upper-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

191. Variable Topics Research Seminars: Anthropology. (4) Seminar, three hours. Research seminar on selected topics in anthropology. Reading, discussion, and development of culminating project. Consult Schedule of Classes for topics and instructors. May be repeated for credit with topic change. P/NP or letter grading.

191HA. Beginning Seminar. (4) Seminar, three hours. Limited to anthropology honors program students. Survey of major research strategies in anthropology to aid honors students in developing research proposals. Letter grading.

191HB. Field Methods. (4) Seminar, three hours. Limited to anthropology honors program students. Survey of major field methods in anthropology to prepare students to conduct their own field research. Letter grading.

191HC. Data Analysis. (4) Seminar, three hours. Limited to anthropology honors program students. Survey of major forms of data analysis in anthropology to aid honors students in analysis of their own research data. Letter grading.

191HD. Writing for Anthropology. (4) Seminar, three hours. Limited to anthropology honors program students. Teaching of writing skills, with focus on how to write honors theses. Letter grading.

191HE. Writing for Publication and Conference Presentations. (4) Seminar, three hours. Limited to anthropology honors program students. Preparation of honors theses for publication and for conference presentations and posters. Letter grading.

193. Journal Club Seminars: Anthropology. (1) Seminar, one hour. Limited to undergraduate students. Discussion of current research in discipline. May be linked with speaker series. May be repeated for credit with topic change. P/NP grading.

194. Research Group Seminars: Anthropology. (1) Seminar, one hour. Limited to undergraduate students who are part of research group or internship. Discussion of research methods and current literature in discipline or of research of faculty members or students. May meet concurrently with graduate research seminar. May be repeated for credit with topic change. P/NP grading.

195CE. Community and Corporate Internships in Anthropology. (4) Tutorial, to be arranged. Fieldwork, eight to 10 hours. Limited to juniors/seniors. Enforced corequisite: course 190E. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to discuss selected USIE seminar project, conduct preparatory research, and begin preparation of syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.

195CE. Community and Corporate Internships in Anthropology. (4) Tutorial, to be arranged. Fieldwork, eight to 10 hours. Limited to juniors/seniors. Enforced corequisite: course 190E. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to discuss selected USIE seminar project, conduct preparatory research, and begin preparation of syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.
CM210Q. Introduction to Archaeological Sciences. (4) (Same as Ancient Near East CM226R.) Lecture, three hours. Basic understanding of newly introduced methods and techniques throughout field of archaeology to implement them and to appreciate and evaluate results of their use by others who have embodied them in their scholarly publications or theoretical models. Systematic instruction in digital data management and mining, scientific analysis of materials, and human and archaeological techniques, and visual presentation of data and research results (ranging from simple graphs to virtual reality). Concurrently scheduled with course CM110Q. S/U or letter grading.

211. Classification in Archaeology: Method and Theory. (4) Seminar, three hours. Limited to graduate anthropology and archaeology students. Discussion of issues and problems in defining and classifying artifacts along with an examination of the nature and limits of different methods of classification. S/U or letter grading.

212Q. Archaeology of Urbanism. (4) Seminar, three hours. Detailed examination in urban sociological analysis of archaeological evidence. Topics may include theoretical and methodological frameworks of research, historical archaeology, archaeology of trade and their influence on social development, archaeology of regional, archaeological reflections of commerce and global economy, ideational systems, and social inequality. S/U or letter grading.

212P. Explanation of Societal Change. (4) Seminar, three hours. Devoted to present state of research in psychocultural studies. Survey of work in child development and socialization, personality, psychobiology, transpersonal psychology, deviance, learning, perception, cognition, and psychocultural perspectives on change. S/U or letter grading.

213. Variable topics course on important theoretical subdisciplinary issues that have guided arguments about how archaeology and anthropology have been and are embedded in their scholarly publications or theoretical models. Current research in social dynamics as cities are considered in intermediate societies, materialist/idealist assumptions and debates that animate archaeological and anthropological work, and new perspectives on concept of culture. S/U or letter grading.

212R. Experimental Biological Anthropology. (2) Seminar, three hours. Designed for graduate students. Basic topics to be announced. Emphasis on nature of hypotheses and their testing in ongoing student and faculty research. May be repeated for credit. S/U or letter grading.

214. Selected Topics in Prehistoric Civilizations of New World. (4) Seminar, three hours. Mesoamerican and Andean civilizations normally constitute major focus of seminar. May be repeated for credit. S/U or letter grading.

M216. Topics in Asian Archaeology. (4) (Same as Art History M256B.) Seminar, three hours. Designed for graduate students. Topics may include identification of ethnic groups in archaeology, archaeology of religion, archaeological reflections of commerce and trade and their ties to human others. Concurrently scheduled with course CM117. S/U or letter grading.

CM217. Selected Laboratory Topics in Archaeology. (4) (Formerly numbered M212S.) (Same as Archaeology M256R.) Lecture, one hour; laboratory, two hours. Designed for graduate students in archaeology or in other departments. Specialized analysis of particular classes of cultural remains. Topic may be one of following: zooarchaeology, paleoethnobotany, ceramic analysis, lithic analysis, rock art, laboratory experience with collections and data. May be repeated for credit with topic change. Concurrently scheduled with course C117. S/U or letter grading.

219. Selected Topics in Anthropological/Archaeological Theory. (4) (Formerly numbered 285P) Seminar, three hours. Designed for graduate students. Variable topics on current important theoretical subjects in anthropological archaeology. Topics include early village societies, specialization and cultural complexity, ethnography for archaeologists, power and hierarchy, and debates on urbanism and exchange systems. May be repeated for credit. S/U or letter grading.

Biological Anthropology


222. Graduate Core Seminar: Biological Anthropology in Review. (4) Seminar, three hours. Graduate core course in biological anthropology. Topics include evolutionary theory, behavior of nonhuman primates, hominid evolutionary history, and contemporary human variation. Concurrently scheduled with course CM221Q. S/U or letter grading.

223. Experimental Biological Anthropology. (2) Seminar, two hours. Research seminar for graduate students conducting experimental research in biological anthropology to assist students in developing research ideas and methods and analyzing results. S/U grading.

229. Current Problems in Biological Anthropology. (4) Formerly numbered 220D.) Seminar, three hours. Delineates contemporary research in biological anthropology (specific topics to be announced). Emphasis on nature of hypotheses and their testing in ongoing student and faculty research. May be repeated for credit. S/U or letter grading.

Sociocultural Anthropology


232P. Anthropology and Media Theory. (4) Formerly numbered 233SR.) Seminar, three hours. Limited to graduate students. Examination of theoretical assumptions and debates that animate visual anthropology very broadly defined, including issues of interpretation, production, and reception of visual media, which includes ethnographic, documentary, and feature films, as well as television programming. S/U or letter grading.

232Q. Ethnographies of Information Technology. (4) Formerly numbered 233T.) Seminar, three hours. Emerging work on new information economy, with emphasis on ethnography. Reading of anthropological work and materials from range of disciplines, including sociology, geography, urban studies, and management studies. S/U or letter grading.

233P. Advanced Seminar: Medical Anthropology. (4) Formerly numbered M233P.) Seminar, three hours. Limited to 15 students. Examination of interrelationships between society, culture, ecology, health, and illness. Bases for written critical analysis and class discussion provided through key theoretical works. S/U or letter grading.

233Q. Latin America: Traditional Medicine, Shamanism, and Folk Illness. (4) Formerly numbered M264.) (Same as Community Health Sciences M264 and Latin American Studies M264.) Lecture, three hours. Recommended preparation: Community Health Sciences 132, bilingual English/Spanish skills. Examination of role of medicine and shamans in Latin America and exploration of how indigenous and mestizo groups diagnose and treat folk illness and Western-defined diseases with variety of health-seeking methods. Examination of art, music, and ritual and case examples reviewing practices via lecture, film, and audioclip. Letter grading.

233R. Health and Culture in America. (4) Formerly numbered M266.) (Same as Community Health Sciences M266 and Latin American Studies M266.) Lecture, three hours. Recommended requisite: Community Health Sciences 132. Health issues throughout Americas, especially indigenous/Mestizo Latin American individuals. Topics include covering politics, economics, history, geography, human rights, maternal/child health, culture,Letter grading.

233T. Narrative and Times of Trouble. (4) Formerly numbered M266N.) Seminar, three hours. Requisites: courses 201B, 202A, 202C, 203C, 204, or 252A. Exploration of how linguistic and psychological/medical anthropology inform each other in relation to narrative and times of trouble. Topics include narrative sense-making in response to illness and misfortune, phenomenology of time, narrative, healing, and experience; remembering through narrative; narrative subjectivity, and narrative and selves in social space. S/U or letter grading.

234. Mind, Medicine, and Culture. (2) Formerly numbered C234A.) Seminar, two hours. Interdisciplinary discussion group hosted by faculty and discussions with scholars from UCLA and beyond. Group provides forum for exploring recent research and classical and contemporary theoretical perspectives that inform psychopathology and medical anthropological research. S/U grading.


236. Seminar: Psychocultural Studies and Medical Anthropology. (4) Formerly numbered 236P.) Seminar, three hours. Topics may include identification of ethnic groups in archaeology, archaeology of religion, archaeological reflections of commerce and trade and their ties to human others. Concurrently scheduled with course CM237. S/U or letter grading.

237. Psychological Anthropology. (4) Formerly numbered M234AQ.) (Same as Psychiatry M721.) Seminar, three hours. Various psychological issues in anthropological analysis of cultural groups. Series of upgrades on basic practice theory framework, with greater attention to issues of power and need to historicize anthropological work, and new perspectives on concept of culture. Topics vary from term to term. May be repeated for credit with topic change. S/U or letter grading.

238. Native American Revitalization Movements. (4) (Same as History M260C.) Lecture, two hours; discussion, one hour. Examination of revitalization movements among native peoples of North America (north of Mexico). Specific revitalization includes Handsome Lake, 1870 and 1890 Ghost Dances, and Peyote Religion. Letter grading.

239. Selected Topics in Field Ethnography. (4 to 8) (Formerly numbered 238P.) Seminar, three hours. Discussion and practicum in various techniques for collecting and analyzing ethnographic field data. S/U or letter grading.

241. Culture, Power, Social Change. (2) Seminar, two hours. Cutting-edge research in sociocultural anthropology. Talks given by scholars from different universities around world and faculty and students from UCLA with discussion regularly attended by students and faculty from wide range of related departments in addition to anthropology. Additional discussions about recently published or unpublished manuscripts. Professionalization sessions for doctoral students. Topics of discussion vary from year to year. S/U grading.


243. Gender Systems. (4) Formerly numbered M263P.) (Same as Gender Studies M653.) Seminar, three hours. Current theoretical developments in understanding gender systems cross-culturally, with emphasis on relationship between systems of gender, economy, ideological systems, and social inequality. Selection of ethnographic cases from recent literature. S/U or letter grading.

244M. Multispecies Anthropology. (4) Lecture, three hours. Survey of human-animal relationships across history, from domestication to present-day debates over animal rights, and very different ways societies distant in time and space from our own have construed inner lives of other species and envision them. Topics of discussion are home-scheduled with course C144M. S/U or letter grading.

C244S. Repatriation of Native American Human Remains and Cultural Objects. (4) (Formerly numbered C269R.) Lecture, two hours; discussion, one hour. Native Americans have recently been successful in obtaining passage of federal and state laws repatriating human remains and cultural objects. Students will examine this phenomenon. May be concurrently scheduled with course C144S. S/U or letter grading.

M245. Critical Theory of African Diaspora. (4) (Same as African American Studies M222.) Seminar, four hours. Introduction to variety of ideas under articulation of construct of African diaspora. Structured through understanding of African diaspora as historic project on African diaspora as distinct intellectual project. Exploration of how scholars have conceptualized and theorized diasporic condition of black peoples. Consideration of who belongs to African diaspora community, and how this community is imagined. S/U or letter grading.

246. Contemporary Problems in Africa. (4) (Formerly numbered 271.) Seminar, three hours. Problematic issues in Africa in light of classical anthropological literature and recent work by anthropologists and other fieldworkers in Africa, with cases from eastern and southern Africa. S/U or letter grading.

M247P. Japan in Age of Empire. (4) (Formerly numbered M276.) (Same as Asian M292 and History M296.) Seminar, four hours. Designed for graduate students. Since late 19th century, Japan expanded its empire into East and Southeast Asia. Coverage of that period and array of anthropological studies conducted in Japan’s colonies and occupied territories in this newly explored area of study of colonialism. S/U or letter grading.

M247Q. Central Asian Studies: Discipline, Methods, Debates. (4) (Formerly numbered M268R.) (Same as History M287 and Near Eastern Languages M287.) Seminar, two hours. Introduction to study of central Asia as practiced in humanities and social sciences disciplines. S/U grading.

247R. Modernity and Taiwan Indigenous Societies. (4) Seminar, three hours. Historical examination of impact of modernization on indigenous populations in Taiwan beginning with Han colonization. Examination of integration of indigenous groups into state politics and market economy, and state-sponsored discourses that forced erasure of indigenous cultures and knowledge. Study of resistance by groups to assimilationist programs. Exploration of new strategies meant to maintain indigenous identities with regard to Han hegemony. Focus on intensification of indigenous peoples’ tie to land. Offers framework to understand Taiwan indigenous peoples’ relationship to Han hegemony. Focus on intensification of indigenous peoples’ experiences and processes and (2) relationship of this consciousness to speakers’ political economic perspectives and to actual communicative conduct. S/U or letter grading.

248. Discourse Laboratory. (2) Seminar, two hours. Interdisciplinary discussion group around in-progress research projects, talks, published articles, and methodological and professional development in linguistic anthropology. S/U grading.

M255. Native American Languages and Discourses of Indigeneity. (4) (Formerly numbered 255.) (Same as American Indian Studies M256.) Seminar, three hours. Preparation: prior coursework in anthropology, linguistics, or American Indian studies. Close reading and discussion of books and articles on topics relating to Native American languages and discourse of indigenous communities. Topics include critical language documentation, multilingualism, indigenous language practices, language ideologies, policies and practices of publication and concealment, language revitalization and protection, and construction of place, storytelling and performance, community/academic collaboration, language as ideological property, linguistic expressions of indigeneity, and cultural sovereignty. Offers resources to understand situation of indigenous languages in wide range of Native American communities. Students perform variety of roles in discussions, an develop book reviews, grant proposals, pedagogical materials, and appropriate sections of their theses and dissertations. S/U or letter grading.

M256. Language, Culture, and Education. (4) Seminar, four hours. Exploration of ongoing movement to reclaim and reimage schooling as site to sustain indigenous, black, Latinx, Asian and Pacific Islander communities, including ways in which identity intersects with gender identity and expression, sexuality, dis/ability, language, migration, place, class, and more. For centuries of teaching and learning, communities have sought to push against ways nation-state schools have devalued communities, their lifeways, and their lives. Most recently, this movement is indebted to several decades of research, theory, and practice in asset-based and strength-based pedagogy tradition. Work on culturally sustaining pedagogy (CSP) has joined these decades (and centuries) of work to offer vision of school for scientific research design. Review of typical research problems and appropriate methods. Students prepare their own research designs and present them for class discussion. S/U or letter grading.

258. Proposal Writing Seminar. (4) (Formerly numbered 260.) Seminar, three hours. Introduction to art of proposal writing. Focus on proposal for anthropological fieldwork, with skillful and useful approach to disciplines and proposal genres. Structured as writing workshop, with weekly writing assignments and group critique. S/U or letter grading.

M284A. Qualitative Research Methodology. (4) (Formerly numbered M292A and Community Health Sciences M216.) Seminar, three hours; laboratory, one hour. Intensive seminar/field course in qualitative research methodology. Emphasis on using qualitative methods and its relevance for evaluation related to healthcare. Letter grading.

284B. Quantitative Research Methodology. (4) (Formerly numbered 284P.) Seminar, three hours. Limited to graduate students. Recommended preparation: research design course. Hands-on approach to qualitative methods used in anthropological research and techniques for analysis of qualitative data. Particular methods depend on and are appropriate to research questions and designs students bring to class. S/U or letter grading.

288. Relational Models Theory and Research Design. (4) Seminar, three hours. Relational models theory (RMT) posits that people in all cultures use combinations of just four relational models (RMs) to organize most aspects of most social coordination: communal sharing, authority ranking, equality ranking, and market pricing. Expressed in ways, the more of these RMs people use these RMs to motivate, generate, constitute, coordinate, judge, and sanction social interaction, RMT aims to account for what is universal and what is variable across cultural boundaries, and for cultural complementarity that specific and whom each relational model operates. Readings may include RMT research in social anthropology, archaeology, social theory, semiotics, linguistics, developmental, cognitive, social, political, moral, clinical, and cultural psychology, neuroscience, evolution, sociology, family studies, philosophy, management, marketing, and consumer psychology, economics, justice, public health, policy and international development. S/U or letter grading.

Specialized Studies

249. Human Complex Systems Forum. (1) Seminar, 90 minutes every other week. Interdisciplinary seminar series to provide students with exposure to current research in understanding of nature of human societies from complexity and multiverse perspective. May be repeated for credit. S/U grading.


299. Selected Topics in Anthropology. (4) (Formerly numbered 297.) Seminar, three hours. Designed for graduate students. Study of selected topics of anthropological interest.
Applied Linguistics

The Department of Applied Linguistics offers Master of Arts (MA), Candidate in Philosophy (CPhil), and Doctor of Philosophy (PhD) degrees in Applied Linguistics. However, the UCLA Academic Senate approved the discontinuance of the graduate degree and certificate programs effective winter quarter 2015. Students currently enrolled in any of the programs may complete them under current requirements.

Undergraduate Study

African Languages BA

The African Languages BA was discontinued effective winter quarter 2015.

Special Studies

375. Teaching Apprentice Practicum. (1 to 4) Seminar, to be arranged. Preparation: apprentice personnel employment as teaching assistant, associate, or fellow. Teaching apprenticeship under active guidance and supervision of regular faculty member responsible for curriculum and instruction at UCLA. May be repeated for credit. S/U grading.

495. Teaching Anthropology. (2 to 4) Seminar/workshop, three hours. Designed for graduate students. Required of all new teaching assistants. Workshop seminar in teaching techniques, including evaluation of each student’s own performance as teaching assistant. Four-day workshop precedes beginning of term, followed by 10-week seminar during term designed to deal with problems and techniques of teaching anthropology. Unit credit may be applied toward full-time equivalence but not toward nine-course requirement for MA. S/U grading.

501. Cooperative Program. (2 to 8) Tutorial, to be arranged. Preparation: consent of UCLA adviser and graduate dean, and host campus instructor, department chair, and graduate dean. Used to record enrollment of UCLA students in courses taken under cooperative arrangements with USC. S/U grading.


597. Preparation for PhD Qualifying Examinations. (2 to 12) Tutorial, to be arranged. S/U grading.


599. Research for PhD Dissertation. (2 to 12) Tutorial, to be arranged. Preparation: apprentice personnel dissertation research or writing. Students must have completed qualifying examinations and ordinarily take no other coursework. S/U grading.

S/U or letter grading.

Lower-Division Course

30W. Language and Social Interaction. (5) Lecture, three hours: discussion, two hours. Enforced requisite: English Composition 3 or 3H or English as a Second Language 36. Not open for credit to students with credit for course 30. Exploration of range of topics related to study of language and social interaction in both mundane and professional settings, particularly how language affects social lives and how social organization affects use of language. Topics include different approaches to study of language in social interaction (theories and research methodologies), issues regarding language and social identity (such as socioeconomic status, race, gender, and situational identity), and issues concerning language and culture (such as cross-cultural misunderstanding and language socialization). Satisfies Writing II requirement. Letter grading.

Graduate Courses

375. Teaching Apprentice Practicum. (1 to 4) Seminar, to be arranged. Preparation: apprentice personnel employment as teaching assistant, associate, or fellow. Teaching apprenticeship under active guidance and supervision of regular faculty member responsible for curriculum and instruction at UCLA. May be repeated for credit. S/U grading.

596. Directed Individual Study. (2 to 12) Tutorial, to be arranged. Limited to MA and PhD students. Independent study in one area of applied linguistics. May not be applied toward MA course requirements. Up to 8 units may be applied toward PhD course requirements. May be repeated for credit. S/U or letter grading.

597. Preparation for PhD Candidacy Examination. (4 to 8) Tutorial, to be arranged. Preparation: completion of at least six courses of 32-unit requirement for PhD. May not be applied toward 32-unit requirement. May be repeated for credit. S/U grading.

599. Research for and Preparation of PhD Dissertation. (4 to 16) Tutorial, to be arranged. Preparation: advancement to PhD candidacy. Required of all PhD candidates each term they are registered and enrolled in dissertation preparation. May be repeated for credit but may not be applied toward PhD course requirements. S/U grading.

ARCHAEOLOGY

Interdepartmental Program

College of Letters and Science

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Archaeology

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E-mail contact
Gregson T. Schachner, PhD, Chair

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Willieke Z. Wendrich, PhD (Near Eastern Languages and Cultures)
Glenn Wharton, PhD (Art History)

Scope and Objectives

The Archaeology Interdepartmental Program offers MA and PhD degrees in Archaeology. It brings together interests and specialties represented by those departaments offering courses in archaeology, as well as others offering courses relevant to archaeology.

The primary purpose of the program is to train scholars in archaeology for university-level teaching and research and other professional aims. Its resources are intended for those archaeology students whose academic goals cannot be met within any single department and who, consequently, require an individually designed plan of study combining academic preparation in two or more departments. Applications are especially encouraged from students whose interests may form bridges with disciplines and departments not offering archaeology (e.g., botany, chemistry, geology, mathematics, statistics, and zoology). There are opportunities for participation in a variety of field, laboratory, and computer studies.
Graduate Study
Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Division website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Graduate Degrees
The Graduate Program offers Master of Arts (MA), Candidate in Philosophy (CPHIL), and Doctor of Philosophy (PhD) degrees in Archaeology but does not encourage applicants who seek only an MA degree.

Archaeology

Lower-Division Courses

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

30. Science in Archaeology. (4) Lecture, three hours; discussion, one hour. Anthropology is rapidly developing due to ongoing introduction of new hardware, software, and information dissemination technology. It is a multidisciplinary field of study, combining its own research methods and technologies with elements from the sciences, history, ethnography, geography, material science, statistics, biology, biochemistry, medicine, and others. Because it does not provide new scholarly insights, but also to provide integrated instruction in science, technology, engineering, and mathematics (STEM) skills. Use of archaeological data as paradigm in STEM education. Instant practical application of mathematics during surveying, geology during ceramic analysis or geophysical research, biochemistry during archaeological residue analysis, or biology during zooarchaeology or paleoethnobotanical research offers point of departure for instructors as well as motivation to students. P/NP or letter grading.

89. Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to lower-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be available toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

89HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designated as adjunct to lower-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

89. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in regular course work (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Courses

C110. Archaeological Materials Identification and Characterization. (4) Lecture, one hour; laboratory, two hours. Introduction to techniques and interpretive strategies for identification of cultural remains in preparation for MA thesis or PhD phase. Students do exploratory research to select subject, then research design that could form basis of extensive paper, grant application, or oral examination. Students work closely with faculty members and report weekly on their progress. Preparation of at least two reports will establish theoretical framework and one on practical aspects of project. Final written research design that incorporates theoretical and practical aspects of research and formulates bridging arguments required. S/U or letter grading.

M205A. Selected Laboratory Topics in Archaeology. (4) Same as Anthropology CM217. Lecture, one hour; laboratory, two hours. Designed for graduate students in archaeology or in other departments. Specialized analysis of particular classes of cultural remains. May be repeated for credit with topic change. S/U or letter grading.

M205B. Intensive Laboratory Training in Archaeology. (6) Formerly numbered M205S. Lecture, three hours; laboratory, two hours minimum. Advanced laboratory training for graduate students with extended laboratory hours. Special laboratory-based topics, including but not limited to lithic analysis, ceramic analysis, zooarchaeology, and paleoethnobotany. May be repeated for credit with topic change. S/U or letter grading.

C210. Archaeological Materials Identification and Characterization. (4) Lecture, one hour; laboratory, two hours. Laboratory-oriented introduction for archaeologists to identification and quantitative description of solid materials, especially metals, ceramics, and other inorganic and some organic substances. Concurrently scheduled with course C211. S/U or letter grading.

C220. Special Topics in Archaeology. (2 or 4) Lecture, three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

C280. Ancient and Historic Metals: Corrosion, Technology, and Microstructure. (8) Seminar, four hours; laboratory, four hours. Overview of technology of ancient metals, aspects of extraction and alloying, corrosion that ancient metals undergo, and how this impacts their preservation. Exploration of knowledge and research work of last two decades that has substantially advanced understanding of processes of extraction, alloying, surface patination, metallic coatings, corrosion, and microstructure. Laboratory work in preparation and examination of metallic sample under microscope, as well as lectures on technology of metallic works of art. Discussion of phase and stability diagrams of common alloying systems and environments. Metallic topics represent Bronze Age Europe, Renaissance Europe, China from Warring States to Tang dynasty, Japanese sword-making, Indian high-tin bronze alloys, bronzes, Peruvian Inca copper, Panamanian copper and gold-copper alloys. Concurrently scheduled with course C280. Letter grading.

C289. Fieldwork in Archaeology. (2 to 12) Fieldwork, to be arranged. Participation in archaeological field excavations under supervision of staff archaeologists at UCLA. Minimum of one month of field time away from campus required. May be repeated for credit with consent of adviser. Concurrently scheduled with course C220. S/U or letter grading.

C299. Fieldwork in Archaeology. (2 to 12) Fieldwork, to be arranged. Participation in archaeological field excavations or museum research under supervision of staff archaeologists at UCLA. Minimum of one month of field time away from campus required. May be repeated for credit with consent of adviser. Concurrently scheduled with course C220. S/U or letter grading.
...stantially advanced understanding of processes of extraction, alloying, surface patination, metallic coatings, corrosion, and microstructure. Laboratory work in preparation and examination of metallic samples under microscope, as well as lectures on technology of metallic works of art. Discussion of phase and stability diagrams of common alloying systems and environments. Metallographic study samples represent Bronze Age Europe, Renaissance Europe, China from Warring States to Tang dynasty, Japanese sword-making, Indian high-tin bronze alloys, bronzes, Peruvian, Colombian, Costa Rican, and Panamanian copper and gold-copper alloys. Concurrently scheduled with course C180. Letter grading.

375. Teaching Apprentice Practicum. (1 to 4) Seminar, to be arranged. Preparation: apprentice personnel employment as teaching assistant, associate, or fellow. Teaching apprenticeship under active guidance and supervision of regular faculty member responsible for curriculum and instruction at UCLA. May be repeated for credit. S/U grading.

501. Cooperative Program. (2 to 8) Tutorial, to be arranged. Preparation: consent of UCLA graduate adviser and graduate dean, and host campus instructor, department chair, and graduate dean. Used to record enrollment of UCLA students in courses taken under cooperative arrangements with USCS. S/U grading.

596. Individual Studies for Graduate Students. (2 to 12) Tutorial, to be arranged. Preparation: consent of adviser, S/U or letter grading.

597. Preparation for PhD Qualifying Examinations. (2 to 12) Tutorial, to be arranged. Preparation: completion of formal coursework, passing of language examinations before enrollment. May be repeated for credit with consent of adviser. S/U grading.


**Scope and Objectives**

The Department of Architecture and Urban Design at UCLA offers a Bachelor of Arts degree in Architectural Studies and four graduate degree programs tailored to the needs of different groups of students: MArch, MA, and PhD in Architecture; and MSc in Architecture and Urban Design.

The BA in Architectural Studies is a two-year program with focus on the built environment. The curriculum visualizes architecture as a cultural, creative, and technical practice and a discipline that is deeply interconnected with design, planning, and policy. Within the context of a liberal arts education, a finely balanced set of architecture and urban studies, ranging from the history and theory of design to contemporary building technologies, provides students with a diverse foundation of knowledge in the field of architecture and prepares them for graduate school and/or careers in a wide range of fields.

MArch is a three-year first professional degree program accredited by the National Architectural Accrediting Board (NAAB). It does not assume any prior background in architecture. Students who do have some prior architecture background (e.g., a four-year undergraduate degree) may also enter the program and may petition to waive certain required courses and substitute more advanced electives in their place. MArch graduates normally pursue professional careers in architectural practice.

The Architecture and Urban Design MS is an advanced self-supporting professional degree program for students who already hold a first professional degree in architecture. The program offers opportunities for intensive concentration in a variety of areas of professional specialization.

The MA and PhD degree programs offer opportunities to pursue research and scholarship in the field of architecture. Graduates typically pursue academic or applied research and consulting careers.

In the U.S. most state registration boards require a degree from an accredited professional degree program as a requisite for licensure. NAAB, the sole agency authorized to accredit U.S. professional degree programs in architecture, recognizes two types of degrees: Bachelor of Architecture and Master of Architecture.

A program may be granted a five-year, three-year, or two-year term of accreditation, depending on its degree of conformance with established standards. Master’s degree programs may consist of a pre-professional undergraduate degree and a professional graduate degree which, when earned sequentially, comprise an accredited professional education. However, the pre-professional degree is not, by itself, recognized as an accredited degree.

**Undergraduate Study**

**Architectural Studies BA**

**Learning Outcomes**

The Architecture Studies major has the following learning outcomes:

- Demonstrated competence in representational techniques including physical and digital modeling, drawing, and analytical diagramming
- Use of representational techniques to document design concepts, organization, spatial order, and scale
- Ability to compile portfolio of original architectural and three-dimensional design proposals
- Familiarity with historical and contemporary precedents in the field
- Demonstrated written awareness of the historical, technological, and cultural significance of precedent works
- Familiarity with, and presentation and discussion of, concepts related to form, organization, and space making
- Delivery of oral and graphic presentations of design concepts and proposals
- Reception of and response to design criticism, and reflection of this response in revised design documentation, as an integral part of the design process

**Admission**

Students are admitted for fall quarter only. Admission is highly competitive, and only a limited number of students are admitted each year. UCLA students may apply for admission in fall quarter of their second year in residence, must have at least a 3.0 cumulative grade-point average, and are required to complete the preparation for the major courses, with grades of B or better, before applying for admission. Transfer students must have at least a 3.0 cumulative GPA and are expected to complete the preparation for the major courses during their first year in residence. All applicants must submit a statement of interest and a three- to six-page PDF of creative work. Applications are available in the department office to regularly enrolled UCLA students during the previous fall quarter. For more information, consult with the undergraduate adviser.

**Preparation for the Major**

The Major
Required: Architecture and Urban Design 121, 122, 123, 131, 132, 133, 141, 142, 143.

Graduate Study
Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Division website. In many cases, more detailed guidelines may be outlined in annual Graduate Bulletin publications, and websites of the schools, departments, and programs.

Graduate Degrees
The Department of Architecture and Urban Design offers Master of Architecture (MArch), Master of Arts (MA) and Doctor of Philosophy (PhD) degrees in Architecture, and Master of Science (M5) degree in Architecture and Urban Design. A concurrent degree program (Architecture MArch/Urban Planning MURP) and a Graduate Certificate in Urban Humanities are also offered.

Architecture and Urban Design

Lower-Division Courses
1. Introduction to Design. (2 or 3) Studio/lecture/field trips, two hours. Limited to high school students. Two- or three-week intensive summer course in architectural design, with focus on developing design skills through space making and its representation. Exposure to contemporary architectural practices through studio work, lectures and presentations, field trips, and final demonstration, critique, and exhibition of student work. Offered only as part of Teen Arch Studio summer program. P/NP grading.

2. Studio. (5) Lecture; three hours; discussion, one hour; outside study, 11 hours. Exploration of developments in global architecture and urban design from the history to 1600 and critical reflection on terms such as building, architecture, city, history, and culture. Focus on world context, construction and technology, and history of architectural ideas. P/NP or letter grading.


5. Studio. (6) Studio, eight hours; outside study, 10 hours. Enforced requisite: courses 121, 122. Limited to Architectural Studies majors. Introduction to disciplinary issues, techniques, and organizations of landscape and how those can influence design of building and site. Exploration of material and temporal characteristics of architecture relative to role those play in landscape. Introduction to issues of accessibility and egress as systems of movement. Structure as spatial component of site, construction, topography, climatology, accessibility, and their mutual interaction. Letter grading.

M125A. Hands-on laboratory-based investigation of emerging digital mapping technologies, including instruction in Web-based mapping applications, virtual globes, and geographic information systems (GIS). Critique and creation of maps of cultural phenomena, applying skills students learned in Ancient Near East to real-world data sets in humanities and social sciences. By mastering emerging technologies in field of digital cultural mapping, students take part in evaluation and production of source representations of complex data, becoming active participants in development of this new field. How to use suite of GIS and geotechnology tools. Fostering of creative approaches to engagement with mapping technologies: What new questions can be asked and answered using these technologies? How does one reason, argue, and solve real-world problems through digital cultural mapping? Design, development, and implementation of student mapping-based research projects. Part of Digital Cultural Mapping Project supported by W.M. Keck Foundation. P/NP or letter grading.

M125C. Digital Cultural Mapping Core Course C: Summer Research. (4) (Same as Ancient Near East M125C) Laboratory, three hours; fieldwork, one hour. Enforced requisite: course 121. Limited to Ancient Near East M125B. Participation in collaborative geographic information systems (GIS) research project in humanities or social sciences using skills learned in courses 125A and M125B. Gathering and input of datasets from real-world sources, creating visual representations of data through production of digital maps, and performing analysis of larger dataset to answer specific research questions. Final oral presentation required that details student work and provides critical analysis of source material and technological/methodological issues inherent to type of GIS used for investigation. Part of Digital Cultural Mapping Project supported by W.M. Keck Foundation. Offered in summer only. P/NP or letter grading.

M125D. Digital Cultural Mapping Core Course D: Team Research. (4) (Same as Ancient Near East M125D) Laboratory, three hours; fieldwork, one hour. Enforced requisite: course 121. Limited to Ancient Near East M125B. Participation in collaborative geographic information systems (GIS) research project in humanities or social sciences using skills learned in courses 125A and M125B. Gathering and input of datasets from real-world sources, creating visual representations of data through production of digital maps, and performing analysis of larger dataset to answer specific research questions. Final oral presentation required that details student work and provides critical analysis of source material and technological/methodological issues inherent to type of GIS used for investigation. Part of Digital Cultural Mapping Project supported by W.M. Keck Foundation. Offered in summer only. P/NP or letter grading.

M1310. Space and Place. (4) (Formerly numbered M130) (Same as World Arts and Cultures CM130.) Lecture, three hours. Survey of spaces and places from cross-cultural or comparative perspective and with performance emphasis, with focus on mutual interaction of human beings and their created environments. Emphasis on common, ordinary, anonymous, or vernacular nonbuilt and built environments, which are built and used by members of small-scale, traditional, and transitional communities around world. Concurrently scheduled with course CM232D. P/NP or letter grading.

M1311. Issues in Contemporary Design. (5) Lecture, three hours; outside study, 12 hours. Limited to Architectural Studies majors. Howard global design culture today operates as part of spatial, economic, political, and social discourses. From development of cities to new formal languages in architecture, consequences of fact that great percentage of our lives is spent in controlled designed environments, including role that research and interdisciplinary play today in influencing design ideas and processes, as well as how design is influenced by technology and new urban conditions. Letter grading.

M1312. Domestic Architecture: Critical History. (5) Lecture, three hours; outside study, 12 hours. Limited to Architectural Studies majors. Investigation of relationships between culture and material and non-material aspects of domestic architecture, from communal living arrangements of antiquity to functional and automated ideals of modern movement. Exploration of how design of domestic interior space reflects and accommodates expectations of contemporary metropolis through series of comparative urban explorations that begin in Los Angeles and extend to engage range of cities, including key examples from Asia to South America. Modern project can be seen in myriad forms across globe, so that city and suburb, taken together, exist in complex conmring of aesthetic, political, social, economic, technological, and social issues. Letter grading.
141. Technology I: Projections. (5) Laboratory, four hours; outside study, 11 hours. Limited to Architectural Studies majors. Introduction to techniques of spatial representation as they relate to architectural design. How to communicate using two- and three-dimensional computer-aided design modeling. Analog and digital techniques and opportunity afforded by moving between both. Analog techniques include orthographic and axonometric projection. Digital techniques focus on computer graphics fundamentals, including bit map and vector graphic imaging using Adobe suite and modeling using Rhinoceros. Letter grading.

142. Technology II: Building Materials and Methodologies. (5) Laboratory, four hours; outside study, 11 hours. Limited to Architectural Studies majors. Introduction to construction systems and materials in relation to design, such as framed, bearing wall, or hybrid system. Specifications and organization of construction documents. Letter grading.

143. Technology III: Digital Technology. (5) Laboratory, four hours; outside study, 11 hours. Limited to Architectural Studies majors. Overview of three-dimensional computer-aided visualization concepts. Teaching applications of AutoCAD and Maya and their use relative to process of design and visual communication. Basic representation methods and tools and introduction to 2D and 3D concepts required to dynamically interact with computer and to explore and understand communicative capacities of different methods of representation. Explanation of bitmap versus vector graphic basics, and design output and integration for print and Web, and introduction to three-dimensional digital modeling and fabrication. Letter grading.

145. Introduction to Sustainable Architecture and Community Planning. (4) (Same as Environment M153.) Lecture, three hours. Relationship of built environment to natural environment through whole systems approach, with focus on sustainable design of buildings and communities. Emphasis on energy efficiency, renewable energy, and appropriate use of resources, including materials, water, and land. Concurrently scheduled with course CM247A. Letter grading.

188A. Individual Studies for USIE Facilitators. (1) Tutorial, to be arranged. Enforced corequisite: Honors College 101E. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to discuss selected USIE seminar topic, conduct preparatory research, and begin preparation of syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.


188C. Individual Studies for USIE Facilitators. (2) Tutorial, to be arranged. Enforced corequisite: course 188B. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor required. May not be repeated. Letter grading.

189. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth through supplementary readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. 402. Final Advanced Topics Studio. (6) Lecture, three hours. Preparation: satisfactory completion of intermediate- and advanced-level studies. Development of studio project including research and writing. Consideration to programming, symbolism, and viewing as well as to technological, aesthetic, and political factors. S/U or letter grading.

288. Renaissance Architecture and Urbanism. (4) Lecture, three hours. Examination of architectural developments from 15th to 17th century. Primary focus on Italian palazzo and Renaissance Mediter- ranean basin. Analysis of individual structures, cities, and landscape designs to reveal changing cultural and theoretical values, as well as specific aesthetic and iconographic content. S/U or letter grading.

289. Special Topics in Architecture and Urban Design. (2 to 4) Lecture, two hours; discussion, two hours. Selected academic topics initiated by students, students, or faculty member. May be repeated for credit. S/U or letter grading.

290. Special Topics in Critical Studies in Architectural Culture. (5) Lecture, three hours; discussion, one hour; outside study, 11 hours. Designed for graduate students. Exploration of how architecture operates in relation to wider cultural, historical, and theoretical issues. May be repeated for maximum of 30 units. Letter grading.

291. Theory of Architectural Programming. (4) Lecture, three hours. Examination of concepts and methods of architectural programming and its interrelation to design process; planning of design process; various techniques for architecture; programming concepts, and building codes; relationship to program components, and building codes. Letter grading.

292. Design and Building Models. (4) Lecture, three hours. Review of range of information and knowledge potentially used in design. Knowledge representation, abstractions, and constructs. Logical structure of design information. Development of knowledge used in areas of design, how it can be identified, analyzed, and structured. Letter grading.

293. Space and Place. (4) (Same as World Arts and Cultures CM230.) Lecture, three hours. Survey of array of spaces and places from cross-cultural and comparative perspective and performance emphasis, with focus on mutual interaction of human beings and their created environments. Emphasis on common, ordinary, anonymous, or vernacular nonbuilt and built environments, which are built and used by members of small-scale, traditional, and transitional communities around the world. Concurrently scheduled with course CM130. S/U or letter grading.

294. Introduction to Sustainable Architecture and Community Planning. (4) (Same as Urban Planning M291.) Lecture, three hours. Relationship of built environment to natural environment through whole systems approach, with focus on sustainable design of buildings and planning of communities. Emphasis on energy efficiency, renewable energy, and appropriate use of resources, including materials, water, and land. Concurrently scheduled with course CM130. S/U or letter grading.

295. Introduction to Urban Humanities. (4) (Same as Urban Planning M295.) Seminar, six hours; studio, six hours. Core introduction to urban humanities. Analytical and descriptive methods of humanities paired with an intuitive and practical approach to architectural and urban design to better understand contemporary state of human environment. Focus on Los Angeles, with concepts seminar, methods laboratory, projects studio, and site visit components. Offered in summer only. S/U or letter grading.

296. Proseminar: Critical Studies in Architectural Culture. (4) Seminar, three hours. Orientation for PhD students to tradition of architectural theory, scholar- ship, and research and to current research directions and questions, through intensive reading and critical discussion. Letter grading.

375. Teaching Apprentice Practicum. (1 to 4) Seminar, to be arranged. Enrolled as apprentice personnel employment as teaching assistant, associate, or fellow. Teaching apprenticeship under active guidance and supervision of regular faculty member responsible for curriculum and instruction at UCLA. May be repeated for credit. S/U or letter grading.

401. Advanced Topics Studio. (6) Studio, 12 hours; outside study, six hours. Preparation: satisfactory completion of intermediate-level studios (courses 412, 413, 414) or M153. Students may choose (through lottery) from several different projects focusing on special topics in architectural and urban design to be offered by faculty members. May be repeated for credit. Letter grading.

402. Final Advanced Topics Studio. (6) Studio, 12 hours; outside study, six hours. Preparation: satisfactory completion of intermediate- and advanced-level
403A–403B–403C. Research Studios. (2–2–6) For courses of 403A and 403B: Seminar, three hours; outside study, three hours; for course 403C: studio, 12 hours; outside study, six hours. Preparation: satisfactory completion of introductory studios (courses 412, 413, 414, 415) or MArch II student. Course 403A is requisite to 403B, which is requisite to 403C. In-depth research phases (courses 403A, 403B) and advanced studio project (course 403C), with focus on number of different special topics in architecture and urban design. In Progress (403A, 403B) and letter (403C) grading.

404. Joint Planning/Architecture Studio. (4) (Same as Urban Planning M404.) Lecture, one hour; discussion, one hour; studio, four hours. Opportunity to work on joint planning/architecture project for client. Outside speakers; field trips. Examples of past projects include Third Street Housing, Santa Monica; New American House for nontraditional households; Pico-Aliso Housing, Boyle Heights; working with resident leaders at Los Angeles City public housing developments. S/U or letter grading.

411. Introductory Design Studio. (6) Studio, 12 hours; outside study, six hours. Introduction to sketching, drawing, perspectives, CAD. Architectural composition is initially studied in terms of its separate elements. After each is studied by means of manipulative exercise that allows for experimentation of its intrinsic possibilities, students undertake series of closely controlled exercises dealing with combining elements and then design small buildings. Letter grading.

412. Building Design Studio. (6) Studio, 12 hours; outside study, six hours. Preparation: course 411. Concentration on basic skills, leading to projects exploring architectural program in relation to design process and, particularly, implications of program on architectural forms and concepts. In second phase, introduction of structural elements to fulfill program requirements and to support and further develop intended forms and concepts. Letter grading.

413. Building Design with Landscape Studio. (6) Studio, 12 hours; outside study, six hours. Preparation: course 411. Introductory theoretical and technical issues such as site planning, urban design, landscape design, building typography. Building design and site planning in relation to water, landforms, and plants in natural landscape. Letter grading.

414. Major Building Design Studio. (6) Studio, 12 hours; outside study, six hours. Preparation: course 413. Designed for second-year graduate students. Introduction to issues such as programming and program manipulation, site planning, urban design, and integration of technical systems and architectural expression. Emphasis either on treatment in breadth of large-scale projects or exploration in depth and detail of smaller-scale projects. Students are instructed to integrate structure and environmental control and to present their ideas in graphic or model form. Letter grading.

415. Comprehensive Studio. (6) Studio, 12 hours; outside study, six hours. Preparation: course 414. Culmination of core sequence (courses 411 through 414), with focus on development phase of project. Technical concerns such as lighting, material innovation, sustainable construction documents, and building envelopes to be considered critical to generation of architectural form, integrated in design of single building project. Letter grading.


436. Introduction to Building Construction. (2) Laboratory, two hours; outside study, four hours. Introduction to construction techniques. Study of physical principles and materials for making architecture through series of exercises and field trips. Letter grading.

437. Building Construction. (4) Laboratory, four hours; outside study, eight hours. Principles of structure and enclosure, with focus on production and materials research. Exploration of building elements for formal and functional properties; in addition, design development of project in previous studio may be developed in detail with integration of range of technical systems. Letter grading.

441. Environmental Control Systems. (4) Lecture, four hours. Design of mechanical systems necessary for functioning of large buildings: air handling, fire and life safety, plumbing, vertical and horizontal circulation, communication and electrical power distribution, analysis of interaction of these systems and their integrated effects on architectural form of building. S/U or letter grading.

442. Building Climatology. (4) Lecture, four hours. Preparation: basic physics. Design of buildings that specifically respond to local climate; utilization of natural energies, human thermal comfort; sun motion and solar control devices; use of plant materials and landform to modify microclimate. S/U or letter grading.


465. Teaching Architectural History, Theory, and Criticism. (2) Seminar, three hours. Offers guidance and support to first-time teaching assistants (TAs) in Department of Architecture and Urban Design. Covers topics which include teaching philosophies, teaching methodologies, assessment/evaluation/grading practices, and professional development specific to academic professions in the field of architecture. Readings and assignments to develop fundamental teaching principles and provide methods with which to design course syllabi and evaluate/gather resources for course content. S/U grading.

496. Special Projects in Architecture. (2 to 8) Tutorial, to be arranged. Projects initiated either by individual students or student teams and directed by faculty member. May be repeated for credit. S/U or letter grading.

497. Special Projects in Urban Design. (2 to 8) Tutorial, to be arranged. Projects initiated either by individual students or student teams and directed by faculty member. May be repeated for credit. S/U or letter grading.

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Raymond B. Brown, MA
Hirsch Perlman, BA
Lari G. Pittman, MFA
Nancy J. Rubins, MFA
Paula A. Wickman, MFA

Professors Emeriti
Raymond B. Brown, MA
Barbara Drucker, MFA
Roger R. Herman, MFA
Mary Kelly, MA
Paul D. McCarthy, MFA
Charles R. Ray, MFA
Nancy J. Rubins, MFA
Adrian A. Saxe, BFA
James Welling, MFA

Assistant Professors
Vishal Jugdeo, MFA
Candice C. Lin, MFA
Anna M. Sew Hoy, MFA
Rodrigo A. Valenzuela, MFA

Lecturer
Jacob M. Samuel, BFA

Scope and Objectives
The Department of Art offers professional art training with an emphasis on interdisciplinary experimentation. The core studio curriculum is supported by courses in art history, theory, and criticism. Bach-
elos of Arts degree coursework and Master of Fine Arts degree specializations include ceramics, new genres, painting and drawing, photography, and sculpture. An interdisciplinary studio option is offered within the MFA program. In addition to departmental labs, Art majors have access to the art resources at UCLA and in the Los Angeles community. The Art Department reserves the right to use documentation and reproductions of student art work from studio courses, student exhibitions, and other records of creative work in publications including, but not limited to, the undergraduate and graduate brochures and publications, department and school websites, and presentations and events related to student recruitment and outreach.

Undergraduate Study

The Art major is a designated capstone major. As part of the upper-division advanced studio requirement, all undergraduate students are required to complete a senior studio course that emphasizes analysis and criticism of individual creative work and ideas. Students develop and present a body of creative work in which they exhibit familiarity with and competence in a range of techniques and media, and a level of proficiency in utilizing particular media appropriate to advanced-level studio projects. Graduates are expected to demonstrate familiarity with historical precedents for and issues in contemporary art, to understand terms and concepts relevant to contemporary art discourse, and to have the ability to effectively articulate analysis of works of art to participate in a studio critique.

Art BA

Capstone Major

Learning Outcomes

The Art major has the following learning outcomes:

- Familiarity with and competency in multiple techniques and media, and a level of proficiency utilizing particular media appropriate to advanced studio projects
- Development of a body of original artwork
- Familiarity with historical precedents for, and issues in, contemporary art
- Understanding of terms and concepts relevant to contemporary art discourse
- Ability to effectively analyze works of art through studio critique

Preparation for the Major


The Major

Required: A minimum of nine upper-division courses, including Art 100 or 132 or one course from an approved list of upper-division nonmajor courses, six courses from at least four of the following studio areas: 130, 133, 137, 140, 145, 147, 148, one course from Art History M110A through 185, one capstone senior studio course (Art 150), and 8 units of art electives. Each course applied toward major requirements must be taken for a letter grade, with the exception of Art 190, 193, and 195, which are offered only on a Passed/Not Passed grading basis. Of those, no more than 4 units total may be applied toward the upper-division art elective requirement.

Graduate Study

Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Division website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Graduate Degrees

The Department of Art offers the Master of Fine Arts (MFA) degree in Art.

Art

Lower-Division Courses

1A. Drawing. (4) Studio, eight hours; five hours arranged. Course in basic drawing skills intended as preparation for work in variety of media. P/NP or letter grading.
1B. Sculpture. (4) Studio, eight hours; five hours arranged. Introduction to concepts and forms of contemporary sculpture to become familiar with tools and material to enable students to visually manifest their individual ideas. Presentation of work of contemporary artists. P/NP or letter grading.
11A. Painting. (4) Studio, eight hours; five hours arranged. Basics of painting: introduction to technical procedures, tools, and materials. Discussion of fundamental conceptual and formal concerns. P/NP or letter grading.
11B. Photography. (4) Studio, eight hours; five hours arranged. Fundamentals in technique, with emphasis on individual projects. Varied approaches, processes, and applications of photographic medium within context of art, supported by studies in theory, aesthetics, and history of photography. P/NP or letter grading.
11C. Printmaking. (4) Studio, eight hours; five hours arranged. Introductory survey of various technical and conceptual concerns in variety of printmaking media as preparation for more focused study in particular media at upper-division level. P/NP or letter grading.
11D. New Genres. (4) Studio, eight hours; five hours arranged. Introduction to projects in installation, performance, video, film, multimedia, and other nontraditional media and processes. P/NP or letter grading.
11E. Ceramics. (4) Studio, eight hours; five hours arranged. Introduction to ceramic materials and processes, with emphasis on personal and cultural expression in ceramic media. Discussion of ceramics in contemporary artistic practice and social history of ceramic art. Letter grading.
19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illumining many paths of discovery at UCLA. P/NP grading.
20. Production. (2) Studio, four hours. Limited to Art majors. Instruction in production techniques and processes, including basic drawing, recording live images, moving images, and sound. Discussion of professional setups and standard practices as well as alternatives. Review of use of tools, software, workflow, storage, and output modalities. Letter grading.
21A. Production: Photographic Print. (2) Studio, four hours. Requisite: course 11B. Limited to Art majors. Not open for credit to students with credit for course 20. Techniques and processes, including basics of shooting, editing, and output for still images and photographs. Professional setups and standard practices as well as alternatives. Review of use of tools, software, workflow, storage, and output modalities. Instruction in postproduction skills and tools for editing and altering images and producing high-quality printed images. Letter grading.
31A. Rise of Modernism in Global Context. (5) Lecture, three hours; discussion, one hour; field trips, three hours. Examination of intellectual underlying development of modernist thought on art and society from mid-19th through early-20th centuries. Exploration of origins, development, theory, and practice of modernism in context of colonialism and industrialization. Letter grading.
31B. Global Modernism. (5) Lecture, three hours; discussion, one hour; field trips, three hours. Art majors should complete courses 31A, 31B, and 31C in sequence in first year. Continued impact of modernist ideas through mid-20th century, with focus primarily on work made from 1920s to 1960s globally. Examination of how modernist ideas and practices were influenced by industrialization, colonization, world wars, and emancipatory movements. Letter grading.
31C. Modernism and Its Discontents. (5) Lecture, three hours; discussion, one hour; field trips, three hours. Art majors should complete courses 31A, 31B, and 31C in sequence in first year. Continued impact of modernist ideas from 1960s to present, covering shift from modernist to postmodernist practices and theories. Examination of critiques of modernism drawing from emancipatory movements and poststructuralist, feminist, queer, performance, postcolonial, and critical race theory. Letter grading.
70. Summer Art Institute: Special Topics in Studio. (3) Studio/lecture/field trips, 45 hours. Limited to high school students in Summer Art Institute. Two-week intensive in studio art covering range of media and contemporary art practices and combination of focused studio work, lecture/presentations, field trips, critiques, and final exhibition of student work. Offered only as part of Summer Institute. May be repeated once for credit. P/NP grading.
89. Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to lower-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.
99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Courses

100. Issues in Contemporary Art. (5) Lecture, three hours; discussion, one hour; screenings/research, 11 hours. Requisites: courses 31A, 31B, 31C. Selected
topics in theoretical, critical, aesthetic, and historical studies and their relevance to practicing artists. May be repeated for maximum of 20 units. Letter grading.

130. Advanced Drawing. (5) Studio, eight hours; seven hours arranged. Requisite: course 1A. Drawing as both independent expressive medium and as means of self-actualization. May be repeated for maximum of 20 units. Letter grading.

132. Survey of Critical Thought. (5) Lecture, three hours; discussion, one hour; screenings/research, 11 hours. Requisite: courses 31A, 31B, 31C. Overview of premodern, modern, and postmodern theory as reflected in critical writing and artistic practice, with emphasis on 1940s to present. Specific topics may vary. May be repeated for maximum of 20 units. Letter grading.

133. Advanced Painting. (5) Studio, eight hours; seven hours arranged. Requisite: course 11A. Varied media and subjects to further develop students' technical and expressive means to implement their ideas. May be repeated for maximum of 20 units. Letter grading.

137. Advanced New Genres. (5) Studio, eight hours; seven hours arranged. Requisite: course 11D. Emphasis to be selected by faculty members from one or more of following media: installation, performance, video, film, other nontraditional media and processes. May be repeated for maximum of 20 units. Letter grading.

140. Advanced Printmaking. (5) Studio, eight hours; seven hours arranged. Requisite: course 11C. Selected studies in fine printmaking, historical and contemporary approaches to problems of handforming and modeling, lithography, silk screen, mixed media. May be repeated for maximum of 20 units. Letter grading.

145. Advanced Sculpture. (5) Studio, eight hours; seven hours arranged. Requisite: course 1B. Selected studies in sculpture, historical and contemporary: modeling, carving, casting, welding, and other media; forms in space, including installations and nonstudio pieces. May be repeated for maximum of 20 units. Letter grading.

147. Advanced Photography. (5) Studio, eight hours; seven hours arranged. Requisite: course 11B. Selected projects in photography and related media, concentrating on development of individual students' artwork. Studio emphasis with special topics in theory and critical analysis. May be repeated for maximum of 20 units. Letter grading.

148. Advanced Ceramics. (5) Studio, eight hours; seven hours arranged. Requisite: course 11E. Selected studies in ceramics, with emphasis on individualized creative experimentation with materials and techniques introduced in course. Methods and processes to be selected from range of possibilities, including handforming and modeling, preparation and use of molds, slipcasting, and use of potter's wheel. May be repeated for maximum of 20 units. Letter grading.

150. Senior Studio. (5) Studio, eight hours; seven hours arranged. Limited to seniors. Advanced studio projects, with emphasis on analysis and criticism of individual creative work and ideas. Letter grading.

150C. Senior Studio. (5) Studio, eight hours; seven hours arranged. Limited to seniors. Advanced studio projects, with emphasis on analysis and criticism of individual creative work and ideas. Letter grading.

157. Special Topics in Studio. (2 to 4) Studio/museum visits, two to four hours arranged. Current themes in art theory, practice, and criticism, offering students opportunity to explore these issues in studio context through critique of work and discussion of critical readings. May be repeated for maximum of 16 units. P/NP or letter grading.

C180. Seminar: Art. (4) Seminar, three hours. Limited to junior/senior majors. Advanced topics in critical theory and study of contemporary art, with emphasis on individuals, issues, and methodologies. Possible areas of study from structuralism, deconstruction, feminist and psychoanalytic theory, commodification, and censorship. May be repeated for credit. Concurrently scheduled with course C280. Letter grading.

C181. Exhibition and System. (4) Seminar, four hours. Preparation: at least one course from 100 through 150. Examination of temporary exhibition, and its associated field of publications as intertextual system of meaning, with beginning individual works and proceeding to overall analysis of current exhibitions. Concurrently scheduled with course C281. Letter grading.

C182. Exhibitions and Public Programs. (4) Seminar, four hours. Preparation: at least one course from 100 through 150. Understanding of principles of program planning and community development in relation to visual arts and work of art museums. Concurrently scheduled with course C282. Letter grading.

C183. Special Topics in Art. (2 or 4) Seminar, six hours. (2-unit course) or 12 hours (4-unit course). Preparation: at least one course from 100 through 150. Selected topics in art explored through variety of approaches: selected readings, discussion, research papers, and oral presentations. Topics announced in advance. May be repeated for credit. Concurrently scheduled with course C283. Letter grading.

M194. Chicana Art and Artists. (4) Same as Chicana and Chicano Studies M175 and World Arts and Cultures M128.) Lecture, four hours. Introduction to Chicana and Chicano artists. Examination of Chicana aesthetic; Chicana art production to principles of identity and experience as artists and Chicanas. Letter grading.

M185. Whose Monument Where: Course on Public Art. (4) (Same as Chicana and Chicano Studies M189 and World Arts and Cultures M126.) Lecture, four hours. Recommended corequisite: course M186A, M186B, or M186C. Examination of public monuments in U.S. as basis for cultural insight and critique of American values as they are embodied by an artist. Use of urban Los Angeles as textbook in urban space issues such as who is public, what is public space at end of 20th century, what defines neighborhoods, and do different ethnic populations use public space differently. P/NP or letter grading.

M186A. Beyond Mexican Mural: Beginning Murals and Community Development. (4) (Same as Chicana and Chicano Studies M186A and World Arts and Cultures M125A) Studio/lecture, four hours. Corequisite: course M186AL. Investigation of muralism as method of community education, development, and empowerment. Exploration of issues through development of large-scale collaborative digitally created image and/or painting for placement in community. Students research, design, and work with community participants. Continuation of project through installation, documentation, and dedication, with work on more advanced independent projects. P/NP or letter grading.

C187. Contemporary Art Collections in Los Angeles. (2) Seminar, three hours; outside study, three hours. Limited to junior/senior majors. Concurrently scheduled with course C287. Letter grading.

1885A. Individual Studies for USIE Facilitators. (1) Tutorial, to be arranged. Enforced corequisite: Honors Collegium 101E. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to discuss selected USIE seminar topic, conduct preparatory research, and begin preparation of syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.


1885C. Individual Studies for USIE Facilitators. (2) Tutorial, to be arranged. Enforced corequisite: course 1885B. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor while facilitating USIE 88S course. Individual contract with faculty mentor required. May not be repeated. Letter grading.

189. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designated as adjunct to undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

190. Studio/Research Colloquia in Art. (1) Seminar, three hours. Corequisite: course 197 or 198. Limited to juniors/seniors. Designed to bring together students undertaking supervised studio projects or research in seminar setting with one or more faculty members to discuss their own work or related work in discipline. Led by one supervising faculty member. May be repeated for maximum of 16 units. P/NP grading.

193. Journal Club Seminars: Current Topics in Art. (1) Seminar, three hours. Limited to junior/senior Art majors. Selection of readings, visiting artist lectures, screenings, and readings in field. May be repeated for credit. P/NP grading.

195. Community Internships in Art. (2 to 4) Tutorial, six to 12 hours. Limited to juniors/seniors. Art-related internship. Directed supervised participation in community agency, business, or institution. Students meet on regular basis with instructor and provide periodic reports of their experience. Only 4 units may be applied toward undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

197. Individual Studies in Art. (2 to 4) Tutorial, to be arranged. Preparation: 3.0 grade-point average in major. Corequisite: course 190. Limited to junior/se- rior Art majors. Individual intensive studio project or study, with scheduled meetings to be arranged between faculty member and student. Tangible evidence
of project or mastery of subject matter required. May be repeated for maximum of 8 units. Individual contract required. Letter grading.

196. Honors Research in Art. (2 to 4) Tutorial, to be arranged. Preparation: 3.0 grade-point average overall, 3.5 grade-point average in major. Corequisite: course 190. Limited to senior Art majors. Development and completion of comprehensive research or studio project under direct supervision of faculty member. May be repeated for maximum of 8 units. Individual contract required. Letter grading.

Graduate Courses

271. Graduate Painting. (2 to 8) Studio, eight hours. Study in painting and associated media. May be repeated for credit with consent of adviser. Letter grading.

272. Graduate Printmaking. (2 to 8) Studio, eight hours. Studies in traditional and experimental printmaking. Selected studies in intaglio, lithograph, woodcut, silk screen, photo printmaking, and mixed media. May be repeated for credit with consent of advisor. Letter grading.

273. Graduate Sculpture. (2 to 8) Studio, eight hours. Studies in sculpture with specific attention to ongoing nature, specificity, and approach to each student’s particular discipline. Individual studio visits and consultation. May be repeated for credit with consent of adviser. Letter grading.

274. Graduate Photography. (2 to 8) Studio, eight hours. Studies concentrating on development of individual student’s artwork. Studio emphasis with adjacent studies in theoretical and critical analysis. Specific attention to original, expressive, social, and humanistic values of art. May be repeated for credit with consent of adviser. Letter grading.

275. Graduate New Genres. (2 to 8) Studio, eight hours. Studies in alternative media, including installation, performance, video, film, and other nontraditional media and processes. May be repeated for credit with consent of adviser. Letter grading.

276. Graduate Group Critique. (4) Discussion, four hours; tutorial, to be arranged. Group critique/discussion of students’ research. Additional tutorial meetings by arrangement with instructor. May be repeated for credit. Letter grading.

277. Graduate Ceramics. (2 to 8) Studio, eight hours. Studies in ceramics and art with investigation of traditional and experimental processes and intellectual and aesthetic developments of ceramic media. Emphasis on development of significant body of original work reflecting student’s expressive and theoretical concerns. May be repeated for credit. Letter grading.

278. Interdisciplinary Studio. (2 to 8) Studio, eight hours. Tutorial focused on directed research, studio visits, and group discussions of recommended readings. May be repeated for credit. S/U or letter grading.

279. Open Area Studio. (2 to 8) Studio, 12 hours. Limited to Art MFA students. Non-medium-specific course in which students work to establish, expand, and deepen their studio practices, including technical and research-related skills, to develop significant body of original work that reflects their concerns and furthers their artistic goals. May be repeated for credit. Letter grading.

C280. Seminar: Art. (4) Seminar, three hours. Advanced topics in critical theory and study of contemporary art, with emphasis on individuals, issues, and methodologies. Possible areas of study from structuralism, deconstruction, feminism and psychoanalytic theory, modernism, postmodernism, and semiotics. May be repeated for credit. Concurrently scheduled with course C180. Letter grading.

C281. Exhibition and System. (4) Seminar, four hours. Examination of temporary exhibition and its associated field of publications as intertextual system of meaning, beginning with individual works and proceeding to on-site analysis of current exhibitions. May be repeated for credit. Concurrently scheduled with course C181. Letter grading.

C282. Exhibitions and Public Programs. (4) Seminar, four hours. Introduction to principles of program planning and community development in relation to visual arts and work of art museums. May be repeated for credit. Concurrently scheduled with course C182. Letter grading.

C283. Special Topics in Art. (2 or 4) Seminar, six hours (2-unit course) or 12 hours (4-unit course). Selected topics in art explored through variety of approaches that may include projects, readings, discussion, research papers, and oral presentations. Topics announced in advance. May be repeated for credit. Concurrently scheduled with course C183. Letter grading.

C287. Contemporary Art Collections in Los Angeles. (2) Seminar, three hours; outside study, three hours. Exploration of critical issues regarding question of collections and collecting. Visits to institutions and collections and discussion of vision, goals, and scope of collections, as well as individual works. Concurrently scheduled with course C187. Letter grading.

375. Teaching Apprentice Practicum (1 to 4). Seminar, to be arranged. Preparation: apprentice personnel employment as teaching assistant, associate, or fellow. Teaching apprenticeship under active guidance and supervision of regular faculty member responsible for curriculum and instruction at UCLA. May be repeated for credit. S/U grading.

400A-400B. Visiting Artists Studio. (2–2) Studio, six hours. Designed for MFA students. Introduction to visiting artists in their area of study, with focus on one-on-one critiques with wide range of practitioners. In Progress (400A) and S/U (400B) grading.

400C. Visiting Artists Studio. (4) Studio, 12 hours. Limited to graduate art students. Introduction to visiting artists in their area of study, with focus on one-on-one critiques with wide range of practitioners. S/U grading.

401. MFA Working Groups. (2) Research group meeting, two hours. Limited to MFA students. Three or more MFA candidates propose research and/or studio topic and invite the Department faculty member to mentor group/topic. May be repeated for credit. S/U grading.

405. Teaching Assistant Training Practicum. (2) Seminar, three hours; outside study, three hours. Forum for first-year teaching assistants for discussion and exploration of teaching pedagogy and classroom mechanics. Problems and practices of teaching art at college level, as well as role of teaching assistants with them. Designed to help new teaching assistants develop teaching skills and to orient them to department and University policies and resources. May not be applied toward degree requirements. S/U grading.

501. Cooperative Program. (2 to 8) Tutorial, to be arranged. Preparation: consent of UCLA graduate advisor and graduate dean, and host campus instructor, department chair, and graduate dean. Used to record enrollment of UCLA students in courses taken under cooperative arrangements with USC. S/U or letter grading.

597. Preparation for Master’s Comprehensive Examination. (2 to 12) Tutorial, to be arranged. May be repeated for credit with consent of adviser. S/U or letter grading.

598. Directed Individual Study or Research. (2 to 8) Tutorial, to be arranged. May be repeated for credit with consent of adviser. S/U or letter grading.

Scope and Objectives

The Department of Art History offers programs leading to the Bachelor of Arts, Master of Arts, and Ph.D. degrees. It endorses an interdisciplinary and intercultural approach to art history of all periods and places. By thinking across current categories and boundaries and even critically interrogating art history itself, students are encouraged to question the canon, rethink the relationship between margins and centers, and practice a socially and politically responsible art history.

The rich and varied art resources available at UCLA and throughout Southern California offer students extraordinary opportunities to supplement the formal curriculum.

Undergraduate Study

The Art History Department offers a designated capstone program for undergraduate majors. Students have options for completing a senior honors thesis, a directed independent study, an advanced undergraduate seminar, a museum studies internship, a research assistantship, or a faculty-approved upper-division course that includes additional coursework culminating in the completion of a capstone paper. Through their capstone work, students are expected to conceive and execute a research or creative project; identify and evaluate documentation relevant to the discipline; develop an enhanced capacity for writing and research, critical and analytical thinking, and competent familiarity with art his-
terial methodologies; and identify and articulate these arguments within art historical discourse and areas of specialization. The capstone experience also enables students to develop an enriched understanding of the foundations of the discipline, as well as the current landscape of the field.

Art History Major

Required: Two courses from Art History 20 through 25 and two courses from 27 through 31. It is strongly recommended that the courses be taken prior to enrollment in upper-division courses. Some of these courses serve as requisites to certain upper-division courses.

Preparation for the Major

Required: Two courses from Art History 20 through 25 and two courses from 27 through 31. It is strongly recommended that the courses be taken prior to enrollment in upper-division courses. Some of these courses serve as requisites to certain upper-division courses.

Transfer Students

Transfer applicants to the Art History major with 90 or more units must complete as many of the following introductory courses as possible prior to admission to UCLA: two art history courses in ancient, Renaissance and baroque, medieval, or modern art and two courses in African, Asian, or pre-Columbian art.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

The Major

Required: Eleven upper-division art history courses as follows:


3. Additional art history electives selected from courses 100 through 185 (20 units minimum); courses 196, 197A, and 1978 may also be included. With prior approval of the undergraduate adviser, one of these courses may be taken in another department.

While the department does not require language training beyond the College requirement, Art History majors, particularly those planning graduate work, are strongly encouraged to study foreign languages beyond what is required by the College.

Each course must be taken for a letter grade.

Honors Program

The honors program is designed for Art History majors who are interested in carrying out an independent research project that culminates in a departmental honors thesis of approximately 30 pages. The program gives qualified students the opportunity to work closely with individual professors on an in-depth supervised research and writing project.

All senior Art History majors who have completed a minimum of six upper-division art history courses with a departmental grade-point average of 3.5 or better and an overall GPA of 3.0 or better are eligible to apply. Consult the art history student affairs officer to plan a coherent program.

Dodd Hall, 310-825-3992. Students are advised to declare the minor early and meet with the student affairs officer to plan a coherent program.

Required Lower-Division Courses (15 units): Three courses selected from Art History 20, 21, 22, 23, 24, 25, 27, 28, 29, 30, 31.

Required Upper-Division Courses (20 units): Five art history courses as follows:


3. One additional art history elective selected from courses 100 through 185; course 197A may also be included.

A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor.

By petition, one upper-division course with substantial art historical content and methodology applied toward the students’ majors may also be applied toward this minor.

Each minor course must be taken for a letter grade (unless the course is graded only on a P/NP basis), and students must have an overall grade-point average of 2.0 or better in the minor. Successful completion of the minor is indicated on the transcript and diploma.
Graduate Study

Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Division website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Graduate Degrees

The Department of Art History offers Master of Arts (MA) and Doctor of Philosophy (PhD) degrees in Art History.

Art History

Lower-Division Courses

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.


22. Renaissance and Baroque Art. (5) Lecture, three hours; discussion, one hour. Survey of Renaissance and baroque art. P/NP or letter grading.

23. Modern Art. (5) Lecture, three hours; discussion, one hour; museum field trips. History of modern art from 1860s to 1960s, from Manet and impressionists to pop art and minimalism. Study of origins and social functions, as well as aesthetic innovations and philosophical dilemmas of modernism. P/NP or letter grading.

24. Architecture in Modern World. (5) Lecture, three hours; discussion, one hour. Introduction to study of architectural history through examination of built world of past two centuries. Building technologies and forms of economy and politics have produced modern built environment that is both diverse and increasingly connected. Focus on factors that have affected architecture globally and those that give rise to increasingly connected. Focus on factors that have affected architecture. Students will be introduced to lower-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, and other activities and led by lecture course instructor. May be repeated for credit with for credit. Honors content noted on transcript. P/NP or letter grading.

89. Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to lower-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities. May be repeated for credit with for credit. Honors content noted on transcript. P/NP or letter grading.

98C. Honors Contracts. (1) Tutorial, three hours. Limited to 10 students. Designed as adjunct to lower-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

99. Student Research Program. (0 to 6) Tutorial (supervised research in College Honors Program). Designed as adjunct to lower-division lecture course. Individual with study course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for credit. Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Courses

100. Art Historical Theories and Methodologies. (4) Seminar, three hours. Requisites: three courses from 20 through 31, and three courses from disciplines of art history, with studies of various theoretical, critical, and methodological approaches to visual arts. Letter grading.

M101A. Art and Architecture of Ancient Egypt, Pre-dynastic Period to New Kingdom. (4) Same as Ancient Near East CM101A) Lecture, three hours. Study of architecture, sculpture, painting, and minor arts during Predynastic period and Old Kingdom. May be repeated for credit with consent of instructor. P/NP or letter grading.

M101B. Art and Architecture of Ancient Egypt, New Kingdom to Greco-Roman Period. (4) Same as Ancient Near East M101B.) Lecture, three hours. Study of architecture, sculpture, painting, and minor arts from New Kingdom to Greco-Roman period. P/NP or letter grading.

M101C. Ancient Egyptian Temple and City of Thebes. (4) Same as Ancient Near East M101C.) Lecture, four hours; fieldwork, one hour. Focus on ancient temples of city of Thebes (modern day Luxor). Theban temples are some of best-preserved cult buildings in all of Egypt, and full traditions of art as well as architectural development, and social and political transformations echoed throughout all of ancient Egypt. Investigation of ritual and funerary architecture of eastern and western banks through festival processions, chronological changes in function and form of Theban temples through time, and statuary program of individual temples. P/NP or letter grading.

M110D. Art and Death in Ancient Egypt. (4) Same as Ancient Near East M116D) Lecture, four hours. Ways of death, burial, funerary ritual, and afterlife beliefs in ancient Egypt, as well as in ancient Near East and Nubia, with focus on ancient visual materials—both objects and architecture—from Predynastic to Roman periods. P/NP or letter grading.

M111. Minoan Art and Archaeology. (4) Same as Classics M113A) Lecture, three hours. Requisite: course 20 or Classics 10 or 51A. Study of development of art and architecture in Minoan Crete from circa 3000 to 1000 BC. P/NP or letter grading.

M112A. Mycenaean Art and Archaeology. (4) Same as Classics M113B) Lecture, three hours. Requisite: course 20 or Classics 10 or 51A. Study of development of art and architecture in Mycenaean Greece from circa 2000 to 1000 BC. P/NP or letter grading.

M112B. Archaic Greek Art and Archaeology. (4) Same as Classics M113C) Lecture, three hours. Requisite: course 20 or Classics 10 or 51A. Study of development of art and architecture of Greek world from approximately 800 through 490 BC. P/NP or letter grading.

M112C. Classical Greek Art and Archaeology. (4) Same as Classics M113D) Lecture, three hours. Requisite: course 20 or Classics 10 or 51A. Study of development of art and architecture of Greek world from approximately 490 through 350 BC. P/NP or letter grading.

M112D. Hellenistic Greek Art and Archaeology. (4) Same as Classics M113E) Lecture, three hours. Requisite: course 20 or Classics 10 or 51A. Study of development of art and architecture of Greek world from middle of 4th century BC, including transmittal of Greek art forms to Romans. P/NP or letter grading.

M113A. Etruscan Art and Archaeology. (4) Same as Classics M113F) Lecture, three hours. Requisite: course 20 or Classics 10 or 51B. Study of art and architecture of Rome and its Empire from circa 300 BC to AD 300. P/NP or letter grading.

M113B. Roman Art and Archaeology. (4) Same as Classics M113G) Lecture, three hours. Requisite: course 20 or Classics 10 or 51B. Art and architecture of Rome and its Empire from circa 300 BC to end of Roman Republic. P/NP or letter grading.

M113C. Late Roman Art. (4) Same as Classics M113H) Lecture, three hours. Requisite: course 20 or Classics 10 or 51B. Art of Roman Empire from 2nd through 4th century AD. P/NP or letter grading.

M114A-M114B-M114C. Classical Archaeology. (4-4-4) (Same as Classics M115-115-115) Lecture, four hours. Requisite: course 20, Classics 10, 20, 51A, 51B, or History 1A. Knowledge of Greek and Latin not required. General introduction to study of Aegean, Greek, and Roman architecture, sculpture, and painting, with credit with department consent. P/NP or letter grading.


C114D. Selected Topics in Ancient Art. Lecture, three hours. Variable topics in art history that reflect interests of individual regular and/or visiting faculty members. May be repeated twice for credit. Concurrently scheduled with course C214D. P/NP or letter grading.

CM115A. Late Antique Art and Architecture. (4) Same as Classics M115L) Lecture, three hours. Art and architecture of late Roman Empire and early Christian world. Concurrently scheduled with course C215A. P/NP or letter grading.


C116A. Middle Byzantine Art and Architecture. (4) Lecture, three hours. Theory and development of Byzantine art from iconoclastic controversy to 1204. Concurrently scheduled with course C216A. P/NP or letter grading.

C116B. Late Byzantine Art and Architecture. (4) Lecture, three hours. Theory and development of Byzantine art from 1204 to 1453. Concurrently scheduled with course C216B. P/NP or letter grading.

C117A. Medieval Archaeology. (4) Lecture, three hours. Archaeology of medieval world. Concurrently scheduled with course C217A. P/NP or letter grading.

C117B. Selected Topics in Medieval Art. (4) Lecture, three hours. Variable topics in medieval art that reflect interests of individual regular and/or visiting faculty members. May be repeated twice. Concurrently scheduled with course C217B. P/NP or letter grading.

M118A. Medieval Armenian Art. (4) (Same as Armenian M172.) Lecture, three hours. Examination of cultural and historical contexts of Armenian miniature paintings. P/NP or letter grading.

M118B. Armenian Painting, 17th to 20th Century. (4) (Same as Armenian M173.) Lecture, three hours. Overview of development of modern Armenian painting out of its matrix in 17th and 18th centuries. P/NP or letter grading.

C118C. Selected Topics in Armenian Art. (4) Lecture, three hours. Variable topics in Armenian art that reflect interests of individual regular and/or visiting faculty members. May be repeated twice. Concurrently scheduled with course C218. P/NP or letter grading.

119A. Western Islamic Art. (4) Lecture, three hours. From Tigris and Euphrates Rivers to Spain, 7th to 16th century. P/NP or letter grading.

119B. Eastern Islamic Art. (4) Lecture, three hours. From Tigris and Euphrates Rivers through Afghanistan and parts of central Asia; Ottoman Empire. P/NP or letter grading.

M119C. Introduction to Islamic Archaeology. (4) (Same as Islamic Studies M111 and Middle Eastern Studies M111.) Lecture, three hours. From earliest monuments of Islam in Arabia and Jerusalem to humble remains of small Egyptian port, broad focus on archaeological and standing remains in central Islamic lands (primarily Syria, Egypt, and Iraq), Turkey, Iran, North Africa, and Spain. Pseudous cultural transformations occurred from birth of Islam in 7th century to early Ottoman period in 16th and 17th centuries, which are traceable in material records. Assessment of effectiveness of tools afforded by historical archaeology to aid understanding of past societies. P/NP or letter grading.

M119D. Archaeology and Art of Christian and Islamic Egypt. (4) (Same as Archaeology M112, Islamic Studies M112, and Middle Eastern Studies M112.) Lecture, three hours. Culture of Egypt transformed gradually after Muslim conquest in mid-7th century CE. According to material evidence such as ceramics, architecture, funerary forms, and burial techniques, it is functionally impossible to separate pre-Islamic Christian Egypt from early Islamic Egypt. Although population may have become largely Muslim by 10th century, Egypt remained Coptic in many senses even to 14th century and retains sizeable Christian minority to present. Survey of archaeological remains and standing architecture of Egypt from 6th to 19th centuries; charting of continuity and discontinuity in material culture and shifts in human geography and land use. P/NP or letter grading.

C120. Selected Topics in Islamic Art. (4) Lecture, three hours. Variable topics in Islamic art and architecture that reflect interests of individual regular and/or visiting faculty members. May be repeated twice for credit. Concurrently scheduled with course C220A. P/NP or letter grading.

121A. Italian Renaissance Art of 14th Century. (4) Lecture, three hours. Art and architecture of 14th century. P/NP or letter grading.


121D. Late Renaissance Art: Counter-Reformation. (4) Lecture, three hours. Requisite: course 22. Painting, sculpture, and architecture of late 16th and early 17th centuries considered in context of Counter-Reformation. P/NP or letter grading.


C125A. Southern Baroque Art. (4) Lecture, three hours. Art and architecture of Spain or Italy, 16th to late 17th century. Concurrently scheduled with course C225. P/NP or letter grading.

C125B. Northern Baroque Art. (4) Lecture, three hours. Requisite: course C125A. Art and architecture of Northern Europe, 16th to late 17th century. P/NP or letter grading.

C126. Selected Topics in Early Modern Art. (4) Lecture, three hours. Variable topics in early modern art that reflect interests of individual regular and/or visiting faculty members. May be repeated twice for credit. Concurrently scheduled with course C226. P/NP or letter grading.

127A. European Art of 17th and 18th Centuries. (4) Lecture, three hours. Requisite: course 22. Painting, architecture, and sculpture of 17th and 18th centuries examined in light of political and intellectual developments. Special emphasis on effect of rise of democratic institutions, especially French Revolution. P/NP or letter grading.


M127C. Cultural and Intellectual History of Modern Europe, 19th Century. (4) (Same as History M22E2.) Lecture, three hours; discussion, one hour (when scheduled). Design of 18th- and 19th-century architects and painters; debate on aesthetic versus formal criteria; assessment of modern architecture in U.S. and Europe, concentrating on the rise of modernism. Concurrently scheduled with course C231A. P/NP or letter grading.

C130. European History of 20th Centuries. (4) Lecture, three hours. Requisite: course 22. Changing topics in contemporary art (post-1945) that reflect interests of individual regular and/or visiting faculty members. May be repeated once for credit. P/NP or letter grading.

C131A. Contemporary Art, 1940s to 1950s. (4) Lecture, three hours. Requisite: course 23. Study of major artistic and cultural trends following World War II in U.S. and Europe, concentrating on the rise of modernism. Concurrently scheduled with course C231A. P/NP or letter grading.


C132. Selected Topics in Contemporary Art. (4) Lecture, three hours. Requisite: course 23. Changing topics in contemporary art (post-1945) that reflect interests of individual regular and/or visiting faculty members. May be repeated once for credit. P/NP or letter grading.

C133A. American Art before Civil War. (4) Lecture, three hours. Painting, sculpture, and architecture in U.S. from Colonial period through Civil War. Concurrently scheduled with course C233A. P/NP or letter grading.


C133C. American Art, 1900 to 1945. (4) Lecture, three hours. Painting, sculpture, and architecture in U.S. from 1900 to 1945. Concurrently scheduled with course C233C. P/NP or letter grading.

133D. Architecture in U.S. (4) Lecture, three hours; discussion, one hour. Introduction to architecture built in U.S. over last 5,000 years. Architecture as vehicle for political and cultural authority, citizenship, and social identity; its role in defining place and our relationship to natural environment and as vehicle for assertion of human control over natural world; its place in world of work and commerce; and its status as professional and aesthetic pursuit. P/NP or letter grading.

C133E. American Houses. (4) Lecture, three hours. Many historians consider the American single-family house to be one of two most American contributions to world architecture (next to skyscrapers). Examination of this claim critically by placing single-family houses in broader context of varied dwellings built and occupied by residents of present-day U.S. over last 500 years, including both architecturally ambitious houses and ordinary (or vernacular) ones, houses of indigenous groups and those of immigrants, urban and rural houses, and single-family houses and multiple dwellings of all sorts. Offers ways to think about houses we occupy and to understand how they relate to the history of American architecture. P/NP or letter grading.
CM135A. African American Art before 1900. (4) (Same as African American Studies CM135A.) Lecture, three hours. Detailed inquiry into work to circa 1900 of African American artists whose works provide insightful and critical commentary about major features of American life and society. Concurrently scheduled with course CM235A. P/NP or letter grading.

CM135B. African American Art, 1900 to 1963. (4) (Same as African American Studies CM135B.) Lecture, three hours. Detailed inquiry into work of African American artists from Colombian Exposition to 1963 March on Washington within context of social, political, and cultural engagement, as well as in codification of American national identity. Concurrently scheduled with course CM235B. P/NP or letter grading.

C136A. Selected Topics in African American Art. (4) Lecture, three hours. Variable topics in African American art that reflect interests of individual regular and/or visiting faculty members. May be repeated twice for credit. Concurrently scheduled with course C236A. P/NP or letter grading.

137. Arts of Native North America. (4) Lecture, three hours. Survey of painting, sculpture, and other arts from Inuit to plateau, Caribbean and Southwestern U.S. Concurrently scheduled with course C237A. P/NP or letter grading.

CM139A. Maya Art and Architecture. (4) (Formerly numbered C139A.) (Same as Chicano and Chicana Studies M137.) Lecture, three hours. Requisite: course 27. Study of Maya-speaking cultures of southern Mesoamerica from circa 2000 BC to Conquest, with particular emphasis on history and iconography. Concurrently scheduled with course C239A. P/NP or letter grading.

C139B. Aztec Art and Architecture. (4) Lecture, three hours. Requisite: course 27. Painting, sculpture, architecture, and other arts of Nahautl-speaking peoples of central Mexico, with emphasis on their social and historical context and major scholarly debates. Concurrently scheduled with course C239B. P/NP or letter grading.

C139C. Inca Art and Architecture. (4) Lecture, three hours. Exploration of art, architecture, and urbanism of incas from their empire's height in late 15th century to their political and cultural fragmentation during Spanish occupation of Andes (1532 to 1824). Concurrently scheduled with course C239C. P/NP or letter grading.

C140. Selected Topics in Arts of Indigenous Americas. (4) Lecture, three hours. Variable topics in artistic production of Native people across Americas that reflect interests of individual regular and/or visiting faculty members. May be repeated twice for credit. Concurrently scheduled with course C240A. P/NP or letter grading.

CM141. Colonial Latin American Art. (4) (Formerly numbered C141.) (Same as Chicana and Chicana Studies M187B.) Lecture, three hours; discussion, one hour (when scheduled). Art and architecture of colonial Americas from 16th to 18th century. Concurrently scheduled with course C241. P/NP or letter grading.

C142A. Mexican Art in Modern Age. (4) Lecture, three hours. Mexican art of 19th and 20th centuries, from foundation of academy in 1785 to present day. Study of art and revolution, muralism, surrealism, indigenism, postcolonialism, and postmodernism in painting, sculpture, prints, photography, and architecture. Concurrently scheduled with course C242A. P/NP or letter grading.

C142B. Latin American Art of 20th Century. (4) Lecture, three hours; discussion, one hour (when scheduled). Mainstream modern and contemporary art and architecture of selected Latin American countries, including both modernist and postmodernist forms, considered in context of social and political concerns, both national and international. Concurrently scheduled with course C242B. P/NP or letter grading.

143. Selected Topics in Latin American Art. (4) Lecture, three hours. Variable topics in Latin American art that reflect interests of individual regular and/or visiting faculty members. May be repeated twice for credit. Concurrently scheduled with course C243A. P/NP or letter grading.


C145A. Architecture and Urbanism in Africa. (4) Lecture, three hours. Survey of African built environment at various moments and in different places from about 200 CE to present, with emphasis on cultural, social, and historical contexts of architecture, gender, and power, and contemporary African cities. Concurrently scheduled with course C245A. P/NP or letter grading.

C145B. Contemporary Arts of Africa. (4) Lecture, three hours; discussion, one hour (when scheduled). Survey of contemporary African art, 1950 to present, with special emphasis on changing meaning of art object, status of African artist, global reception of contemporary African art, and various conditions of contemporary African art. Concurrently scheduled with course C245B. P/NP or letter grading.

C146A. Selected Topics in African Art. (4) Lecture, three hours. Variable topics in African art that reflect interests of individual regular and/or visiting faculty members. May be repeated twice for credit. Concurrently scheduled with course C246A. P/NP or letter grading.


C148A. Art and Material Culture, Neolithic to 210 BC. (4) Lecture, three hours. Genesis of Chinese civilization and distinctive artifacts, including sites and works of art (e.g., ceramics, bronzes, jades). Concurrently scheduled with course C248A. P/NP or letter grading.

C148B. Art and Material Culture of Early Imperial China, 210 BC to AD 906. (4) Lecture, three hours. Palaces and tombs of early imperial dynasties, impact of Buddhist art (cave temples), rise of new media and technologies. Concurrently scheduled with course C248B. P/NP or letter grading.

C148C. Art and Material Culture of Late Imperial China, 906 to 1911. (4) Lecture, three hours. Secular and religious (Buddhist and Taoist) architecture, painting, sculpture, and various luxury industries (lace, porcelain, textiles, jade, bronze, furniture, wood and bamboo carving, etc.). Concurrently scheduled with course C248C. P/NP or letter grading.


C148E. Art in Modern China. (4) Lecture, three hours. Exploration of formal, ideological, and stylistic changes in art schools and masters of Chinese art from turn of 20th century to present, with focus on interaction with foreign cultures and issues of self-identity, assimilation, modernity, tradition, and commodification of Chinese art. Concurrently scheduled with course C248E. P/NP or letter grading.


151. Selected Topics in Japanese Art. (4) Lecture, three hours. Variable topics in Japanese art that reflect interests of individual regular and/or visiting faculty members. May be repeated twice for credit. Concurrently scheduled with course C251A. P/NP or letter grading.

152A. Arts of Korea. (4) Lecture, three hours; museum field trip. Introduction to arts and archaeology on Korean peninsula from Neolithic beginnings to early 20th century through analysis and discussion of selected monuments. Selected topics include early and technologically, religious, cultural, and sociopolitical contexts. Examination of construction of concepts of history, under colonial and nationalist perspectives, with regard to historical and contemporary East Asian cultural and political interrelations. P/NP or letter grading.

152B. History of Korean Painting. (4) Lecture, three hours. Limited to juniors/seniors. Korean painting history from Three Kingdoms period to 19th century, examined within cultural and sociopolitical contexts. Special emphasis on diversity of topics and social status of artists during Choson dynasty (1392 to 1910). Concurrently scheduled with course C252B. P/NP or letter grading.

152C. History of Korean Ceramics. (4) Lecture, three hours. Limited to juniors/seniors. History of Korean Buddhist art from Three Kingdoms period to Choson dynasty, with special emphasis on Buddhist iconography and relationships between sculpture, painting, and architecture. Concurrently scheduled with course C252C. P/NP or letter grading.

153. Selected Topics in Korean Art. (4) Lecture, three hours. Variable topics in Korean art that reflect interests of individual regular and/or visiting faculty members. May be repeated twice for credit. Concurrently scheduled with course C253A. P/NP or letter grading.

154A. Early Art of India. (4) Lecture, three hours. Not open to freshmen. Survey of Indian art from 10th to 19th century. Decline of Buddhist art, last efflorescence of Hindu art, Muslim painting and architecture, and Rajput painting. P/NP or letter grading.

154B. Later Art of India. (4) Lecture, three hours. Requisite: course 154A. Study in Indian sculpture and architecture. Concurrently scheduled with course C254A. P/NP or letter grading.

154D. Modern and Contemporary South Asian Art. (4) Lecture, three hours; discussion, one hour (when scheduled). Topics in modern and contemporary South Asian art from 1900 to present. P/NP or letter grading.

155. Selected Topics in South and Southeast Asian Art. (4) Lecture, three hours. Variable topics in South and Southeast Asian art that reflect interests of individual regular and/or visiting faculty members. May be repeated twice for credit. Concurrently scheduled with course C255A. P/NP or letter grading.

156. Arts of Southeast Asia. (4) Lecture, three hours. Not open to freshmen. Southeast Asian art from its beginning in prehistory through 19th century. Study of arts and cultures in lands of Southeast Asia, including Thailand, Cambodia, Vietnam, and Indonesia. P/NP or letter grading.

158A. Selected Topics in Asian Arts and Architecture. (4) Lecture, three hours. Variable topics in Asian art and architecture that reflect interests of individual regular and/or visiting faculty members. May be repeated twice for credit. Concurrently scheduled with course C258A. P/NP or letter grading.
C160. Art and Empire. (4) Lecture, three hours; discussion, one hour (when scheduled). Examination of relationship between art and imperial ideologies and introduction to current issues in colonial studies and postcolonial criticism. Concurrently scheduled with course C272A. P/NP or letter grading.

161. Cities in History. (4) Lecture, three hours; discussion, one hour. Examination of history of cities worldwide, locating cities in their aesthetic, social, cultural, and symbolic contexts. History of cities from origins of urban course, with focus on recent centuries. P/NP or letter grading.

C169. Selected Topics in Architectural History. (4) Lecture, three hours. Variable topics in architectural history that interests of individual regular and/or visiting faculty members. May be repeated twice for credit. Concurrently scheduled with course C269. P/NP or letter grading.

C170A. Museum Studies. (4) Lecture, three hours; discussion, one hour (when scheduled). Introduction to museology as critical practice, with emphasis on history and theory of museums and impact of culture and society on current museum theory and practice. Concurrently scheduled with course C270A. P/NP or letter grading.

C170B. Museum Studies Practicum. (2 to 4) Lecture, three hours. On-site examination and discussion of selected artworks, exhibitions, and associated published and distributed materials, and of museum and gallery institutions, practices, and policies. Concurrently scheduled with course C270B. Letter grading.

C171. Selected Topics in Museum Studies. (4) Seminar, variable topics. Topics that reflect interests of individual regular and/or visiting faculty members. May be repeated for credit with topic change. Concurrently scheduled with course C271. P/NP or letter grading.

C172A. Preservation of Art. (4) Lecture, three hours. Designed for Anthropology and Art History majors and other juniors/seniors. Introduction to preservation of cultural heritage materials, including what should be preserved and why, as well as who should be involved in decision-making process. Discussion of issues of preservation and restoration of these cultural heritage materials both in museum and outdoor environment contexts. Materials and techniques used to make cultural heritage materials, in relation to preservation efforts needed to prevent decay and loss. Introduction to examples of conservation issues related to sites, buildings, and collections. Ethical and contextual aspects with reference to changing values, illustrating how cultural materials may have been treated differently according to those values. Concurrently scheduled with course C272A. P/NP or letter grading.

C172B. Art: Fakes, Forgeries, and Authenticity. (4) Lecture, three hours. Examination of concepts of authenticity, originality, fakes, and forgeries in art. Overview of problems inherent in concept of authenticity and description of many examples of problems related to this concept in series of discussions based on objects from Getty collections. Introduction to subject of fakes and account of three different areas of connoisseurship that are essential component of production, study, and scientific examination of fakes. Nature of art connoisseurship in many examples by paintings of Renaissance and earlier panel paintings, as well as antiques and traditional African arts. Background of art restoration and art conservation discussed in relationship to authenticity. Consideration of technical tools that form basis of another kind of connoisseurship described in terms of dating techniques that can be applied directly to works of art and technical methods which material constituents reveal to works of art are studied. Concurrently scheduled with course C272C. P/NP or letter grading.

M179. Cultural Heritage and Identity Representation: Creating Fowler and Virtual Exhibit. (4) Same as Anthropology 212A. Lecture, three hours; discussion, one hour. Exploration of what it takes to run museum and create exhibit. Introduction to different types of museum work, ranging from collecting and curation, to research, conservation, presentation, visitor experience, and management. Students jointly create exhibit based on Fowler Museum collection. Students research and discuss context and different stakeholders that relate to material under consideration. Consideration of narrative exhibit and how objects and their arrangement convey deliberate or accidental message as well as original context of each object. Focus on people behind objects, technologies, or material characteristics. P/NP or letter grading.

185. Undergraduate Seminar. (4) Seminar, three hours. Offered each quarter. Variable topics, selected topics in art history explored through readings, discussion, research papers, and oral presentations. May be repeated twice for credit. P/NP or letter grading.

188A, 188B. Individual Study. (1) Tutorial, to be arranged. Enforced corequisite: Honors College 101E. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to discuss selected USIE seminar topic, conduct preparatory research, and begin preparation of syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.


188SC. Individual Studies for USIE Facilitators. (2) Tutorial, to be arranged. Enforced corequisite: course 188SB5. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor while facilitating USIE BBS course. Individual contract with faculty mentor required. May not be repeated. Letter grading.

189. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth through supplemental readings and/or discussions. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

189HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to upper-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. Letter grading.

195. Museum Studies Internship. (3) Seminar, tutorial, five hours; fieldwork, four hours. Requisite: course C170A. Limited to junior/senior Art History majors. Internship in supervised setting at participating host museum at UCLA or in greater Los Angeles area. Participation in ongoing museum projects and operations, with specific work to be determined by host institution in consultation with faculty mentor. Curatorial, educational, communications, public relations, and development work may be included, as well as assistance at public programs and related events. Students meet on regular basis with faculty mentor to discuss progress and feedback regarding their experience. May be repeated for credit. Individual contract with supervising faculty mentor required. P/NP or letter grading.

196. Research Apprenticeship in Art History. (2 to 4) Seminar, three hours per week per unit. Limited to juniors/seniors. Entry-level research apprenticeship for upper-division students under guidance of faculty mentor. May be repeated for credit. Individual contract required. P/NP or letter grading.

197A. Individual Studies in Art History. (2 to 4) Tutorial, to be arranged. Preparation: 3.0 grade-point average in major. Limited to seniors. Individual intensive study for majors, with scheduled meetings to be arranged between faculty mentor and student. Assigned reading and tangible evidence of mastery of subject matter required. May be repeated for max. of 8 units. Eight units may be applied toward major. Individual contract required. P/NP or letter grading.

197B. Individual Capstone Studies. (2 to 4) Tutorial, two hours. Limited to departmental junior/senior majors and minors. Guided study by faculty supervisor. Instructor meets with student to plan capstone project so it conforms to departmental capstone project guidelines. Must be taken in conjunction and concurrently with one upper-division departmental major. Individual contract required. P/NP or letter grading.

198A-198B. Honors Research in Art History. (4-4) Tutorial, to be arranged. Preparation: completion of required four upper-division departmental courses with 3.5 departmental grade-point average and overall 3.0 grade-point average. Limited to junior/senior Art History and History/Art History majors. Two-term independent research project. May not be repeated for credit. Individual contract required. P/NP or letter grading.

199. Directed Research in Art History. (2 to 4) Tutorial, two hours. Limited to juniors/seniors. Supervised individual research or investigation under guidance of faculty mentor. Culuminating paper or project required. May not be repeated for credit. Individual contract required. P/NP or letter grading.

Graduate Courses

200. Art Historical Theories and Methodologies. (4) Seminar, three hours. Critical examination of discipline of art history, with studies of various theoretical, critical, and methodological approaches to visual arts from antiquity to present. May be repeated for credit with consent of adviser. S/U or letter grading.

201. Topics in Historiography of Art History. (4) Seminar, three hours. Critical examination of historiographic traditions of specific schools and/or within discipline of art history, concentrating on particular time periods, geographical areas, artistic traditions, or works of one or more authors. May be repeated for credit with consent of adviser. S/U or letter grading.

202. Topics in Theory and Criticism in Art History. (4) Seminar, three hours. Focused studies of various theoretical and critical traditions within art history, concentrating on particular issues, authors, or methodologies either within or across historical and cultural areas. May be repeated for credit with consent of adviser. S/U or letter grading.

203. Topics in Architectural History and Theory. (4) Seminar, three hours. Focused studies of various theoretical and critical traditions within architectural history, concentrating on particular issues, authors, or methodologies either within or across historical, geographic, and cultural areas. May be repeated for credit with consent of adviser. S/U or letter grading.


210. Egyptian Art. (4) Seminar, two hours. Requisites: courses M110A, M110B, M1111. Art in Egypt during Late Period and Graeco-Roman Period. Students should be ready to prepare for every meeting briefing of topic from archaeological memoirs, not to exceed 10 minutes. Some lectures. May be repeated for credit with consent of adviser. S/U or letter grading.

212A. Topics in Aegean Art. (4) Seminar, two hours. Requisites: courses M1111, M112A. Art and architecture of Aegean Bronze Age (3000 to 1000 BC). Monuments or theoretical problems related to art and culture of Crete, Greece, or Cretan area. May be repeated for credit with consent of adviser. S/U or letter grading.

212B. Topics in Classical Art. (4) Seminar, two to three hours. Studies in Parthian art. Site-by-site study of Near East (Anatolia, Syria, Egypt) during period of Greek and Parthian control. May be repeated for credit with consent of adviser. S/U or letter grading.
C21G. Classical Art. (4) Seminar, two hours. Studies in Greco-Roman art and archaeology. Studies of specific periods, sites, or artistic media. May be repeated for credit with consent of adviser. S/U or letter grading.

C214D. Selected Topics in Ancient Art. (4) Lecture, three hours. Variable topics in ancient art that reflect interests of individual regular and/or visiting faculty members. May be repeated twice for credit. Concurrently scheduled with course C114D. S/U or letter grading.

C215A. Late Antique Art and Architecture. (4) Lecture, three hours. Art and architecture of late Roman Empire and early Christian world. Concurrently scheduled with course CM115A. S/U or letter grading.

C215B. Early Medieval Art and Architecture. (4) Lecture, three hours. Prerequisite: course 21. Art and architecture of Western Europe from Migration period until AD 1000. Concurrently scheduled with course C115B. S/U or letter grading.


C216A. Middle Byzantine Art and Architecture. (4) Lecture, three hours. Study of art of Byzantine Empire, 6th-14th centuries, from Nicaea to At about 1200. Study of course C116A. S/U or letter grading.

C216B. Late Byzantine Art and Architecture. (4) Lecture, three hours. Theory and development of Byzantine art from Iconoclastic controversy to 1200. Concurrently scheduled with course C116B. S/U or letter grading.

C217A. Medieval Archaeology. (4) Lecture, three hours. Archaeology of the Middle Ages. Study of course C117A. S/U or letter grading.

C217B. Selected Topics in Medieval Art. (4) Lecture, three hours. Variable topics in medieval art that reflect interests of individual regular and/or visiting faculty members. May be repeated twice for credit. Concurrently scheduled with course C117B. S/U or letter grading.

C217C. Medieval Art. (4) Seminar, two hours. Studies in selected topics in Byzantine and European medieval art. May be repeated for credit with consent of adviser. S/U or letter grading.

C217D. Byzantine Art, Architecture, and Archaeology. (4) Seminar, two hours. Selected topics in Byzantine art and architecture. Time. May be repeated for credit with consent of adviser. S/U or letter grading.

C218. Selected Topics in Ancient Art. (4) Lecture, three hours. Variable topics in Ancient art that reflect interests of individual regular and/or visiting faculty members. May be repeated twice for credit. Concurrently scheduled with course C118C. S/U or letter grading.

C220A. Selected Topics in Islamic Art. (4) Lecture, three hours. Variable topics in Islamic art and architecture that reflect interests of individual regular and/or visiting faculty members. May be repeated twice for credit. Concurrently scheduled with course C120A. S/U or letter grading.

C220B. Advanced Studies in Islamic Art. (4) Seminar, three hours. Lectures or seminar, research, and exploration of Islamic art and art history. May be repeated for credit with consent of adviser. S/U or letter grading.

C222A. Renaissance Art. (4) Seminar, two hours. Preparation: knowledge of Italian. Study of various aspects of Leonardo's theoretical approach to art in terms of sources and impact on followers. May be repeated for credit with consent of adviser. S/U or letter grading.

C224A. Northern Renaissance Art. (4) Seminar, two hours. Preparation: knowledge of German. Emphasis on selected topic (e.g., particular artist, trend, or problem). Research papers and oral reports required. May be repeated for credit with consent of adviser. S/ U or letter grading.

C225. Southern Baroque Art. (4) Lecture, three hours. Art and architecture of Spain or Italy, 16th to late 17th century. Concurrently scheduled with course C125A. S/U or letter grading.

C226. Early Modern Art. (4) Seminar, three hours. Emphasis on selected topic (e.g., particular artist, trend, or problem). Research papers and oral reports required. Language requirements depend on area of focus. May be repeated for credit with consent of adviser. S/U or letter grading.

C226. Selected Topics in Early Modern Art. (4) Lecture, three hours. Variable topics in early modern art that reflect interests of individual regular and/or visiting faculty members. May be repeated twice for credit. Concurrently scheduled with course C126. S/U or letter grading.

C226A-C226B-C226C. History of Photography. (4-4-4) Concurrently scheduled with courses C126A-C126B-C126C. S/U or letter grading. C226A, 1839 to 1910. Lecture, three hours. Study of origin, social functions, and development of photography in 19th and 20th centuries, from Népke to Atget, C226B, 1910 to Present. Lecture, three hours; discussion, one hour. History of photography in 20th century, with special attention to photography's entrance into project of avant-garde, its role in formation of postmodern aesthetic. C226C. Selected Topics. Lecture, three hours. Variable topics in history of photography that reflect interests of individual regular and/or visiting faculty members. S/U or letter grading.

C228D. History and Theory of Photography. (4) Seminar, three hours. Selected topics in photography history, criticism, and theory. S/U or letter grading.

C229A. Modern Art, 1900 to 1950. (4) Lecture, three hours; discussion, one hour. Future of 20th-century modernism from Fauvism to abstract expressionism. Topics include primitivism, gender, and sexuality in modernist art; origins of abstraction, collage, photomontage, and ready-made; rise of automation and chance procedures; art, utopia, and political revolution; antimodernism and fascism; mass culture, machine paradigm, and work of art in age of mechanical reproduction. Concurrently scheduled with course C129A. S/U or letter grading.

C229B. Dada, 1915 to 1923. (4) Lecture, three hours; discussion, one hour (when scheduled). Study of modernism and historical avant-garde of early 20th century, tracing the line of Dada avant-garde in its various geographical locales during and after World War I. Visual art, literature, film, and performance; an emphasis on special attention to invention and development of photography in 19th century and social, cultural engagement, as well as in codification of modern black life in U.S. Concurrently scheduled with course C129B. S/U or letter grading.

C230A. European Art, 1700 to 1900. (4) Seminar, two hours. Study of art, literature, and film associated with surrealism movement in France, with special attention to dissent surrealism of writer and philosopher Georges Bataille, as well as to challenge to art history posed by surrealism's engagement with lessons of psychoanalysis. Concurrently scheduled with course C130A. S/U or letter grading.

C230B. Surrealism, 1924 to 1939. (4) Lecture, three hours; discussion, one hour (when scheduled). Study of art, literature, and film associated with surrealism movement in France, with special attention to dissent surrealism of writer and philosopher Georges Bataille, as well as to challenge to art history posed by surrealism's engagement with lessons of psychoanalysis. Concurrently scheduled with course C130B. S/U or letter grading.

C233A. Modern Art, 1900 to 1950. (4) Lecture, three hours; discussion, one hour. Future of 20th-century modernism from Fauvism to abstract expressionism. Topics include primitivism, gender, and sexuality in modernist art; origins of abstraction, collage, photomontage, and ready-made; rise of automation and chance procedures; art, utopia, and political revolution; antimodernism and fascism; mass culture, machine paradigm, and work of art in age of mechanical reproduction. Concurrently scheduled with course C129A. S/U or letter grading.

C233A-M233B. Modern European History. (4-4) Seminar, two hours. Discussion addressed, with special attention to invention and development of photography in 19th century and social, cultural engagement, as well as in codification of modern black life in U.S. Concurrently scheduled with course C129A. S/U or letter grading.

C236A. Selected Topics in African American Art. (4) Lecture, three hours. Variable topics in African American art from 18th century to present. May be repeated for credit with consent of graduate adviser. S/U or letter grading.

C236A. Selected Topics in African American Art. (4) Lecture, three hours. Variable topics in African American art from 18th century to present. May be repeated for credit with consent of graduate adviser. S/U or letter grading.

C236A. Selected Topics in African American Art. (4) Lecture, three hours. Variable topics in African American art from 18th century to present. May be repeated for credit with consent of graduate adviser. S/U or letter grading.

C239A. Maya Art and Architecture. (4) Lecture, three hours. Prerequisite: course 27. Study of art of selected Maya-speaking peoples from circa 2000 BC to Conquest, with particular emphasis on history and iconography. Concurrently scheduled with course CM139A. S/U or letter grading.

C239B. Aztec Art and Architecture. (4) Lecture, three hours. Prerequisite: course 27. Painting, sculpture, architecture, and other arts of Nahua-speaking peoples of central Mexico, with emphasis on their social
and historical context and major scholarly debates. Concurrently scheduled with course C195B. S/U or letter grading.

C239C. Inca Art and Architecture. (4) Lecture, three hours. Exploration of art, architecture, and urbanism of Incas from their empire’s height in late 15th century to their political fragmentation, with emphasis on Spanish occupation of Ayacucho (1532 to 1824). Concurrently scheduled with course C339C. S/U or letter grading.

C240A. Selected Topics in Arts of Indigenous Americas. (4) Lecture, three hours. Variable topics in artistic production of Native people across Americas that reflect interests of individual regular and/or visiting faculty members. May be repeated twice for credit. Concurrently scheduled with course C140. S/U or letter grading.


C242A. Mexican Art in Modern Age. (4) Lecture, three hours. Mexican art of 19th and 20th centuries, from foundation of academy in 1785 to present day. Study of art and revolution, muralism, surrealism, indigenism, postcolonialism, and postmodernism in painting, sculpture, prints, photography, and architecture. Concurrently scheduled with course C142A. S/U or letter grading.

C242B. Latin American Art of 20th Century. (4) Lecture, three hours; discussion, one hour (when scheduled). Mainstream modern and contemporary art and architecture of selected Latin American countries, including both modernist and postmodernist forms, considered in context of social and political concerns, both national and international. Concurrently scheduled with course C142B. S/U or letter grading.

C245A. Architecture and Urbanism in Africa. (4) Lecture, three hours. Survey of African built environment at various moments and in different places from about 200 CE to present, with emphasis on cultural, social, and historical contexts of architecture, gender, and space, and contemporary African cities. Concurrently scheduled with course C145A. S/U or letter grading.

C245B. Contemporary Arts of Africa. (4) Lecture, three hours; discussion, one hour (when scheduled). Survey of African visual practices since mid-20th century, with focus on changing meanings of art object, status of African artist, global reception of contemporary African art, and very definitions of contemporary African art. Concurrently scheduled with course C145B. S/U or letter grading.

C246. African Art. (4) Seminar, three hours. Studies in selected topics in art of sub-Saharan Africa. May be repeated for credit with consent of adviser. S/U or letter grading.

C246A. Selected Topics in African Art. (4) Lecture, three hours. Variable topics in African art that reflect interests of individual regular and/or visiting faculty members. May be repeated twice for credit. Concurrently scheduled with course C146A. S/U or letter grading.

247. Oceanic Art. (4) Seminar, three hours. Studies in selected topics in art of Pacific islands. May be repeated for credit with consent of adviser. S/U or letter grading.

C248. Art and Material Culture, Neolithic to 210 BC. (4) Lecture, three hours. Genesis of Chinese civilization in light of new archaeological finds, including sites and works of art (e.g., ceramics, bronzes, jades). Concurrently scheduled with course C148A. S/U or letter grading.

C248B. Art and Material Culture of Early Imperial China, 210 BC to AD 906. (4) Lecture, three hours. Palaces and tombs of early imperial dynasties, impact of Buddhist art (cave temples), rise of new media and technologies. Concurrently scheduled with course C148B. S/U or letter grading.

C248C. Art and Material Culture of Late Imperial China, 906 to 1911. (4) Lecture, three hours. Secular and religious (Buddhist and Taoist) architecture, painting, sculpture, and various luxury industries (lacquer, porcelain, textiles, jade, bronze, furniture, wood and bamboo carving, etc.). Concurrently scheduled with course C148C. S/U or letter grading.


C248E. Gardens in Chinese Art and Culture. (4) Lecture, three hours. Overview of practice, theory, and representation of Chinese gardens in their historical, philosophical, artistic, social, and cultural contexts through literary writings, paintings, and aspects of material culture. Concurrently scheduled with course C148E. S/U or letter grading.


C249A. Selected Topics in Chinese Art. (4) Lecture, three hours. Variable topics in Chinese art that reflect interests of individual regular and/or visiting faculty members. May be repeated twice for credit. Concurrently scheduled with course C149A. S/U or letter grading.

249B. Chinese Art. (4) Seminar, three hours. Advanced studies in secular and religious artistic traditions of China. May be repeated for credit with consent of adviser. S/U or letter grading.

C260A. Art and Empire. (4) Lecture, three hours; discussion, one hour (when scheduled). Introduction to museology as critical practice, with emphasis on history that reflect interests of individual regular and/or visiting faculty members. May be repeated twice for credit. Concurrently scheduled with course C150B. S/U or letter grading.


C251A. Selected Topics in Japanese Art. (4) Lecture, three hours. Variable topics in Japanese art that reflect interests of individual regular and/or visiting faculty members. May be repeated twice for credit. Concurrently scheduled with course C151A. S/U or letter grading.

C251B. Japanese Art. (4) Lecture, three hours. Advanced studies in secular and religious artistic traditions of Japan. May be repeated for credit with consent of adviser. S/U or letter grading.


C252B. History of Korean Ceramics. (4) Lecture, three hours. History of Korean ceramics from Neolithic period to 19th century, with emphasis on technical and stylistic developments. Concurrently scheduled with course C152C. S/U or letter grading.

C252C. History of Korean Buddhist Art. (4) Lecture, three hours. History of Korean Buddhist art from Three Kingdoms period to Choson dynasty, with special emphasis on the development of Buddhist iconography and relationships between sculpture, painting, and architecture. Concurrently scheduled with course C152D. S/U or letter grading.

C253A. Selected Topics in Korean Art. (4) Lecture, three hours. Variable topics in Korean art that reflect interests of individual regular and/or visiting faculty members. May be repeated twice for credit. Concurrently scheduled with course C153A. S/U or letter grading.

C253B. Selected Topics in Korean Art. (4) Lecture, three hours. Studies of Korean art under different artistic, historical perspectives, methods, and theories. Individual art objects, with emphasis on representation. Group studies may be linked to exhibition projects. May be repeated with consent of instructor. S/U or letter grading.

C254A. Advanced Indian Art. (4) Lecture, three hours. Requisite: course 154A. Study in Indian sculpture and architecture. Concurrently scheduled with course C154C. S/U or letter grading.

C249L. Inca Art and Architecture. (4) Lecture, three hours. Topics in modern and contemporary South Asian art from 1900 to present. Letter grading.

C255A. Selected Topics in South and Southeast Asian Art. (4) Lecture, three hours. Variable topics in South and Southeast Asian art that reflect interests of individual regular and/or visiting faculty members. May be repeated twice for credit. Concurrently scheduled with course C155A. S/U or letter grading.

C256A. Indian Art and Architecture. (4) Lecture, three hours. Advanced studies in secular and religious artistic traditions of India. May be repeated for credit with consent of adviser. S/U or letter grading.

C256A. Selected Topics in Asian Arts and Architecture. (4) Lecture, three hours. Topics in Asian arts and architecture that reflect interests of individual regular and/or visiting faculty members. May be repeated twice for credit. Concurrently scheduled with course C156A. S/U or letter grading.

C256B. Topics in Asian Archaeology. (4) (Same as Anthropology M216.) Seminar, three hours. Designed for graduate students. Topics include identification of ethnic groups in archaeology, archaeology of prehistory, historical archaeology, and their influence on social development, archaeology of language dispersal, cultural contact and nature of cultural influence. S/U or letter grading.

C256C. Fieldwork in Archaeology. (2 to 8) Fieldwork, to be arranged. Participation in archaeological excavations or other archaeological research under supervision of staff. May be repeated for credit with consent of adviser. S/U or letter grading.

C260A. Art and Empire. (4) Lecture, three hours; discussion, one hour (when scheduled). Examination of relationship between art and imperial ideologies and introduction to current pre-colonial studies and postcolonial criticism. Concurrently scheduled with course C160A. S/U or letter grading.


C269. Selected Topics in Architectural History. (4) Lecture, three hours. Variable topics in architectural history that reflect interests of individual regular and/or visiting faculty members. May be repeated twice for credit. Concurrently scheduled with course C169. S/U or letter grading.

C270A. Museum Studies. (4) Lecture, three hours; discussion, one hour (when scheduled). Introduction to museology as critical practice, with emphasis on history and theory of museums and impact of culture and society on current museum theory and practice. Concurrently scheduled with course C170A. S/U or letter grading.

C270B. Museum Studies Practicum. (2 to 4) Lecture, three hours. On-site examination and discussion of selected artworks, exhibitions, and associated publications, and distributed materials of museum and gallery institutions, practices, and policies. Concurrently scheduled with course C170B. Letter grading.

C271. Selected Topics in Museum Studies. (4) Seminar, three hours. Variable topics in museum studies that reflect interests of individual regular and/or visiting faculty members. May be repeated for credit with topic change. Concurrently scheduled with course C171. S/U or letter grading.
C272A. Preservation of Art, (4) Lecture, three hours. Designed for anthropology, archaeology, and art history graduate students. Introduction to preservation of cultural heritage materials, including what should be preserved and why, as well as what should be involved in decision-making process. Discussion of issues of preservation and restoration of these cultural heritage materials both in museum and outdoor environments. Materials and techniques used to make cultural heritage materials, in relation to preservation efforts needed to prevent decay and loss. Introduction to examples of conservation issues related to sites, buildings, monuments, and collections. Ethical and contextual considerations in reference to changing values. Illustrating how cultural materials may have been treated differently according to those values. Concurrently scheduled with course C172A. S/U or letter grading.

C272C. Art: Fakes, Forgeries, and Authenticity, (4) Lecture, three hours. Examination of concepts of authenticity, originality, fakes, and forgeries in art. Overview of problems inherent in concept of authenticity and description of many examples of problems related to this concept in terms of discussions based on objects from various cultures. Introduction to subject of fakes and account of three different areas of connoisseurship that are essential component of production, study, and scientific examination of fakes. Nature of art connoisseurship described in many examples from Renaissance and earlier panel paintings, as well as antiquities and traditional African arts. Background of art restoration and art conservation discussed in relationship to authenticity and technical studies. Scientific tools that form basis of another kind of connoisseurship described in terms of dating techniques that can be applied directly to works of art and technical methods by which material constituents of works of art are studied. Concurrently scheduled with course C172B. S/U or letter grading.

272B. Restoration, Preservation, and Conservation, (4) Seminar, three hours. May not be repeated. S/U or letter grading.

ARTS AND ARCHITECTURE
School of the Arts and Architecture
2200 Broad Art Center
Box 951620
Los Angeles, CA 90095-1620
School of the Arts and Architecture
310-206-3564
School e-mail

Scope and Objectives
There is no major in arts and architecture; however, the following courses are part of the schoolwide curriculum.

Arts and Architecture
Lower-Division Courses
10. Arts Encounters: Exploring Arts Literacy in 21st Century, (4) Lecture, four hours; discussion, one hour; field trips, three hours; outside study, seven hours. Through series of direct encounters with art and artists across global range of practices, course equips students with critical skills that enhance their understanding of, and sharpen their appetite for, wide range of artistic practices. Attendance at performance/art events outside normal class schedule is mandatory. P/NP or letter grading.

19. Fiat Lux Freshman Seminars, (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

89. Honors Seminars, (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to lower-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

90. Student Research Program, (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be enrolled in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Courses
100. Selected Topics in Arts, (4) Lecture, three to six hours; discussion and/or laboratory, two to three hours (when scheduled); outside study, six to nine hours. Selected topics in arts explored through variety of approaches that may include projects, readings, studio work, performance, discussion, research papers, and oral presentations. Topics announced in advance. May be repeated for maximum of 8 units. P/NP or letter grading.

189. Advanced Honors Seminars, (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

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Scope and Objectives
There is no major in arts and architecture; however, the following courses are part of the schoolwide curriculum.

Arts and Architecture
Lower-Division Courses
10. Arts Encounters: Exploring Arts Literacy in 21st Century, (4) Lecture, four hours; discussion, one hour; field trips, three hours; outside study, seven hours. Through series of direct encounters with art and artists across global range of practices, course equips students with critical skills that enhance their understanding of, and sharpen their appetite for, wide range of artistic practices. Attendance at performance/art events outside normal class schedule is mandatory. P/NP or letter grading.

19. Fiat Lux Freshman Seminars, (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

89. Honors Seminars, (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to lower-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

90. Student Research Program, (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be enrolled in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Courses
100. Selected Topics in Arts, (4) Lecture, three to six hours; discussion and/or laboratory, two to three hours (when scheduled); outside study, six to nine hours. Selected topics in arts explored through variety of approaches that may include projects, readings, studio work, performance, discussion, research papers, and oral presentations. Topics announced in advance. May be repeated for maximum of 8 units. P/NP or letter grading.

189. Advanced Honors Seminars, (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.
The Asian American Studies major has the following learning outcomes:

- Skills in and critical appreciation for theoretical, multidisciplinary, and practical/applied dimensions of scholarly activities as applied to historical and contemporary studies of subject populations
- Skills in and critical appreciation for textual, library, archival, visual, creative, and fieldwork-based qualitative and quantitative research, including ways of identifying and accessing diverse resources
- Skills in and critical appreciation for comparative, relational, and intersectional understanding of group formation and dynamics, group differences and commonality, and individual identity within groups
- Skills in and critical appreciation for individual and collective agency, civic and political engagement, and engaged scholarship's role in social change
- Skills in and critical appreciation for historical contextualization including approaches to the rise of new groups, identities, and social movements in national, global, local, and other frameworks
- Skills in and appreciation for collective formations against forms of injustice, such as subordination and inequality

Preparation for the Major

Required: Two courses from Asian American Studies 10 or 10W, 20 or 20W, 30 or 30W, 40 or 40W, 50 or 50W.
Asian American Studies Minor

The Asian American Studies minor is designed for students who wish to gain understanding of and competence in Asian American Studies.

To enter the minor, students must have an overall grade-point average of 2.0 or better, have completed two lower-division Asian American Studies courses, and file a petition with the department under-graduate academic adviser, 3339 Rolfe Hall.

Required Lower-Division Courses (10 units): Two courses from Asian American Studies 10 or 10W, 20 or 20W, 30 or 30W, 40 or 40W, 50 or 50W.


No more than 4 graded units of Asian American Studies 195, 197, 198, and 199 may be applied toward the minor. Courses 192 and 196 may not be applied toward the minor. Only courses in the department or those multiple-listed with the department may be taken to fulfill requirements for the minor.

A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor. Each minor course must be taken for a letter grade, and students must have an overall grade-point average of 2.0 or better in the minor. Successful completion of the minor is indicated on the transcript and diploma.

Graduate Study

Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Division website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Graduate Degrees

The Department of Asian American Studies offers the Master of Arts (MA) degree in Asian American Studies. Two concurrent degree programs (Asian American Studies MA/Public Health MPH and Asian American Studies MA/Social Welfare MSW) are also offered.

Asian American Studies Lower-Division Courses

10. History of Asian Americans. (5) Lecture, three hours; discussion, one hour. Not open for credit to students with credit for course 10W. Multidisciplinary examination of history of Asians and Pacific Islanders in U.S. P/NP or letter grading.

10W. History of Asian Americans. (5) Lecture, three hours; discussion, two hours. Enforced requisite: English Composition 3 or 3H or English as a Second Language 36. Not open for credit to students with credit for course 10. Multidisciplinary examination of history of Asians and Pacific Islanders in U.S. Satisfies Writing II requirement. Letter grading.

M18. Leadership and Student-Initiated Retention. (2) Same as African American Studies M18, American Indian Studies M18, and Chicana and Chicano Studies M18). Seminar, two hours. Limited to freshmen/sophomores/first-year transfer students. Not open for credit to students with credit for course M168. Exploration of issues in retention at UCLA through lens of student-initiated and student-run programs, efforts, activities, and services. Focus on populations with historically low graduation rates targeted by Campus Retention Committee. May not be applied toward departmental major or minor elective requirements. May be repeated once for credit. Letter grading.

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

20. Contemporary Asian American Communities. (3) Lecture, three hours; discussion, one hour. Multidisciplinary introduction to contemporary Asian American populations and communities in U.S. Topics include contemporary immigration, demographic trends, sociocultural, economic, and political issues, and interethnic relations. P/NP or letter grading.

20W. Contemporary Asian American Communities. (5) Lecture, three hours; discussion, two hours. Requi-site: English Composition 3. Not open for credit to students with credit for course 20. Multidisciplinary introduction to contemporary Asian American populations and communities in U.S. Topics include contemporary immigration, demographic trends, sociocultural, economic, and political issues, and interethnic relations. Satisfies Writing II requirement. Letter grading.

30. Asian American Literature and Culture. (5) Lecture, three hours; discussion, one hour. Not open for credit to students with credit for course 30W. Multidisciplinary introduction to Asian American literature and cultural production, with examination of some combination of novels, short stories, poetry, drama, performance, film, visual art, music, and/or new media. P/ NP or letter grading.

30W. Asian American Literature and Culture. (5) Lecture, three hours; discussion, two hours. Enforced requisite: English Composition 3 or 3H or English as a Second Language 36. Not open for credit to students with credit for course 30. Multidisciplinary introduction to Asian American literature and cultural production, with examination of some combination of novels, short stories, poetry, drama, performance, film, visual art, music, and/or new media. Satisfies Writing II requirement. Letter grading.


50. Asian American Women. (5) Lecture, three hours; discussion, one hour. Overview of history of feminist theory and intersection of gender, class, race/ ethnicity from cross-cultural perspectives, with focus on Asian American women’s lived experiences in U.S. Topics include Asian American women’s roles in family life, work, community organization, social change, and cultural creativity. Examination of broader structural forces that affect women in society, such as racialization, undervaluation, globalization, capitalism, and postcolonialism, and social movements. P/NP or letter grading.

50W. Asian American Women. (5) Lecture, three hours; discussion, two hours. Requisite: English Com-position 3. Not open for credit to students with credit Pilipino Studies Minor

The Pilipino Studies minor produces graduates competent in histories and contemporary experiences of Filipinos in the U.S. and elsewhere in the world. Student understanding of historical and contemporary histories of Filipinos is grounded in questions of equality, social justice, and disparity, which supply a vocabulary and critical thinking skills necessary to engage with issues including class, cultural production, gender, identity, transnationalism, labor, migration, and representation. The minor consists of broad courses that study national and diasporic identities as a social formation rather than an innate and unchanging biological assignation. As an interdisciplinary field, Pilipino studies draws from American studies, anthropology, Asian studies, Asian American studies, ethnic studies, history, literary and performance studies, Philippine studies, and sociology.

To enter the minor, students must have an overall grade-point average (GPA) of 2.0 or better, have completed the two lower-division minor courses with a GPA of 2.0 or better, and file a petition with the department under-graduate academic adviser, 3339 Rolfe Hall.

Required Lower-Division Courses (10 units): Two courses from Asian American Studies 10 or 10W, 20 or 20W, 30 or 30W, 40 or 40W, 50 or 50W.


No more than 4 graded units of Asian American Studies 195, 197, 198, and 199 may be applied toward the minor. Courses 192 and 196 may not be applied toward the minor. Only courses in the department or those multiple-listed with the department may be taken to fulfill requirements for the minor.

A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor. Each minor course must be taken for a letter grade, and students must have an overall grade-point average of 2.0 or better in the minor. Successful completion of the minor is indicated on the transcript and diploma.
for courses 50. Overview of history of feminist theory and intersection of gender, class, race/ethnicity from cross-cultural perspectives, with focus on Asian American women’s lived experiences in U.S. Topics include Asian American women’s roles in family life, work, consumption, social change, and cultural creativity. Examination of broader structural forces that affect women in society, such as racialization, immigration, global capitalism, colonialism and postcolonialism, and social movements. Satisfies Writing II requirement. Letter grading.

89. Honors Seminars. (1 Seminar, three hours. Limited to 20 students. Designed as adjunct to lower-division lecture course; open to honors students in good standing. May be repeated for credit. P/NP grading.

89HC. Honors Contracts. (1) Seminar, three hours. Limited to students in College Honors Program. Designed as adjunct to lower-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

Variable Topics in Asian American Studies. (1 to 2) Seminar, one to two hours. Current topics and particular research methods in Asian American studies through research projects and assignments. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

97. Variable Topics in Asian American Studies. (1 to 2) Tutorial, one to two hours. Current topics and particular research methods in Asian American studies through research projects and assignments. May be repeated for credit. P/NP grading.

99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week, per unit. Entry-level course for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Courses

103. Social Science Research Methods. (4) Lecture, three hours; discussion, one hour. Designed for juniors/seniors. Introduction to fundamentals of conducting social research on Asian Americans, providing experience in using some research methods and exercises in evaluating nature and quality of scientific research on Asian American issues. P/NP or letter grading.

104A. Field Studies Methods in Asian Pacific Communities. (4) Lecture, three hours. Preparation: one course from 101 through M191F. Development of community profiles on Asian Pacific American communities, using various field studies techniques of data collection. P/NP or letter grading.

104B. Special Internships in Asian Pacific Communities. (4) Fieldwork, eight hours minimum. Requisite: course 104A. Asian studies course (except 199). Integrates academic and empirical work by providing students challenge of performing public service and community work in Asian Pacific American communities, and of bringing their ongoing internship experiences back to classroom. May be repeated for credit. P/NP or letter grading.

105. Historical Research Methods. (4) Seminar, three hours. Requisite: course 104. Introduction to methods used to locate and analyze source materials for research on Asian American history. Historians have used a wide range of sources that may include archival materials, oral history, material culture, and more. P/NP or letter grading.

107. Scholarly and Creative Communication in Asian American Studies. (4) (Formerly numbered 101.) Lecture, three hours. Designed for advanced undergraduate and/or senior/senior American Studies majors and minors. Examination of alternative modes of expression to effectively reach academic and nonacademic audiences, including written text, visual materials, and performance. Exploration of scholarly works by looking at how narratives are developed, ideas and values are framed, or knowledge is generated and transmitted, through either traditional or electronic mediums. Investigation of discursive and popular forms, stylistic patterns, and communicative practices. Themes and content vary from term to term. Research related to course objective may be pursued with guidance from instructor. Sharing and critiquing of other student works in progress. P/NP or letter grading.

108. Policy, Planning, and Community. (4) Same as Urban Planning/Community Development M38. Lecture, four hours; field laboratory. Project-oriented methods course on conducting needs assessment in Asian American communities. Geographical areas to be used to be defined problems and needs. Letter grading.


111. Asian Americans and War. (4) Lecture, three hours. Interdisciplinary examination of role that war has played in history and culture of Asian Americans, drawing on diverse sets of materials ranging from Asian American literature, Hollywood movies, and wartime propaganda to political speeches, Supreme Court decisions, and protest culture, to evaluate relationship between Asian American communities and geopolitical conflicts from late-19th century to contemporary period. P/NP or letter grading.

112A. Historical Survey of Asian American Literature. (5) Same as English M102A. Lecture, four hours; discussion, one hour (when scheduled). Enforced requisite: English Composition 3 or 3H. Survey of Asian American literature both produced from or thematically reflecting pre-1980 period. Issues include immigration, diaspora, gender, economic development, interethnic dynamics, and social movement. Works by such authors as Edith Eaton, Younghill Kang, Carlos Bulosan, Hisaye Yamamoto, John Okada, Frank Chin, and Maxine Hong. Letter grading.

112B. Contemporary Asian American Literary Issues and Criticism. (5) Same as English M102B. Lecture, four hours; discussion, one hour (when scheduled). Enforced requisite: English Composition 3 or 3H. Survey of post-1980 Asian American literature that explores key literary and critical issues, such as race and geography, aesthetics and activism, cultural work and immigrant labor, kinship and sexuality, model minority and Orientalism, and meat versus rice in study of novels, poetry, performance, memoirs, and essays. May be repeated for credit with topic or instructor change. P/NP or letter grading.

112C. Asian American Cinema. (4) Seminar, four hours. Enforced requisite: English Composition 3 or 3H. Designed for juniors/seniors. Examination of meaning of geographic and psychic spaces that Asian American film, literature, and theatre explore in discussing American mainstream and specific factors, such as gender, ethnicity, gender, class, and sexual orientation, that shape individual’s unique margin. Balanced blend of readings and film screenings. Letter grading.


114. Asian American Education and Schooling. (4) Same as Education M103D. Seminar, four hours. Examination of existing body of research from various disciplines on Asian American educational experiences. Letter grading.

115. Asian American and Community in Asian American Studies. (4) Lecture, three hours. Condition of Asian women in America. Topics include women in Asian American history, racial and cultural stereotypes, and contemporary issues. Methodological approaches to study gender issues presented and evaluated. P/NP or letter grading.


117. Asian American Personality and Mental Health. (4) Same as Psychology M107. Lecture, three hours. Requisite: Psychological foundations of personality development and mental health among Asian Americans. Topics include culture, family patterns, achievements, stressors, resources, and immi-grant and minority group status. P/NP or letter grading.

118. Asian American Religious History. (4) Lecture, four hours. Examination of religion as thematic thread within context of Asian American history, primarily during period before World War II. Basic grounding in early Asian American history through exploration of role of religion in various communities. P/NP or letter grading.


120. Yellow Peril’s Revenge: Asian American Independent Cinema. (4) Lecture/screenings, three hours. Exploration of relationship between content, social context, and production processes in independently produced films and digital media by and about Asian American filmmakers, focusing on directors and their films’ cultural po- tencies to theatrical features and online talent. P/NP or letter grading.

121. Exploring Asian American Theater. (4) Lecture, four hours. Study of Asian American plays; study of cultural and intellectual coalitions toward which Asian American studies contribute distinctly to contemporary American culture. Performance, model minority and Orientalism, and meat versus rice in study of plays, poetry, performance, memoirs, and essays. May be repeated for credit with topic or instructor change. P/NP or letter grading.

122A. Indigeneity, Empire, and Resistance in Pacific Islands. (4) Lecture, three hours. Introduction to indigenous and colonial histories of Pacific Islands. Discussions, film screenings, guest speakers, and reading assignments, with focus on issues of cultural survival, empire, indigeneity, migration, resistance, sovereignty, and war. P/NP or letter grading.

122B. Gender and Film in Pacific. (4) Lecture, three hours. Requisite: course 122A. Exploration of rise of film in Pacific Islands during 20th century, with attention to politics of gender, history, and representation, to engage students in textual and visual readings of feature-length films about Pacific. Discussions, film screenings, and guest speakers, with focus on aesthetics, cultural, economic, gendered, historical, and political dimensions of films. P/NP or letter grading.

Cultures of/against Empire. (4) Seminar, three hours. Critical concepts and cultural practices linking Asian American studies to study of U.S. cultures of empire. Course begins with premise that Asian American studies contribute distinctly to contemporary scholarship on U.S. empire. Examination of political and intellectual coalitions toward which Asian American studies critique builds. Emphasis on works
that approach study of empire through comparative racial formation, postcolonialism, transnationalism, and studies of migration. P/NP or letter grading.

M124. Comparative Racialization and Indigeneity. (4) (Same as African American Studies M124.) Lecture, three hours. Examination of processes and histories of racialization and colonization in U.S. Discussions, film screenings, guest speakers, and reading assignments, with focus on issues of cultural survival, empire, indigeneity, migration, resistance, sovereignty, and war. P/NP or letter grading.


126. Comparative Race and Indigeneity. (4) Seminar, three hours. Preparation: one ethnic studies course. Analysis of race and indigeneity within comparative ethnic studies framework. Examination of how racialization and colonization are theorized and practiced, and Latinx identifiers are formed in relation to one another in US and its territories. Interrogation of how communities are pitted against each other by structural and theological rationalizations. Imperialism, racial ontologization, settler colonialism, white supremacy, and heteropatriarchy—and theorizing of strategies for building solidarity across difference. Intersectional and interdisciplinary perspectives on indigeneity and indigeneity in relation to gender, sexuality, and class, with texts from ethnic studies, gender studies, anthropology, sociology, history, cultural studies, and literature. P/NP or letter grading.

M129. Health Issues for Asian Americans and Pacific Islanders: Myth or Model? (4) (Same as Community Health Sciences M140.) Lecture, three hours; fieldwork, one hour. Introductory overview of mental and physical health issues of Asian American and Pacific Islanders; identification of gaps in health status indicators and barriers to both care delivery and research for these populations. Letter grading. P/NP or letter grading.


130B. Chinese Immigrant Literature and Film. (4) (Same as Chinese M153 and Comparative Literature M171.) Lecture, three hours; discussion, one hour. In-depth analysis of written and visual representation of Chinese diaspora. Knowledge of Chinese not required. In-depth look at Chinese immigrant experience by reading literature and watching films. Theories of diaspora, gender, and race to inform thinking and discussion of relevant issues. P/NP or letter grading.

130C. Chinese Immigration. (4) (Same as Sociology M153.) Lecture, three hours; discussion, one hour. Survey of sociological studies of Chinese immigration, with focus on international context, organization, and institutions of Chinese America and its interactions with social environment. P/NP or letter grading.


131B. Japanese Americans and Incarceration. (4) Seminar, three to four hours. Requisite: course 10 or 10W, 20, 20W, 30, 30W, 40, 40W, 50, or 50W. Examination of textual and fictional narratives of key literature about mass incarceration of Japanese Americans during 1940s. Immediate and long-range effects of internment. Emphasis on research. Original paper based on primary sources held by University of Hawai‘i. Letter grading. P/NP or letter grading.


140SL. Power to People: Asian American and Pacific Islander Community-Based Learning. (4) Lecture, two hours; fieldwork, four hours. Enforced requisite: course 10, 10W, 20, 20W, 30, 30W, 40, 40W, 50, or 50W. Service learning and critically examine community organizing and community-based organizations (CBOs) in Asian American and Pacific Islander communities related to issues such as arts and culture, community health, and applied research. P/NP or letter grading.

141A. Asian American and Pacific Islander Leadership Development Project Part I: Leadership. (4) Seminar, three to four hours. First term of two-term series on leadership development, with focus on intellectual and practical learning of leadership concepts, models, and skills. In Progress grading (credit to be given only on completion of course 141B). P/NP or letter grading.

141B. Asian American and Pacific Islander Leadership Development Project Part II: Field Studies. (4) Lecture, three hours; fieldwork, three hours. Enforced requisite: course 141A. Limited to juniors/seniors. Second term of two-term series on leadership development, with focus on Asian American, Pacific Islander, and other ethnic communities in Los Angeles. Examination of role of leadership and leadership strategies to community building and maintenance. P/NP or letter grading.

C142A. Ethnocommunications I: Introduction to Creating Community Media. (4) Seminar, three hours. Strong verbal skills and familiarity with technology required. Introduction to social documentary theory and methodology. Through hands-on production, use of digital video to tell visual stories, reclaim history, and examine social issues related to diverse peoples, cultures, and communities. Viewing of films and interactive media for critique and discussion; guest speakers; basic instruction in use of digital video technology; and group and individual video projects. Concurrently scheduled with course C242A. P/NP or letter grading.


M143A. Fieldwork in Asian American and Pacific Islander Communities. (4) (Same as Anthropology M138Q.) Lecture, three hours; discussion, one hour. Introduction to qualitative research methods and applications of theoretical approaches to and reporting. Critical reflection of issues related to identity, migration, multiculturalism, tourism, and indigenous rights. Field excursions and guest lecturers from local community included. Given in Hawai‘i. P/NP or letter grading.

143B. Politics of Race, Ethnicity, Migration, and Multiculturalism in Hawai‘i. (4) Lecture, three hours; discussion, one hour. Critical examination of historical and contemporary experiences of various people in Hawai‘i. Investigation of historical, economic, and political contexts of migration and relations between indigenous peoples, migrants, and existing racial and ethnic groups. P/NP or letter grading.

M143C. Ethnic Identity and Ethnic Relations in Hawai‘i. (4) (Same as Anthropology M168Q.) Lecture, three hours; discussion, one hour. Continuing consideration of ethnic and identity issues as they affect populations in various cultural forms and social contexts in Hawai‘i. Overview of theoretical approaches to and basic concepts in study of ethnic identity and ethnic relations. Discussion of historical and cultural contexts of ethnic identity and ethnic relations in Hawai‘i. Given in Hawai‘i. P/NP or letter grading.

M160. Culture, Media, and Los Angeles. (6) (Same as African American Studies M102 and Honors Colleague M102.) Lecture, four hours; screenings, two hours. Designed for juniors/seniors. Role of media in society and its influence on contemporary cultural environment, specifically in Los Angeles; issues of representation and their potential to shape ethnic identity, gender, and sexuality. P/NP or letter grading.

M161. Ethnic, Cultural, and Gender Issues in America’s Healthcare Systems. (4) (Same as Health Policy M110.) Lecture, three hours. Introduction to study of gender, ethnicity, and cultural diversity related to health status and health care delivery in U.S. Letter grading.

M163. Worker Center Movement: Next Wave Organizing for Justice for Immigrant Workers. (4) (Formerly numbered M166C.) (Same as African American Studies M167, Chicana and Chicano Studies M130, and Labor Studies M187.) Seminar, three hours. Development of theoretical understanding of worker center movement, with focus on historical factors that have led to emergence and growth of worker centers. Role of worker centers in promoting multilingual and multicultural campaigns for workplace and economic justice. Transnational cross-border solidarity issues and rights of undocumented workers. P/NP or letter grading.

M164. War, Violence, Globalization: India, Philippines, Singapore, Vietnam. (4) (Same as Gender Studies M166A.) Lecture, four hours. Study of various forms of violence done on women not only in and of themselves but in light of global systems of oppression, with focus on Filipinos, Vietnamese, Singaporean, and South Asian cultures. Letter grading.

M165. Race, Gender, Class. (5) (Same as Comparative Literature M175.) Seminar, three hours. Theoretical and literary readings combined to explore three main aspects of social and cultural experience (race, gender, class) as separate but interconnected spheres affecting both minority and majority populations in U.S. Examination of identity from comparative perspectives. P/NP or letter grading.

M166A. Immigrant Rights, Labor, and Higher Education. (4) (Same as Chicana and Chicano Studies M156A and Labor Studies M166A.) Lecture, three hours; discussion, one hour. Critical examination of immigrant rights movement, with particular attention to labor and higher education. Overview of history of immigrant rights movement and examination of development of coalition efforts between labor movement and immi-
grant rights movement nationally and locally. Special focus on issue of immigrant students in higher education, challenges facing undocumented immigrant students, and legislative and policy issues that have emerged. Students conduct oral histories, family histories, research on immigration and immigrant rights, write poetry and spoken word about immigrant experiences, and work to collectively develop student publication on immigrant students in higher education. P/NP or letter grading.

M166B. Research on Immigration Rights, Labor, and Higher Education. (4) (Same as Chicana and Chicano Studies M166B and Labor Studies M166B.) Seminar, two hours. Requisite: course M166A. Expansion of research conducted by students in course M166A involving oral histories, research on immigration/labor/higher education, and evaluation of legal and policy issues impacting undocumented students. Designed around class project, where students work on showcasing all material collected throughout year. Letter grading.

M166C. Research on Immigrant Students and Higher Education. (4) (Same as Chicana and Chicano Studies M156C and Labor Studies M166C.) Seminar, three hours. Enforced requisites: courses M166A, M166B. Expansion of research conducted by students in courses M166A and M166B involving oral histories, research on immigration/labor/higher education, and evaluation of legal and policy issues impacting undocumented students. Designed around class project, where students work on showcasing all material collected throughout year. Letter grading.


M168. Student-Initiated Retention and Outreach Issues in Higher Education. (4) (Same as African American Studies M118, American Indian Studies M118, and Chicana and Chicano Studies M118.) Lecture, four hours. Exploration of issues in outreach and retention of students in higher education, especially through student-initiated programs, efforts, activities, and services. May be repeated for credit as LSA as case. May be repeated twice for credit. Letter grading.

M169. Constructing Race. (4) (Same as African American Studies M159P and Anthropology M144P) Lecture, three hours; discussion, one hour (when scheduled). Requisite: course M158 or Consent of Instructor. Examination of historical and contemporary aspects of the construction of race, gender, and identity in the United States. May be repeated for credit with approval of instructor. P/NP or letter grading.

170. Transnational Perspectives on Asian America. (4) Lecture, three hours. Recommended preparation: background in Asian Pacific American social and legal history. Discussion of social and historical transformations that have occurred in Asian America in last four decades as consequence of global economic restructuring and new immigration. Introduction to and survey of new frameworks for understanding these changes in postmodern Asian American communities, using theories of transnationalism and Asian American political and racial history. Readings and discussions focused on historical and contemporary topics in context of Asian/Asian American experience. Building of linkages between roots of social constructions of race and multilingualism and the new construction of identity in Asia, Multilingualism and the new construction of identity in Asia. Theoretical readings assigned. P/NP or letter grading.

171A. Critical Issues in U.S.-China Relations. (4) Lecture, three hours. Critical examination of U.S.-China relations, discussing current issues such as trade, Taiwan, and human rights. May be repeated for credit with approval of instructor. P/NP or letter grading.

171B. Critical Issues in U.S.-Japan Relations. (4) Lecture, three hours. Critical examination of U.S.-Japan relations, discussing current issues such as trade, Taiwan, and human rights. May be repeated for credit with approval of instructor. P/NP or letter grading.

171C. Critical Issues in U.S.-Korea Relations. (4) Lecture, three hours. Critical examination of U.S.-Korea relations, discussing current issues such as trade, Taiwan, and human rights. May be repeated for credit with approval of instructor. P/NP or letter grading.

171D. Critical Issues in U.S.-Philippines. (4) Lecture, three hours; discussion, one hour (when scheduled). Requisite: course M144C or Consent of Instructor. Examination of issues related to course theme with guidance from instructor. May be repeated for credit with approval of instructor. P/NP or letter grading.

172B. Gender in South Asian Communities at Home and Abroad. (4) Seminar, three hours. Examination of historical and contemporary issues related to gender at South Asian communities at home and abroad. May be repeated for credit with approval of instructor. P/NP or letter grading.

172C. Transnational Bollywood. (4) (Same as Communication M137.) Lecture, three hours. Study of role of popular Bollywood cinema in the globalization process and postcolonial formations pertaining to gender, class, and caste. May be repeated for credit with approval of instructor. P/NP or letter grading.

173. Transnationalism and Diasporas. (4) Lecture, three hours; discussion, one hour (when scheduled). Requisite: course M154 or Consent of Instructor. Exploration of issues related to course theme with guidance from instructor. May be repeated for credit with approval of instructor. P/NP or letter grading.

174B. Special Courses in Transnationalism and Diasporas. (4) Lecture, three hours; discussion, one hour (when scheduled). Limited to juniors/seniors. Variable topics in selected comparative and international issues pertaining to transnationalism and diasporas. May be repeated for credit with topic change. P/NP or letter grading.

175. Topics in Transnationalism and Diasporas. (4) Seminar, three to four hours. Limited to juniors/seniors. Variable topics in selected comparative and international issues pertaining to transnationalism and diasporas. May be repeated for credit with topic change. P/NP or letter grading.

176. Making Fiction Work: Philippines and Its Elsewheres. (4) Seminar, three to four hours. Requisite: one among CML 10, 10W, 20, 20W, 30, 30W, 40, 40W, 50, 50W, 123, 133, M171D or History M144C, Filipino 130A, 152, 155, or consent of instructor. Philippines and Filipinos from comparative perspective. May be repeated for credit with topic change. P/NP or letter grading.

177. Social Movements in Guam and Pacific. (4) Lecture, three hours. Survey of immigrant and indigenous histories in Guam, Mariana Islands, and Oceania. Emphasis on Asian, Chamorro, and Pacific Islander communities in Guam and Oceania. May be repeated for credit with topic change. P/NP or letter grading.

178. Critical Refugee Studies. (4) Lecture, three hours: course 10, 10W, 20, 20W, 30, 30W, 40, 40W, 50, or 50W. Examination of how refugees are represented in government and popular media, and how refugees represent themselves through cultural production. Rather than focus on refugee as victim, study centers refugees as agents of cultural production across multiple historical and geopolitical contexts. Focus on colonial South Asia, South Asian diasporas in U.K., South Asian American in U.S., and transnational South Asian diasporas. May be repeated for credit with topic change. P/NP or letter grading.

185. Capstone Community-Based Research. (4) Seminar, three hours; fieldwork, three hours. Limited to senior departmental majors. Students and instructor designed to serve as complement to service learning requirement for major and minor and may be used to fulfill capstone requirement for major and minor. Students work as research team, are matched with one or more community groups, and must complete minimum of 40 fieldwork hours. Duties and responsibilities collaboratively determined by instructor, students, and sponsoring organizations. Readings determined in consultation with instructor. Letter grading.

186. Capstone Research Seminar. (4) Seminar, three hours. Limited to senior departmental majors. Discussion of oral and written capstone project, may be repeated for credit with topic change. P/NP or letter grading.

187. Special Courses in Research Methodologies. (4) Lecture, three hours; discussion, one hour (when scheduled). Limited to juniors/seniors. Variable topics in multidisciplinary research methodologies in Asian American Studies. May be repeated for credit with topic change. P/NP or letter grading.

188. Special Courses in Asian American Themes. (4) Lecture, three hours; discussion, one hour (when scheduled). Limited to juniors/seniors. Variable topics in selected Asian American themes, including issues on race, ethnicity, gender, and sexuality from comparative perspective. May be repeated for credit with topic change. P/NP or letter grading.
in cultural formation, religion, education, social class, economic development, social movement, politics, and public policy. May be repeated for credit with topic change. P/NP or letter grading.

187C. Special Courses in Asian American Populations and Communities. (4) Lecture, three hours; laboratory, three hours; fieldwork, three hours (when scheduled). Limited to juniors/seniors. Variable topics in historical and contemporary issues pertaining to different Asian-origin subgroups and their respective communities. May be repeated for credit with topic change. P/NP or letter grading.

188. Special Courses in Asian American Studies. (4) Seminar, four hours. Program-sponsored experimental courses, such as those taught by visiting faculty members. May be repeated for credit with topic change. P/NP or letter grading.

188SA. Individual Studies for USIE Facilitators. (1) Tutorial, to be arranged. Enforced corequisite: Honors Collegium 101E. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to discuss selected USIE seminar topic, conduct preparatory research, and begin preparation for final contract with faculty mentor. May not be repeated. Letter grading.


188SC. Individual Studies for USIE Facilitators. (2) Tutorial, to be arranged. Enforced corequisite: 188SB. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor while utilizing USIE 88S course. Individual contract with faculty mentor required. May not be repeated. Letter grading.

189. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

189HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed for division lecture course. Individual study and individual contract with faculty instructor to pursue topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of five separate individual honors contracts required. Honors content noted on transcript. Letter grading.

191A. Topics in Research Methodologies. (4) Seminar, three to four hours. Limited to juniors/seniors. Variable topics in multidisciplinary research methodologies in Asian American studies. May be repeated for credit with topic change. P/NP or letter grading.

191B. Topics in Asian American Themes. (4) Seminar, three to four hours. Limited to juniors/seniors. Variable topics in selected Asian American themes, including issues in cultural formation, religion, education, social class, economic development, social movements, public policy. May be repeated for credit with topic change. P/NP or letter grading.

191C. Topics in Asian American Populations and Communities. (4) Seminar, three to four hours. Limited to juniors/seniors. Variable specialized studies course in Asian American literature. Topics may include genres (autobiography, novel, poetry, short fiction, or drama); specific nationalities within Asian American community; themes of transnational immigration, cross-cultural, interdisciplinary, or interracial negotiation; and gender and queer politics. Reading, discussion, and development of culminating project. May be repeated for credit with topic or instructor change. P/NP or letter grading.

192. Undergraduate Practicum in Asian American Studies. (2 or 4) Seminar, two or four hours. Limited to juniors/seniors. Training and supervised practicum for advanced undergraduate students in Asian American studies content in preparation of materials and development of innovative programs with guidance of faculty members in small course settings. May not be applied toward departmental major or minor requirements. May be repeated for credit, P/NP grading.

195. Community or Corporate Internships in Asian American Studies. (4) Tutorial, two hours; fieldwork. Requisites: courses 10 or 10W, and 20. Limited to juniors/seniors. Internship in supervised setting in community agency or business. Students meet on regular basis with instructor and provide periodic report of their experience. Individual contract with supervising faculty member required. P/NP or letter grading.

M195CE. Comparative Approaches to Community and Corporate Internships. (4) Same as African American Studies M195CE, Chicana and Chicano Studies M195CE, and Gender Studies M195CE. Tutorial, one hour; fieldwork, eight to 10 hours. Limited to juniors/seniors. Internship in community agency or nonprofit setting coordinated through Center for Community Learning. Comparative study of race, gender, and identity in relation to contemporary workplace dynamics. Students complete weekly written assignments, attend biweekly meetings with graduate students, and write final research paper. Faculty sponsor and graduate student coordinator construct seminar that examines issues related to internship site. Individual contract with supervising faculty member required. P/NP or letter grading.

196. Research Apprenticeship in Asian American Studies. (2 to 4) Tutorial, three hours per week per unit. Limited to juniors/seniors. Entry-level research apprenticeship for upper-division students under guidance of faculty mentor to learn skills and techniques. May not be applied toward departmental major or minor requirements. May be repeated for credit. Individual contract required. P/NP grading.

197. Individual Studies in Asian American Studies. (2 to 4) Seminar, three hours. Limited to juniors/seniors. Exploration of topics of 10 or 10W or 20 or comparable knowledge in Asian American studies. 3.0 grade-point average or better. Limited to juniors/seniors. Directed reading of scholarly works on selected topics, apprenticeship for upper-division students under guidance of faculty mentor. No original research or project expected, but tangible evidence of mastery of subject matter required. May be repeated for maximum of 8 units. Individual contract required. P/NP or letter grading.

198A. Honors Research in Asian American Studies. (4) Tutorial, three to four hours. Requisites: two courses from 10 (or 10W), 20, and 30 (or 30W) and one course from 104A through M108, 187A, or 191A. Introductory to research techniques and applications of methodologies in study of Asians and Pacific Islanders in U.S. Development of honors thesis or comprehensive research project under direct supervision of faculty member. May be repeated for credit. Individual contract required. Letter grading.

198B-198C. Honors Research in Asian American Studies. (4) Seminar, four hours. Preparation: 3.0 overall grade-point average. Requisites: courses 10 (or 10W) and 20 or comparable knowledge in Asian American studies. Limited to juniors/seniors. Supervised individual research or investigation under guidance of faculty mentor. Culminating research paper or project report required. May be repeated for maximum of 8 units. Individual contract required. P/NP or letter grading.

Graduate Courses

200A. Historical Perspectives on Asian American and Pacific Islander American Communities. (4) Seminar, three hours. Designed for graduate students. Examination of critical issues in Asian and Pacific Islander American history and historiography. Introduction to research in archival and/or oral history methods. S/U or letter grading.

200B. Critical Approaches to Emerging Issues in Asian and Pacific Islander American Studies. (4) Seminar, three hours. Designed for graduate students. Examination of emergent issues in Asian and Pacific Islander American communities, using selected theoretical approaches. Introduction to research in social scientific methods, such as ethnography, participant observation, interviewing, survey development, or community-based research. S/U or letter grading.

200C. Critical Issues in Asian and Pacific Islander American Literature and Culture. (3) Seminar, three hours. Designed for graduate students. Examination of critical questions emerging from Asian and Pacific Islander American literature and cultural criticism and/or philosophical approaches. S/U or letter grading.


203. Asian American Research Methods. (4) Seminar, three hours. Introduction to empirical research methods, stressing uses and relevancy in research with ethnic minority populations. Review of characteristics and logical processes of research and applicability of scientific and scholarly inquiry in advancing knowledge. S/U or letter grading.


215A-215B. Asian American Jurisprudence. (215A: 3 or 215B: 1 or 2) Lecture, three hours. Course 215A is enforced requisite for graduate students. Through judicial opinions, commentary, and historical readings, examination of how American law has shaped demographics, experiences, and possibilities of Asian Americans and also how they shaped American law as well. Concurrently scheduled with Law 315. In Progress (215A) and S/U or letter (215B) grading.

222. Colonialism and Law in Pacific. (4) Seminar, three hours. Reading seminar on broad topics of colonialism and law. Survey of anthropological, historical, and legal studies of ways in which colonialism and law operated in the context of Asian-Latinos. Also how they shaped American law as well. S/U or letter grading.

M239. Race, Ethnicity, and Culture as Concepts in Practice and Research. (4) Same as Community Health Sciences M239.) Seminar, three hours. Integration of cross-cultural findings in healthcare with current American (U.S.) healthcare system paradigms to facilitate designing culturally based public health programs and train culturally competent practitioners. Letter grading.

C242A. Ethnocommunications I: Introduction to Creating Community Media. (4) Seminar, three hours. Strong verbal communication skills and familiarity with technology required. Introduction to social documentary theory and methodology. Through hands-on production, use of digital video to tell visual stories, reclaim history, and examine social issues related to diverse peoples, cultures, and communities. Viewing of films and interactive media for critique and discussion, guest speakers, basic instruction in use of digital video technology, and group and individual video projects. Concurrently scheduled with course C142A. S/U or letter grading.

C242B. Ethnocommunications II: Intermediate Creating Community Media. (4) Seminar, three hours. Strong verbal communication skills and familiarity with technology required. Intermediate application of social documentary theory and methodology. Use of digital video to create new approaches to visual storytelling, reclaim history, and examine social issues related to diverse peoples, cultures, and communities. Continuing instruction in use of digital technology and concepts. Topics include videography, composition, sound recording, interviewing techniques, editing, and writing treatments. Completion of community-based documentary required. Concurrently scheduled with course C142B. S/U or letter grading.


M260. Topics in Asian American Literature. (4) (Same as English M260A.) Seminar, three hours. Grad- uate seminar that examines and critically evaluates works of Asian Americans. May be repeated for credit. S/U or letter grading.

M261. Theorizing Third World. (4) (Same as Comparative Literature M274.) Seminar, three hours. Investi- gation of politics of power, gender, and race in complex relationships between so-called First World and Third World, using both theoretical and textual approaches. S/U or letter grading.


297B. Asian Migration to U.S. (4) Seminar, three hours. Emphasis on Asia as main regional source for interna- tional migrants. Topics include patterns and theories of international migration and their relevance to Asian American experiences, sending and receiving country perspectives, research and policy issues. S/U or letter grading.

375. Teaching Apprentice Practicum. (1 to 4) Sem- inar, three hours. Preparation: apprentice personnel employment as teaching assistant, associate, or fellow. Teaching apprenticeship under active guidance and supervision of regular faculty member responsible for curriculum and instruction at UCLA. Unit credit may be applied toward full-time equivalence but not toward 11-course requirement for MA. May be repeated for credit. S/U grading.

490. Writing Workshop for Graduate Students. (2) Lecture, one hour; discussion, one hour. Practice in writing reports, grant proposals, abstracts, theses, and articles for refereed publication. S/U grading.

495. Supervised Teaching of Asian American Studies. (4) Seminar, three hours. Preparation: apprentice personnel appointment as teaching assistant in Asian American studies. Designed for graduate students. Required of all new teaching assistants. Special course for teaching assistants designed to deal with problems and techniques for teaching introductory Asian American studies courses. Unit credit may be applied toward full-time equivalence but not toward course requirements for MA. S/U grading.

596. Directed Individual Study or Research. (2 to 8) Tutorial, to be arranged. S/U grading.


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SCOPE AND OBJECTIVES
The Department of Asian Languages and Cultures offers a wide range of courses in the languages, literatures, religions, and cultural heritage of China, Japan, and Korea, as well as South and Southeast Asia. The department offers training in many specialized fields such as archaeology, film, folklore, history, linguistics, literature, mythology, religious studies, and cultural studies. Courses prepare students for careers in business, government service, international relations, journalism, law, publishing, teaching, and academic professions.

Undergraduate majors earn a Bachelor of Arts degree. The graduate program offers PhD degrees.

For undergraduates, the department offers majors that combine language study with courses taught in English that examine the rich cultural heritage of China, Japan, and Korea, as well as South and Southeast Asia. The majors also offer opportunities for education abroad in an Asian country. The language courses aim to develop the four skills of speaking, aural comprehension, reading, and writing in a balanced and mutually supportive manner. The lecture and seminar courses aim to develop critical thinking and writing skills through in-depth study of a culture within a broader historical and comparative context.
Undergraduate majors who wish to pursue graduate degrees are encouraged to apply for admission to the departmental honors program.

At the graduate level, the department offers highly selective PhD degree programs that train research scholars for academic careers in various fields of Asian culture, including literature, linguistics, film, religion, and history.

Courses for Nonmajors
The department offers many courses in which knowledge of Asian languages is not required. A current list is available on the Registrar’s course descriptions web page.

Undergraduate Study
The department offers one major in the study of Asian languages and linguistics—BA in Asian Languages and Linguistics, two majors in the study of Asian cultures—BA in Asian Humanities and BA in Asian Religions, and three majors in Asian literatures and cultures—BA in Chinese, BA in Japanese, and BA in Korean. Each course in the majors must be taken for a letter grade.

The department also offers two minors—Asian Humanities minor and Asian Languages minor. Each course in the minors must be taken for a letter grade.

Students considering a major or minor in the department should consult with the departmental undergraduate adviser as soon as possible in their undergraduate year. The departmental honors program.

Placement in Language Courses
Students are not placed in Chinese, Filipino, Hindi-Urdu, Indonesian, Japanese, Korean, Thai, and Vietnamese language courses automatically according to their years of previous study. Students with any prior knowledge or study of an Asian language who wish to take courses in that language at UCLA are required to take the appropriate departmental language placement examination (see the Schedule of Classes or department website for more information). The examination determines which course is most appropriate for the student’s current level of proficiency. Students who have obtained college credit for Asian language courses may not repeat those same courses for credit. Prospective majors who place out of the upper-division modern language requirement are expected to substitute an equivalent number of other units to be selected in consultation with the departmental undergraduate adviser.

Language Acquisition Courses
No credit is allowed for completing a less advanced course after successful completion of a more advanced Asian language course with focus on conversation, grammar, and/or composition.

Asian Humanities BA
Learning Outcomes
The Asian Humanities major has the following learning outcomes:

- Identification of major elements of cultures in Asia, with particular attention to chosen regions of expertise
- Assessment of the social contours of a given Asian society, and explanation of ways in which dynamics within communities and other social structures shape the course of events
- Understanding of the role that language and literature play in reflecting and influencing Asian societies, across time and different literary genres
- Formulation of effective written and oral arguments that address important themes and issues in Asian arts and cultures, in ways that are historically appropriate and relevant to particular contexts
- Conduct research on Asian languages, literatures, and other cultural elements, making effective and critical use of primary and secondary source materials
- Appreciation of the central place of religion in Asian cultures, with focus on chosen region of expertise and tradition of focus

Preparation for the Major
Required: Completion of the intermediate sequence in one Asian language offered by the department (e.g., Chinese 6, 10, Filipino 6, Hindi-Urdu 100C, Indonesian 6, Japanese 6, 10, Korean 6, 10, Thai 6, Vietnamese 6, or equivalent) and Asian 30 or one civilization course (e.g., Chinese 50, Japanese 50, 70, Korean 50) or one introduction to religions course (e.g., Asian M60, M60W, M61, Chinese M60, M60W, Korean M60, South Asian M60, Southeast Asian M60) or one culture course (e.g., Japanese 75, 80, Korean 40, 70, 80) within the department.

Transfer Students
Transfer applicants to the Asian Humanities major with 90 or more units must complete as many of the following introductory courses as possible prior to admission to UCLA: two years of Chinese, Japanese, Korean, Filipino/Tagalog, Hindi, Indonesian, Thai, or Vietnamese and either one civilization course on Asia or one introduction to Buddhism course or one introduction to Asian religions course.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

The Major
Required: Three upper-division language courses in one Asian language offered by the department and eight upper-division electives within the department, including at least one course from at least four of the following areas: Asia, China, Japan, Korea, South Asia, or Southeast Asia.

Asian Languages and Linguistics BA
Learning Outcomes
The Asian Languages and Linguistics major has the following learning outcomes:

- Identification of major linguistic features of Asian languages, with attention to chosen region of expertise
- Demonstrated working knowledge of one or two Asian languages
- Demonstrated competency in fieldwork with Asian languages in their natural social and cultural contexts
- Demonstrated familiarity with current theories of language pedagogy with practical skills in classroom teaching of an Asian language
- Understanding of the interdependency and dynamic relationship between language, society, culture, and social interaction in the context of Asia languages across time and different modes of communication
- Conduct research and formulate effective written and oral arguments that address important themes and issues in languages and cultures of Asia

Preparation for the Major
Required: Completion of the intermediate sequence in one Asian language offered by the department (e.g., Chinese 6, 10, Filipino 6, Hindi-Urdu 100C, Indonesian 6, Japanese 6, 10, Korean 6, 10, Thai 6, Vietnamese 6, or equivalent) and Asian 30 or one civilization course (e.g., Chinese 50, Japanese 50, 70, Korean 50, Southeast Asian 70) or one introduction to religions course (e.g., Asian M60, M60W, M61, Chinese M60, M60W, Korean M60, South Asian M60, Southeast Asian M60) or one culture course (e.g., Japanese 75, 80, Korean 40, 70, 80) within the department, and Linguistics 20.

All preparation courses must be completed with a C or better grade. A minimum 2.5 grade-point average is required for both (1) the language and (2) Linguistics 20 and the civilization/religion course.

Transfer Students
Transfer applicants to the Asian Languages and Linguistics major with 90 or more units must complete as many of the following introductory courses as possible prior to admission to UCLA: two years of Chinese, Japanese, Korean, Filipino/Tagalog, Hindi, Indonesian, Thai, or Vietnamese and either one civilization course on Asia or one introduction to Buddhism course or one introduction to Asian religions course.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.
The Major
Required: Eleven courses as follows: (1) five upper-division language courses in one Asian language offered by the department, or three upper-division language courses in one Asian language offered by the department and two upper-division language courses in a different Asian language offered by the department, (2) Asian 100 and 104, (3) two Asian linguistics courses selected from Asian CM124, Chinese 103, 120, Japanese M120, M122, M123, CM127, Korean CM120, 124, South Asian 170, and (4) two upper-division electives within the department or from the Linguistics Department.

Asian Religions BA
Learning Outcomes
The Asian Religions major has the following learning outcomes:
- Appreciation of the central place of religion in Asian cultures, with focus on chosen region of expertise and tradition of focus
- Understanding of the crucial role of language and written documents in the development of religious beliefs and practices
- Clear and effective writing on topics in the field, in a way that is sensitive to the complex dynamics and transformations of religion across Asian cultural boundaries
- Formulation of research projects using primary and secondary source materials, making effective and critical use of primary and secondary source materials
- Demonstrated working knowledge of one Asian language at an intermediate level
- Demonstrated basic exposure to the Buddhist argot of one Asian language

Preparation for the Major
Required: Completion of the intermediate sequence in one Asian language offered by the department (e.g., Chinese 6, 10, Filipino 6, Hindi-Urdu 100C, Indonesian 6, Japanese 6, 10, Korean 6, 10, Thai 6, Vietnamese 6, or equivalent) and Asian 30 or one introduction to religions course from Asian M60, M60W, M61, Chinese M60, M60W, Korean M60, South Asian M60, or Southeast Asian M60.

Transfer Students
Transfer applicants to the Asian Religions major with 90 or more units must complete as many of the following introductory courses as possible prior to admission to UCLA: two years of Chinese and one Chinese civilization course.

Preparation for the Major
Required: Completion of the intermediate sequence in Chinese offered by the department (e.g., Chinese 6 or 6A or 10 or equivalent, and one course from 50, M60, M60W, 70, 70W, or Asian 30).

Japanese BA
Learning Outcomes
The Japanese major has the following learning outcomes:
- Demonstrated advanced written and oral knowledge of the Japanese language
- Demonstrated broad knowledge of Japanese cultural history from ancient times to the present
- Demonstrated specific skills and expertise, including research, analysis, and writing, of a specialized topic in the study of Japanese language and culture
- Ability to identify primary sources in Japanese and analyze them within their historical and cultural context
- Working knowledge of scholarly discourse on a specialized topic in Japanese culture
- Conception and execution of research projects that identify and engage with a specialized topic in Japanese culture

Preparation for the Major
Required: Japanese 6 or 10 or equivalent, and one course from 50, 70, 75, 80, Asian 30.

Transfer Students
Transfer applicants to the Japanese major with 90 or more units must complete as many of the following introductory courses as possible prior to admission to UCLA: two years of Japanese and one Japanese civilization or images of Japan course.

Congruent with the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

The Major
Required: Eleven courses as follows: (1) five language courses in modern or premodern language or texts selected from Japanese 100A and 100B and 100C or 100S, 100R, 101A and 101B and 101C or 101S, 103A, 103B, 104, 105A, 105B, 110A, 110B, M120, CM123, 130A, 130B, 140A, 140B, 140C, C149, 165, (2) one literature course selected from C150, 151, 154, M156, 157, C159, 170, 172, 174, or 191A, (3) three elective courses on Japanese selected from C112, CM122, CM123, CM127, 155, CM160, 161, 165, C171, C182, 191B, 191C, or from items 1 and 2 above not used to fulfill another requirement, and (4) two additional upper-division elective courses within the department but outside Japan.

Korean BA
Learning Outcomes
The Korean major has the following learning outcomes:
- Demonstrated advanced knowledge of written and spoken Korean
- Broad knowledge of Korean history, literature, thoughts, and religions from the ancient to the modern era
- Engagement in critical comparisons of historical and other narratives
- Relation of historical and cultural developments in Korea with other countries in East Asia and beyond
- Discussion of the scholarly literature about a topic in an area of expertise
• Analysis of texts, cultural objects, and historical developments based on disciplinary knowledge
• Conduct research projects using primary and second source materials critically and persuasively

Preparation for the Major
Required: Korean 6 or 6A or 10 or equivalent, and one course from 40, 50, M60, 70, 80, Asian 30.

Transfer Students
Transfer applicants to the Korean major with 90 or more units must complete as many of the following introductory courses as possible prior to admission to UCLA: two years of Korean and one Korean civilization course.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

The Major
Required: Eleven courses as follows: (1) five language courses selected from Korean 100A, 100B, 100C, 101A and 101B and 101C or 101I, 102A, 102B, 102C, 103A, 103B, 103C, 104A, 104B, 104C, CI05A, CI05B, CI05C, 106A, 106B, 106C, 107A, 107B, 107C, CM120, 124, 165, 176, 178, (2) one literature course selected from 130A, 130B, CI150, or CI151, (3) three elective courses on Korea selected from CM127, CM149, 154, 155, CM160, 165, 172, 175, 177, 180A, 180B, 180C, 181, 182, 183, 184A, 184B, 185, M186, 187, 191A, 191B, or from items 1 and 2 above not used to fulfill another requirement, and (4) two additional upper-division elective courses within the department but outside Korea.

Study Abroad
Early acquisition of Asian language skills aids in the timely completion of major requirements and enriches appreciation of Asian cultures. Students are encouraged, therefore, to complete up to a year of language study in approved programs of study abroad.

Honors Program
Admission
The honors program is open to departmental majors with a 3.5 grade-point average in upper-division courses in the major and a 3.0 overall GPA. Students should apply for admission by spring quarter of their junior year and, at the time of admission, must have completed at least two upper-division courses in their major. For application forms and more information, contact the departmental undergraduate adviser.

Requirements
The honors program is a three-term sequence (Asian 198A-198B-198C), taken in addition to requirements for the major, that culminates in the submission of a 40- to 60-page thesis. In most circumstances courses 198A-198B-198C are taken in the senior year (fall, winter, and spring quarters), although students also have the option of taking course 198A in spring quarter of their junior year. Students are expected to use an Asian language in their research, with the scope of language work to be determined in consultation with their faculty adviser. Highest honors, honors, or no honors are awarded as determined by the faculty thesis director and the departmental honors committee.

To qualify for graduation with departmental honors, students must (1) complete all requirements for the major, (2) have a cumulative grade-point average of 3.5 or better in upper-division courses required for the major and an overall GPA of 3.0 or better, and (3) complete Asian 198A-198B-198C.

To qualify for graduation with departmental highest honors, students must (1) complete all requirements for the major, (2) have a cumulative grade-point average of 3.8 or better in upper-division courses required for the major and an overall GPA of 3.5 or better, and (3) complete Asian 198A-198B-198C with a grade of A in each course.

Asian Humanities Minor
The Asian Humanities minor is designed to recognize a serious commitment to the study of Asian cultures. Lower-division survey courses in civilizations and religious traditions provide students with a solid foundation in the diverse cultural heritages of Asia. Students may fulfill upper-division requirements from a wide variety of courses in all aspects and historical periods of Asian humanities.

To enter the minor, students must have an overall grade-point average of 2.0 or better, have completed 45 units at UCLA and all lower-division requirements for the minor, and consult with the departmental undergraduate adviser.

Required Lower-Division Courses (10 units): Two courses from Asian 30, M60, M60W, M61, Chinese M60, M60W, Korean 40, M60, Southeast Asian M60, or one language course (e.g., Japanese 50, Korean 100) or one introduction to religions course (e.g., Asian 45, Japanese 45, or Korean 45).

Required Upper-Division Courses (20 units): Five courses in the department concerning Asian culture (e.g., film, folklore, history, linguistics, literature, mythology, religious studies). A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor, and at least 16 units must be taken in residence at UCLA. Each minor course must be taken for a letter grade, and students must have an overall grade-point average of 2.0 or better in the minor. Successful completion of the minor is indicated on the transcript and diploma.

Graduate Study
Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Division website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Graduate Degrees
The Department of Asian Languages and Cultures offers Master of Arts (MA), Candidate in Philosophy (CPhil), and Doctor of Philosophy (PhD) degrees in Asian Languages and Cultures and a Master of Arts (MA) degree in Teaching Asian Languages.

The Graduate Council of the UCLA Academic Senate has approved a temporary suspension of admission to the Teaching Asian Languages MA degree effective fall quarter 2018 through spring quarter 2021.

Asian Languages Minor
The Asian Languages minor is designed to recognize a serious commitment to the study of Asian languages. It is especially suited for students who wish to augment their major program in the College of Letters and Science with mastery of an Asian language. The lower-division survey course in civilization or religious tradition provides students with an essential introduction to the diverse cultural heritages of Asia. In the upper-division languages courses, students gain advanced skills in speaking, aural comprehension, reading, and writing an Asian language.

To enter the minor, students must have an overall grade-point average of 2.0 or better, have completed 45 units at UCLA and all lower-division requirements for the minor, and consult with the departmental undergraduate adviser.

Required Lower-Division Courses (10 units): Completion of the intermediate sequence in one Asian language offered by the department (e.g., Chinese 6, 10, Filipino 6, Hindi-Urdu 100C, Indonesian 6, Japanese 6, Korean 6, 10, Thai 6, Vietnamese 6, or equivalent) and Asian 30 or one civilization course (e.g., Chinese 50, Japanese 50, 70, Korean 50) or one introduction to religions course (e.g., Asian 45, Japanese 45, or Korean 45).

Required Upper-Division Courses (20 units): Three language courses in one Asian language offered by the department and two electives within the department.

A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor, and at least 16 units must be taken in residence at UCLA.

Each minor course must be taken for a letter grade, and students must have an overall grade-point average of 2.0 or better in the minor. Successful completion of the minor is indicated on the transcript and diploma.
corresponding earliest developments, and their antiquity and distribution from China and Mesoamerica, their evident isolation mark these centers as loci of independent linguistic representation. Origins and development of early non-Western writing systems. How Greco-Roman alphabets arose in 1st millennium BC and how they came to other modern writing systems. P/NP or letter grading.

30. Languages and Cultures of Asia. (5) Lecture, three hours; discussion, one hour. Comparative perspective on Asian languages, with emphasis on three major East Asian languages—Chinese, Japanese, and Korean—to show what they share and how they differ in terms of linguistic features, historical development, and larger cultural settings in which these three languages are used. P/NP or letter grading.

M60. Introduction to Buddhism. (5) Same as Religion M60A) Lecture, three hours; discussion, one hour. Not open for credit to students with credit for course M60W. Knowledge of Asian languages not required. General survey of development of Buddhism in India, with focus on those religious doctrines and meditative practices most essential to various Asian traditions of Buddhism. P/NP or letter grading.

M60W. Introduction to Buddhism. (5) Same as Religion M60W Lecture, three hours; discussion, one hour. Enforced requisite: English Composition 3 or 3H or English as a Second Language 36. Not open for credit to students with credit for course M60. Knowledge of Asian languages not required. General survey of Buddhist worldview and lifestyle, with focus on those religious doctrines and meditative practices most essential to various Asian traditions of Buddhism. P/NP or letter grading.

120F. Readings in East Asian Languages. (2) Seminar, two hours. Requisite: Chinese 6 or 6A or Japanese 6 or 6A or Korean 6 or 6A. Enforced corequisite: course 120. Additional work in major East Asian languages to enrich and augment work assigned in course M60W. May be taken for credit through supplemental readings, papers, or other activities and led by lecture course instructor. P/NP or letter grading.

120FL. Readings in East Asian Languages. (2) Seminar, two hours. Requisite: Chinese 6 or 6A or Japanese 6 or 6A or Korean 6 or 6A. Enforced corequisite: course 120. Additional work in major East Asian languages to enrich and augment work assigned in course M60W. May be taken for credit through supplemental readings, papers, or other activities and led by lecture course instructor. P/NP or letter grading.

121. Field Methods in Asian Languages and Cultures. (3) Lecture, three hours. Recommended preparation: at least one year of one Asian language. Examination of principles and practices in teaching Asian languages, with emphasis on key Buddhist themes and critical issues in cross-cultural interpretations of Asian religious texts. Letter grading.

122. Buddhist Literature in Translation. (4) Lecture, three hours; discussion, one hour. Knowledge of Asian languages not required. Survey of theory and practice of meditation in Buddhism and its emphasis on Thera- nodic, Zen, and other forms of Buddhist meditation and lifestyle, with focus on key Buddhist themes and critical issues in cross-cultural interpretations of Asian religious texts. Letter grading.

155. Buddhism, Film, and Media. (4) Lecture, three hours; discussion, one hour. Knowledge of Asian languages not required. Survey of issues related to Buddhism in globalizing world, with focus on changing and diverse presentations of Buddhism in film, media, and new media. P/NP or letter grading.


164. Buddhism and Early Religious History of Pakistan, Afghanistan, and Central Asia: Introduction. (4) Lecture, three hours. Knowledge of Asian languages not required. Survey of regions and religions of Central Asia, especially Buddhism in Afghanistan and Pakistan. Topics include historical, art historical, and linguistic approaches to history of religions. Letter grading.

170. Approaches to Study of Religion. (4) Seminar, three hours. Investigation of various ways in which religion and religions may be studied, including anthropological, sociological, psychological, phenomenological, and other approaches. Readings of primary and secondary sources of modern scholarship. Concurrently scheduled with course C270. Letter grading.

189. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

189HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to honors lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for a maximum of 4 units. Individual honors contract required. Honors content noted on transcript. P/NP or letter grading.

99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week. Open to qualified undergraduate students under guidance of faculty mentor. May be repeated. P/NP grading.

Upper-Division Courses

100. Methods in Asian Linguistics. (4) Lecture, three hours; discussion, one hour. Research methodologies for dealing with Asian languages, with emphasis on bibliographical, data, and professional resources, issues in analyzing and presenting language examples, explaining language phenomena beyond what is observed, cross-linguistic comparisons, oral presentation skills, and writing reports in organized ways. P/NP or letter grading.


112. Field Methods in Asian Languages and Cultures. (3) Lecture, three hours. Recommended preparation: prior course on Buddhism or traditional Asian religions. Knowledge of Asian languages not required. In-depth examination of selected topics in one or more religious traditions of Asia. Topics vary, but may include death, gender, and state and religion. May be repeated for credit with topic change. Letter grading.

162. Buddhist Meditation Traditions. (4) Lecture, three hours; discussion, one hour. Recommended preparation: prior course on Buddhism or traditional Asian religions. Knowledge of Asian languages not required. Survey of theory and practice of meditation in Buddhism and its emphasis on Thera-nad, Zen, and other forms of Buddhist meditation and lifestyle, with focus on key Buddhist themes and critical issues in cross-cultural interpretations of Asian religious texts. Letter grading.

164. Buddhism and Early Religious History of Pakistan, Afghanistan, and Central Asia: Introduction. (4) Lecture, three hours. Knowledge of Asian languages not required. Survey of regions and religions of Central Asia, especially Buddhism in Afghanistan and Pakistan. Topics include historical, art historical, and linguistic approaches to history of religions. Letter grading.

170. Approaches to Study of Religion. (4) Seminar, three hours. Investigation of various ways in which religion and religions may be studied, including anthropological, sociological, psychological, phenomenological, and other approaches. Readings of primary and secondary sources of modern scholarship. Concurrently scheduled with course C270. Letter grading.

189. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

189HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to upper-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for a maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

190. Research Colloquium in Asian Languages and Cultures. (1) Seminar, one hour. Corequisite: course 198A or 198B or 198C or 199. Designed to bring together advanced undergraduate students under-taking individual supervised tutorial research in seminars set up with one or more faculty members to discuss their own work or related work in discipline. Led by one supervising faculty member. May be repeated for credit. P/NP grading.

152. Tibetan Buddhism. (4) Lecture, three hours. Knowledge of Asian languages not required. Survey of thought and practices of Buddhism in Tibet from its beginnings to present. Letter grading.

155. Buddhism, Film, and Media. (4) Lecture, three hours; discussion, one hour. Enforced corequisite: course M60 (or Religion M60A) or M60W (or Religion M60W). Examination of issues related to Buddhism in globalizing world, with focus on changing and diverse presentations of Buddhism in film, media, and new media. P/NP or letter grading.

191A. Variable Topics: Research Seminars: Life Writing in East Asia. (4) Seminar, three hours. Research seminar on selected topics. Readings of biography and autobiography as elements of East Asian cultural traditions, with focus rotating between China, Japan, and Korea. Readings in English and relevant East Asian languages, discussion, and development of culminating project. May be repeated for credit. Letter grading.

191B. Variable Topics Research Seminars: Buddhist Studies. (4) Seminar, three hours. Limited to juniors/seniors. Research seminar on selected topics in Buddhist studies. Reading, discussion, and development of culminating project. May be repeated for credit. Letter grading.

191H. Honors Research Seminars: Asian Languages and Cultures. (4) Seminar, three hours. Limited to departmental and College honors students. Introduction to research methods and critical approaches to study of Asia in preparation for writing of senior honors thesis. May be repeated for credit. Letter grading.

193. Speaker Series Seminars: Asian Languages and Cultures. (2) Seminar, two hours. Limited to undergraduates. Introduction to latest scholarship in field of Asian studies. Attendance at selected scholarly presentations required, as well as sessions with faculty adviser to discuss presentations and published works of speakers. May be repeated for credit. P/NP grading.

195. Community Internships in Asian Languages and Cultures. (4) Tutorial, one hour; fieldwork, eight hours. Designed for graduate students. Internship supervised in a supervised setting in community cultural or organizational setting. Students meet on regular basis with instructor and provide periodic written reports of their experiences. Final paper that combines academic research and knowledge gained from community experience required. Individual contract with supervising faculty member required. P/NP or letter grading.

196A-196B. Directed Research in Asian Languages and Cultures. (4–4) Tutorial, three hours. Limited to junior/senior departmental majors. May be repeated for credit. Individual contract required. 196A. Preparation: one undergraduate departmental seminar. Development of honors thesis under direct supervision of faculty member. Letter grading. 196B. Enforced requisite: course 196A. Continuation of work initiated in course 196A. Presentation of research and relevant progress to supervising faculty member. In Progress grading (credit to be given only on completion of course 196C). 196C. Enforced requisite: course 196B. Further investigation of research developed in course 196A, 196B. Presentation of honors project to supervising faculty member. Letter grading.

199. Directed Research in Asian Languages and Cultures. (2 to 8) Tutorial, to be arranged. Recommended preparation: advanced reading knowledge of one Asian language. Limited to juniors/seniors. Supervised individual research or investigation under guidance of faculty mentor. CULminating paper or project required. May be repeated once with consent of instructor. Individual contract required. Letter grading.

Graduate Courses

200. Research Methods in East Asian Linguistics. (4) Seminar, three hours. Research methodologies for East Asian languages, with emphasis on compiling bibliographies and preparing professional papers for research. Examination of issues in analyzing language examples, theoretical implications of linguistic data, and applications of functional linguistics in order to explain language phenomena. S/U or letter grading.

201. Proseminar: Approaches to Buddhist Studies. (4) Seminar, three hours. Designed for graduate students in Buddhist studies. Introduction to history of field, bibliography, relations with other disciplines, and current issues and research trends. S/U or letter grading.


203. Variable Topics in East Asian Linguistics. (4) Seminar, three hours. Advanced course that explores topics in East Asian linguistics through critical reading of current research on Asian languages and in-depth analysis of linguistic data. Topics include linguistic structure, communicative function, pragmatics, language, society, and culture, and language change. May be repeated for credit. S/U or letter grading.

204A-204B. Issues and Perspectives in East Asian Languages. (4–4) Lecture, three hours. Course 204A is enforced requisite to 204B. Critical reading and discussion of major pedagogical issues in teaching Asian languages (chiefly Chinese, Japanese, Korean) as second languages, with focus on second language acquisition theories and best practices as related to Asian language teaching. In Progress (204A) and S/U or letter (204B) grading.

205. Variable Topics in East Asian Culture and History. (4) Seminar, three hours. Selected topics in East Asian culture and history, with focus on China, Japan, and Korea. May be repeated for credit with topic change. S/U or letter grading.

210. Proseminar: Cultural and Comparative Studies. (4) Seminar, three hours. Designed for graduate students. Introduction to theoretical topics relevant to comparative study of East Asian culture in modern period. Readings include Western theoretical works balanced with texts taking congruent approaches to East Asian topics. S/U or letter grading.


216. Seminar: History and Asia. (4) Seminar, three hours. Designed for graduate students. Readings and discussion of major historical trends, with focus on how they have been applied to Asia. Topics include Marxist histories, Annales school and cultural history, microhistories, gender, space, historical memory, postcolonial histories, subaltern, and modernity and Asia. S/U or letter grading.

220A-220B. Seminars: Topics in Cultural Studies. (4–4) Seminar, three hours. Complements course 210. Further investigation of methodology and materials of cultural studies. Topics to be selected by instructors. May be repeated for credit. In Progress (220A) and letter (220B) grading.

222A-222B. Corpus Linguistics. (4–4) Formerly numbered M222A-222B. Fourteen to twenty-two lecture hours. Construction and exploitation of computerized language corpora for studying issues in areas such as lexicology, discourse grammar, language change and teaching. Discussion of special issues in working with East Asian language corpora. In Progress (222A) and S/U or letter (222B) grading.

224. Teaching and Learning of Heritage Languages. (4–4) Seminar, three hours. Course 204A is enforced requisite. Further exploration of the theoretical underpinnings of heritage language theories and practices as related to contexts of heritage learning and teaching. In Progress grading (credit to be given only on completion of course 224C). 224C. Enforced requisite: course 224B. Further investigation of theoretical research in syntax, semantico-pragmatics, theoretical research in syntax, semantico-pragmatics, and applied linguistics course. In Progress (224A) and S/U or letter (224B) grading.

230A-230B. Seminars: Theoretical Topics in East Asian Literature. (4–4) Seminar, three hours. Preparation: reading knowledge of at least one East Asian language. Concerns of literary theory that are brought to fore by reading of literature from or about East Asia. Reading of fiction by both Western and Asian theorists; issues of translation, comparison, and categorization. In Progress (230A) and letter (230B) grading.

240A-240B. Seminars: Topics in East Asian Literary History. (4–4) Seminar, three hours. Preparation: reading knowledge of at least one East Asian language. Critical issues common to literary historiography in East Asia, including periodization, canon, ideology, interaction between high and low culture, westernization, local cultures, etc. In Progress (240A) and letter (240B) grading.


245A-245B. Seminars: Position of Modernity in East Asian Literature. (4–4) Seminar, three hours. Preparation: at least five years of one East Asian language. Prepared for graduate students. Course 245A concerned with conceptual architecture and architectural modernity, with readings from European sources. In-class debate probes relevance of these readings for work as Asianists. Focus on Asian writings in courses 245B. In Progress (245A) and letter (245B) grading.

255. Topics in Southeast Asian Literature and/or Cinema. (4) Seminar, three hours. Knowledge of one Southeast Asian language recommended but not required. Theoretical concerns raised by works from Southeast Asia, one Southeast Asian nation, and/or Southeast Asian diaspora. Critical and historical examination of literary and/or film representations connected to practices of empire, nation, diaspora, and globalization. May be repeated for credit. S/U or letter grading.


265A-265B. Seminars: Selected Topics in Buddhist Studies. (4–4) Seminar, three hours. Coverage varies. May be repeated for credit. In Progress (265A) and letter (265B) grading.

270. Approaches to Study of Religion. (4) Seminar, three hours. Investigation of many ways in which religion and religions are studied including anthropological, sociological, psychological, phenomenological, political, reductionist, and other approaches. Readings of primary and secondary sources of modern scholarship. Concurrently scheduled with course C170. Letter grading.

281A-281B. Field Methods for Study of East Asian Oral Traditions. (4–4) Seminar, three hours. Description and evaluation of modern approaches to collecting and documenting oral tradition as text, performance, and sociocultural event, providing hands-on experience in fieldwork and archiving methods. Consideration of approaches ranging from written transcription and textualization to audio and video presentations. In Progress (281A) and S/U or letter (281B) grading.


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Chinese Lower-Division Courses

1. Elementary Modern Chinese. (5) Lecture, two hours; discussion, three hours. Requisite: course 1A with grade of C or better. Chinese placement test or courses equivalent to elementary-Mandarin. Open to students who have learned, from whatever source, enough Chinese to qualify for more advanced courses. S/U grading.
2. Elementary Modern Chinese for Advanced Beginners. (5) Lecture, two hours; discussion, three hours. Requisite: course 1A with grade of C or better. Chinese placement test. First-year Chinese. Not open to students who have learned, from whatever source, enough Chinese to qualify for more advanced courses. Continuation of course 2A. P/NP or letter grading.
3. Elementary Modern Chinese. (5) Lecture, two hours; discussion, three hours. Enforced requisite: course 1A with grade of C or better. Chinese placement test. First-year Chinese. Not open to students who have learned, from whatever source, enough Chinese to qualify for more advanced courses. Continuation of course 1A. P/NP or letter grading.
4. Intermediate Modern Chinese. (5) Lecture, two hours; discussion, two hours. Requisite: course 3A with grade of C or better. Chinese placement test. Second-year Chinese. Not open to students who have learned, from whatever source, enough Chinese to qualify for more advanced courses. Continuation of course 4A. P/NP or letter grading.
5. Intermediate Modern Chinese. (5) Lecture, three hours; discussion, two hours. Requisite: course 4A with grade of C or better. Chinese placement test. Second-year Chinese. Not open to students who have learned, from whatever source, enough Chinese to qualify for more advanced courses. Continuation of course 5. P/NP or letter grading.
6. Intermediate Modern Chinese for Advanced Students. (5) Lecture, three hours; discussion, two hours. Requisite: course 5A with grade of C or better. Chinese placement test. Second-year Chinese. Not open to students who have learned, from whatever source, enough Chinese to qualify for more advanced courses. Continuation of course 6A. P/NP or letter grading.
7. Mandarin for Cantonese Speakers. (5) Lecture, four hours. Enforced requisite: course 5C or Chinese placement test. Designed for students who are Cantonese speakers and familiar with Chinese characters and who need to improve their pronunciation of standard Mandarin. P/NP or letter grading.
8. Elementary Chinese. Intensive. (15) Lecture, 10 hours; discussion, 10 hours. Open to students who have learned, from whatever source, enough Chinese to qualify for more advanced courses. Intensive course equivalent to courses 1, 2, and 3. Introduction to fundamentals of standard Chinese, including pronunciation, grammar, and Chinese characters, with emphasis on all four basic language skills—speaking, listening comprehension, reading, and writing. Offered in summer only. P/NP or letter grading.
9. Intermediate Modern Chinese for Advanced Beginners. Intensive. (15) Lecture, 10 hours; discussion, 10 hours. Open to students who have learned, from whatever source, enough Chinese to qualify for more advanced courses. Intensive course equivalent to courses 4, 5, and 6. Designed to strengthen communicative skills of listening, speaking, reading, and writing. Grammar review, knowledge of idiomatic expressions, and both traditional and simplified characters. P/NP or letter grading.
10. Intermediate Modern Chinese. Intensive. (15) Lecture, 10 hours; discussion, 10 hours. Requisite: course 10A with grade of C or better. Chinese placement test or courses equivalent to elementary-Mandarin. Second-year Chinese. Not open to students who have learned, from whatever source, enough Chinese to qualify for more advanced courses. Intensive course equivalent to courses 4, 5, and 6. Designed to strengthen communicative skills of listening, speaking, reading, and writing. Grammar review, knowledge of idiomatic expressions, and both traditional and simplified characters. P/NP or letter grading.
19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

30. Chinese Language, Society, and Culture. (4) Lecture, two hours; discussion, two hours. Recommended preparation: one to two years of college-level Chinese. Exploration of relationship between Chinese language, society, and culture. Discussion of fundamental role that language plays in Chinese social life and cultural practices while simultaneously exploring how social and cultural factors impact ways in which Chinese language is used and the ways language and thought patterns, language and gender, language and politics, language and commerce, language and law, language and arts, and language and globalization. 40. Popular Culture in Modern Chinese Societies. (5) Lecture, three hours; discussion, one hour. Examination of modern Chinese popular culture in China, Taiwan, Hong Kong, and overseas Chinese communities. From fiction to film, music to TV, and cartoons to karaoke, probing of popular as it has manifested itself in Chinese societies and tracing of its development over last century. P/NP or letter grading.

50. Chinese Civilization. (5) Lecture, three hours; discussion, one hour. Credit for this course will not count toward credit for course 50W. Knowledge of Chinese not required. Introduction to most important aspects of Chinese Culture. Topics include early Chinese civilization, historical development of Chinese society, issues of ethnicity, Chinese language and philosophy, and early scientific and technological innovation. P/NP or letter grading.

50W. Chinese Civilization. (5) Lecture, three hours; discussion, one hour. Enforced requisite: English Composition 3 or 3H or English as a Second Language 36. Not open for credit to students with credit for course 50W of Knowledge of Chinese not required. General survey of religious life in China, with emphasis on everyday religious practice over doctrine, and themes common to Buddhism, Daoism, and Confucianism. P/NP or letter grading.

50W0. Introduction to Chinese Religions. (5) Same as Religion M60B.) Lecture, three hours; discussion, one hour. Enforced requisite: English Composition 3 or 3H or English as a Second Language 36. Not open for credit to students with credit for course 50W. Knowledge of Chinese not required. General survey of religious life in China, with emphasis on everyday religious practice over doctrine, and themes common to Buddhism, Daoism, and Confucianism. P/NP or letter grading.

50W00. Introduction to Chinese Religions. (5) Same as Religion M61W.) Lecture, three hours; discussion, one hour. Enforced requisite: English Composition 3 or 3H or English as a Second Language 36. Not open for credit to students with credit for course M60W. Knowledge of Chinese not required. General survey of religious life in China, with emphasis on everyday religious practice over doctrine, and themes common to Buddhism, Daoism, and Confucianism. P/NP or letter grading.

70. Classics of Chinese Literature. (5) Lecture, three hours; discussion, one hour. Enforced requisite: English Composition 3 or 3H or English as a Second Language 36. Not open for credit to students with credit for course 70W. Prior knowledge of Chinese literature, language, or culture not required. Introduction to pre-20th-century Chinese literary traditions, including selections from poetry, prose, fiction, and drama. P/NP or letter grading.

70W. Classics of Chinese Literature. (5) Lecture, three hours; discussion, one hour. Enforced requisite: English Composition 3 or 3H or English as a Second Language 36. Not open for credit to students with credit for course 70. Prior knowledge of Chinese culture, literature, or language not required. Introduction to pre-20th-century Chinese literary traditions, including selections from poetry, prose, fiction, and drama. Satisfies Writing II requirement. Letter grading.

80. Chinese Cinema: Pictures, Prisms, Products, Projections. (5) Lecture, two hours; discussion, one hour; film viewing, three hours. Knowledge of Chinese not required. Introduction to history and major themes of Chinese cinema. Representative films studied in contexts of culture, society, politics, and economics, with reflections on changing meanings of both Chinese and cinema. May not be repeated for credit. P/NP or letter grading.

99. Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to lower-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be repeated for credit for different honors students. Honors content noted on transcript. P/NP or letter grading.

99HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in Honors Program. Designed as adjunct to lower-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

97. Variable Topics in Chinese Culture. (4) Lecture, three hours. Knowledge of Chinese language or culture not required. Variable topics covering many different aspects of Chinese culture. Consult Schedule of Classes for topics to be offered in specific term. May be repeated for credit with topic change. P/NP or letter grading.

99 Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Courses

100A-100B-100C. Advanced Modern Chinese. (4–4–4) Lecture, three hours; discussion, two hours. Enforced requisite: course 6 or 10 with grade of C or better or Chinese placement test. Course 100A with grade of C or better or Chinese placement test is enforced requisite to 100B; course 100B with grade of C or better or Chinese placement test is enforced requisite to 100C. Third-year Chinese. Not open to students who have learned, from whatever source, enough Chinese to qualify for more advanced courses. Materials selected from contemporary Chinese publications, with emphasis on social, economic, historical, and political topics. Texts analyzed for their linguistic features and social and cultural background. Readings, compositions, informal debates on topical issues, and oral presentations. P/NP or letter grading.

100D-100E-100F. Advanced Modern Chinese for Heritage Speakers. (4–4–4) Lecture, three hours; discussion, two hours. Enforced requisite: course 6A with grade of C or better or Chinese placement test. Course 100D with grade of C or better or Chinese placement test is enforced requisite to 100E; course 100E with grade of C or better or Chinese placement test is enforced requisite to 100F. Third-year Chinese for heritage speakers. Not open to students who have learned, from whatever source, enough Chinese to qualify for more advanced courses. Materials selected from contemporary Chinese publications, with emphasis on social, economic, and political topics. Texts analyzed for their linguistic features and social and cultural background. Readings, compositions, informal debates on topical issues, and oral presentations. P/NP or letter grading.

100G. Advanced Modern Chinese: Intensive. (12) Lecture, 10 hours; discussion, two hours. Enforced requisite: course 6 or 10 with grade of C or better or Chinese placement test. Not open to students who have learned, from whatever source, enough Chinese to qualify for more advanced courses. Intensive course equivalent to courses 100A, 100B, and 100C. Materials selected from contemporary Chinese publications, with emphasis on social, economic, and political topics. Texts analyzed for their linguistic features and social and cultural background. Readings, compositions, informal debates on topical issues, and oral presentations. Offered in summer only. P/NP or letter grading.

101A-101B-101C, Advanced Readings in Modern Chinese. (4–4–4) For courses 101A, 101B: lecture, two hours; discussion, two hours; for course 101C: lecture, three hours; discussion, one hour. Requisite for courses 101A, 101B: course 100C or 100F or 100H or Chinese placement test. Not open to students who have learned, from whatever source, enough Chinese to qualify for more advanced courses. Advanced reading and discussion for second-year students. To do advanced coursework or research on China. Topics from magazines, journals, and books related to humanities and social sciences. Each course may be taken independently for credit. P/NP or letter grading (101C) and letter grading (101A, 101B).

102A. Advanced Chinese for International Business. (4) Lecture, three hours; discussion, one hour. Requisite: course 6 or 10 with grade C or better or Chinese placement test. Not open to native speakers. Designed to improve student language skills in service of business practice and ground language learning in authentic social cultural settings. Focus on oral and written business communication, cross-cultural communication, social etiquette in business conduct, Chinese economic and business climate, language of business and trade relations and environment, and business case studies. Letter grading.

102B. Advanced Chinese for International Business. (4) Lecture, three hours; discussion, one hour. Requisite: course 6 or 10 with grade C or better or Chinese placement test. Not open to native speakers. Doing business with China and understanding Chinese economy and business conduct require advanced level of Chinese language proficiency and deep understanding of Chinese society and culture. Designed to improve student language skills in service of business practice and ground language learning in authentic social cultural settings. Oral and written business communication, social etiquette in business conduct, Chinese economic and business climate, language of business and trade regulations, resources and environment, and business case studies. Offered in summer only. P/NP or letter grading.

103. Topics in Chinese Language and Culture. (4) Lecture, two hours; discussion, two hours. Recommended preparation: one to two years of college-level Chinese. Satisfies Writing II requirement. Letter grading.

104A-104B-104C. Advanced Modern Chinese. (4–4–4) Lecture, three hours; discussion, two hours. Enforced requisite: course 6 or 10 with grade of C or better or Chinese placement test. Course 104A with grade of C or better or Chinese placement test is enforced requisite to 104B; course 104B with grade of C or better or Chinese placement test is enforced requisite to 104C. Third-year Chinese. Not open to students who have learned, from whatever source, enough Chinese to qualify for more advanced courses. Materials selected from contemporary Chinese publications, with emphasis on social, economic, and political topics. Texts analyzed for their linguistic features and social and cultural background. Readings, compositions, informal debates on topical issues, and oral presentations. P/NP or letter grading.

100. Advanced Modern Chinese. (4–4–4) Lecture, three hours; discussion, two hours. Enforced requisite: course 6A with grade of C or better or Chinese placement test. Course 100A with grade of C or better or Chinese placement test is enforced requisite to 100B; course 100B with grade of C or better or Chinese placement test is enforced requisite to 100C. Third-year Chinese for heritage speakers. Not open to students who have learned, from whatever source, enough Chinese to qualify for more advanced courses. Materials selected from contemporary Chinese publications, with emphasis on social, economic, and political topics. Texts analyzed for their linguistic features and social and cultural background. Readings, compositions, informal debates on topical issues, and oral presentations. Offered in summer only. P/NP or letter grading.

C107A-C107B. Academic/Professional Chinese. (4-4) Lecture; three hours; discussion; one hour. Enforced requisite: course 101B or Chinese placement test. Intended to improve reading and writing skills in specific academic and professional subject areas for students who have studied general Chinese at an advanced level, with coverage in Chinese humanities and social sciences, science and technology, medicine, and applied linguistics. Concurrently scheduled with courses C207A-C207B. P/NP or letter grading.

108FL. Special Studies: Readings in Chinese. (2) Seminar, two hours. Enforced requisite: course 100C or 100I or Chinese placement test. Students must be concurrently enrolled in affiliated main course. Additional work in Chinese to augment work assigned in main course, including reading, writing, and other exercises. May be repeated for credit. P/NP or letter grading.

109. Advanced Tutorial Instruction in Chinese. (2) Tutorial, two hours. Requisite: course 100C or Chinese placement test. Tutorial and guided independent study to help students develop advanced to superior proficiency in oral and written Chinese. May be repeated for credit. P/NP or letter grading.

110A-110B-110C. Introduction to Classical Chinese. (4-4-4) Lecture; three hours; discussion; one hour. Enforced requisite: course 3 or Chinese placement test. Concurrently scheduled with course C126A. P/NP or letter grading. Concurrently scheduled with course 110C. Grammar and readings in selected premodern texts. P/NP or letter grading.

C120. Introduction to Chinese Linguistics. (4) Lecture; three hours; discussion; one hour. Recommended preparation: one to two years of college-level Chinese. Introduction to Chinese sound system, writing system and its reform, regional differences, major structural features, language in society and in cultural practices. Concurrently scheduled with course C240. Letter grading.

124. Taiwanese Language and Culture. (4) Lecture, two hours; discussion; one hour. Enforced requisite: course 3 or Chinese placement test. Taiyuan, or Taiwanese (also known as Minnan, Hoklo, or Hokkien, depending on context or region), is language that most Taiwanese people use in daily lives, including everyday interaction and communication, entertainment, social and cultural events, etc. Examination of various manifestations of Taiyuan in different forms of cultural production, including in television, cinema, music, animation, Gezi opera, glove puppetry, and other media. Discussion also of how these media have represented Taiwan’s society and shaped its cultural landscape.

130A-130B. Readings in Modern Chinese Literature. (4-4) Lecture; three hours; discussion; one hour. Enforced requisite: course 100C or Chinese placement test. Lecture, discussion, and films. Enforced requisite to 130B which is enforced requisite to 110C. P/NP. Letter grading.

141. Readings in Modern Chinese Texts. (4) Lecture, three hours; discussion; one hour. Preparation: knowledge of Chinese. Three hours of discussion, one hour. Preparatory: bilingual competency in Chinese and English. Workshop on Chinese-English literary translation, designed to improve translation skills. Focus on close readings and analysis of original texts against published English translations and actual translation work. May include interpretation segment, designed to improve translation skills. Concurrently scheduled with course C244. P/NP or letter grading.

150A. Lyrical Traditions. (4) Lecture; three hours; discussion; one hour. Knowledge of Chinese not required. Readings in English translation of poetic and critical writings of traditional China, with emphasis on development of subjectivity and modes of address. Concurrently scheduled with course C250A. P/NP or letter grading.

C150B. Chinese Literature in Translation: Traditional Narrative and Fiction. (4) Formerly numbered 1505B. Lecture, three hours; discussion, one hour. Knowledge of Chinese not required. Examination of formation and development of Chinese narrative traditions from Tang to Ming-Qing periods (7th–18th century). Readings from biographical writings, fiction, drama, legal cases, etc., with emphasis on different narrative conventions and their cultural assumptions and intersections. Exploration of important issues in context of imperial China, including order and chaos, self and other, desire and transcendence, gender norms and transgression, violence and justice. May be taken independently for credit. Concurrently scheduled with course C250B. Letter grading.

151. Chinese Literature in Translation: Modern Literature. (4) Lecture; three hours; discussion, one hour. Knowledge of Chinese not required. Lectures and reading of representative works from 1900 to present in English translation. Letter grade. P/NP or letter grading.

152. Topics in Contemporary Chinese Literature and Culture. (4) Lecture; two hours; discussion, one hour. Knowledge of Chinese not required. Investigation of various topics in contemporary Chinese literature and culture, including politics and culture of Chinese postmodernism, nativism, feminism, mass culture, and media. Letter grading.

M153. Chinese Immigrant Literature and Film. (4) (Same as Asian American Studies M130B and Comparative Literature M177.) Lecture: three hours; discussion; one hour. Knowledge of Chinese not required. In-depth look at Chinese immigrant experience by reading literature and watching films. Theories of diaspora, gender, and race to inform thinking and discussion of relevant issues. P/NP or letter grading.

154. Introduction to Chinese Cinema. (4) Lecture; two hours; discussion; one hour; film viewing, three hours. Knowledge of Chinese not required. History of Chinese-language cinemas, with emphasis on mainland China. Examination of film style and aesthetics, as well as contexts of industry, economics, politics, culture, and society. May not be repeated for credit. Letter grading.

155. Topics in Chinese Cinema. (4) Lecture; two hours; discussion; one hour; film viewing, three hours. Knowledge of Chinese not required. Critical study of films from Taiwan, Hong Kong, Taiwan, and Chinese diaspora. Examination of aesthetics, genres, directors and stars, other arts and media, and cultural and political histories. May be repeated for credit with topic change. P/NP or letter grading.

C156. Variable Topics in Culture and Society in Taiwan. (4) Lecture; three hours; discussion; one hour. Designed for seniors. Knowledge of Chinese not required. Examination of relationship between culture (art, literature, film) and society in Taiwan. Reading, audio and visual material, discussion, and development of culminating project. May be repeated for credit with topic change. Concurrently scheduled with course C257. Letter grading.

157. Contemporary Chinese Popular Culture. (4) Lecture; three hours; discussion; one hour. Examination of various aspects of modern and contemporary popular culture in China, Taiwan, and Hong Kong from cultural studies perspective. Genres and media in- cluding literature, print culture, music, film and television, radio, pop music, visual arts, fashion, advertising, and cyberculture. P/NP or letter grading.

Variable Topics in Culture and Society in China. (4) Lecture; three hours; discussion; one hour. Knowledge of Chinese language not required. Examination of relationship between culture (art, literature, film) and society in China. Reading, audio and visual material, discussion, and development of culminating project. May be repeated for credit with topic change. P/NP or letter grading.


165. Introduction to Chinese Buddhist Texts. (4) Lecture; three hours; discussion; one hour. Recommended requisite: course 100A or 110B or Japanese 110A or Korean 100A or Chinese placement test. Readings in premodern Buddhist texts written in literary Chinese and taken from translated Indian sutras, indigenous exegetical materials, Chinese Esoteric scriptures, and Ch’an writings. Problems in translation from Indo-European languages into Chinese; evolution of Chinese Buddhist terminology. Coverage varies. May be repeated for credit with consent of instructor. Letter grading.


C175. Introduction to Chinese Thought. (4) Lecture; three hours; discussion; one hour. Knowledge of Chinese not required. Survey of Chinese thought as represented in texts of Zhou and later Chinese periods (circa 1000 to 100 BCE), with focus on invention of Confucian tradition (including Five Classics) and on defenses of that tradition against challenges from Mohists, Taoists, and other groups of thinkers. Service learning component includes meaningful work with community partners, such as local schools, selected in advance by instructor. Letter grading.

176. Neo-Confucianism. (4) Lecture; three hours; discussion; one hour. Knowledge of Chinese not required. Examination of movement to revitalize and reinterpret teachings of Confucius during Tang, Song, Yuan, and Ming dynasties, with consideration of both neo-Confucian philosophy and social action. Letter grading.

180. Chinese Mythology and Supernatural. (4) Lecture; three hours; discussion; one hour. Knowledge of Chinese not required. Survey of corpus of traditional Chinese mythology, with focus on examples preserved in a variety of early texts, later evolutions in drama, fiction, and popular works, and evidence from visual arts. Letter grading.
162. Archaeology of Early Global Trade and Piracy. (4) Lecture, three hours; discussion, one hour. Exploration of role of trade and piracy at threshold of globalization (13th to 17th century), with focus on continuity and transformation in Asian trade network in response to early global trade. Investigation based on archaeological study of porcelain, tracing movement from kilns around Chinese trading ports to shipwrecks and consumer societies in Southeast Asia and colonial America. Important commodities will be trans-Pacific voyage, close association of porcelain production and trade with international piracy in traditional historiography presents new angle for understanding dynamics of early global trade and industries.

Letter grading.

M183. Archaeological Landscapes of China. (4) (Same as Anthropology M118F.) Lecture, three hours; discussion, one hour (when scheduled). Declassified space images from Cold War era and open remote sensing data of 21st century provide new opportunities for studying landscape transformation in historical China. Combines lectures, lab work, research, and hands-on analysis of archaeological sites on satellite images, investigation of changing historical and archaeological landscape in China during last 5,000 years. Topics vary, with focus on emergence of early cities to rise of metropolitan centers and formation of imperial landscapes. P/NP or letter grading.

184. Crime, Law, and Punishment in Traditional China. (4) Seminar, three hours. Preventing crime and administering justice are important parts of any society, but these are not straightforward or simple processes. What is crime? Are there crimes so terrible that they merit special kinds of punishment? How is punishment decided and by whom? What happens if justice is not carried out? Consideration of these questions as they apply to premodern China from multiple perspectives: legal codes and casebooks, literary re-imaginings of trials, depictions of postmortem punishment, and tales of supernatural retribution. Discussion of how legal and penal systems of China have been represented in West. Letter grading.

185. Food and Love in Chinese Culture. (4) Lecture, three hours; discussion, one hour. Knowledge of Chinese not required. Based on studies of cultural, historical, and social contexts, discussion of food and cooking in China from Neolithic period to the present. Emphasis on food production and consumption in China across various scales, from emergence of early cities to rise of metropolitan centers and formation of imperial landscapes. P/NP or letter grading.

186. Archaeology in China. (4) Lecture, three hours; discussion, one hour. Knowledge of Chinese not required. Early Chinese study of their own past, types of artifacts, beginnings of scientific archaeology, and surveys of major excavations of sites of all periods. Letter grading.

187. Chinese Etymology and Calligraphy. (4) Lecture, three hours; discussion, one hour. Recommended requisite: course 3. Coverage of (1) development of Chinese writing system from pottery inscriptions 6,000 years ago to modern simplified forms and studies of six scripts principles that were used to form Chinese characters and (2) aesthetic treatment of calligraphy, including etymology, discovery of recognizing and interpreting cursive style, common forms of handwriting. Letter grading.

189. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. May be repeated for credit; individual honors contract required. Honors content noted on transcript. P/NP or letter grading.

190HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designated as adjunct to upper-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units of credit; individual honors contract required. Honors content noted on transcript. Letter grading.


191B. Variable Topics Research Seminars: 20th-Century China and Taiwan. (4) Seminar, three hours. Designed for juniors/seniors. Research seminar on selected topics in modern and contemporary literature and culture from China, Taiwan, Singapore, and Hong Kong. Reading, discussion, and development of culminating project. May be repeated for credit. Letter grading.


200B. Prossemia: Premodern Chinese Literature. (4) Seminar, three hours. Introduction to major bibliographical and methodological resources in field of premodern Chinese literature, with focus on research tools in field and on scholarship in English on major literary genres, periods, and authors. Letter grading.

200C. Prossemia: Modern Chinese Literature and Cinema. (4) Seminar, three hours. Introduction to major bibliographical and methodological resources in fields of modern Chinese literary and cinematic studies, with focus on theoretical tools, historical, and critical trends. Letter grading.

201A—201B. Seminars: Classical Chinese Poetry. (4–4) Lecture and seminar 1, three hours. Introduction to major structural features, language in society and in literature. Topics rotate among classical Chinese poetry and related matters. Emphasis on philological, critical, and historical approaches. May be repeated for credit with consent of instructor. Letter grading.


212. Topics in Chinese Poetry. (4) Readings/discussion, three hours. Selected readings from classical poetic tradition, with focus on individual poets, themes, or other critical issues. May be repeated for credit with consent of instructor. Letter grading.

213A—213B. Chinese-Language Cinemas. (4–4) Seminar, three hours; film-viewing laboratory, two hours. Advanced topics in Chinese-language cinemas. Examination of theory and methodology, historiography, industry and institutions, style and aesthetics, major genres and artists, other arts and media, other cinematic traditions, and social contexts. May be repeated for credit. Letter grading.

220A—220B. Theoretical Approaches to Chinese and Sinophone Cultures. (4–4) Seminar, three hours. Discussions to be framed by Western literary and cultural theory, investigating China in its relations with and limitations towards Western theory may pose for Chinese literary and cultural studies. Specific topics vary from year to year. In Progress (220A) and letter (220B) grading.


230A—230B. Seminars: Selected Topics in Modern Chinese Literature. (4–4) Seminar, three hours. Selected readings in 20th-century Chinese literature, emphasizing fiction. Discussion of individual research projects. May be repeated for credit. In Progress (230A) and letter (230B) grading.

238. Travel Writing in Premodern China. (4) Lecture, three hours; discussion, one hour. Recommended preparation: course 123B. Three-hour seminar on travel writing in China, with focus on English translations of works by native writers and by foreign visitors through centuries. Concurrently scheduled with course C138. Letter grading.

240. Introduction to Chinese Linguistics. (4) Lecture, three hours; discussion, one hour. Recommended preparation: one to two years of college-level Chinese. Introduction to Chinese sound system, writing system and its reform, regional differences, major structural features, language in society and in cultural practices. Concurrently scheduled with course C120. Letter grading.

241A—241B. Heaven, Earth, and Monarchy in Ancient China. (4–4) Seminar, three hours. Preparation: working knowledge of classical Chinese. Close reading of chapters from Han dynasty collection of writings on forms of music, social interaction, education, marriage, and mourning in Zhou period, with discussion of topics in recent cultural semiotics and anthropology. In Progress (241A) and letter (241B) grading.

242A—242B. Chinese Classics and Exegetical Traditions. (4–4) Seminar, three hours. Recommended preparation: command of literary Chinese. Reading and discussions of selections from one traditional Chinese text. In Progress (242A) and letter (242B) grading.

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230A—230B. Seminars: Selected Topics in Modern Chinese Literature. (4–4) Seminar, three hours. Selected readings in 20th-century Chinese literature, emphasizing fiction. Discussion of individual research projects. May be repeated for credit. In Progress (230A) and letter (230B) grading.

238. Travel Writing in Premodern China. (4) Lecture, three hours; discussion, one hour. Recommended preparation: course 123B. Three-hour seminar on travel writing in China, with focus on English translations of works by native writers and by foreign visitors through centuries. Concurrently scheduled with course C138. Letter grading.

240. Introduction to Chinese Linguistics. (4) Lecture, three hours; discussion, one hour. Recommended preparation: one to two years of college-level Chinese. Introduction to Chinese sound system, writing system and its reform, regional differences, major structural features, language in society and in cultural practices. Concurrently scheduled with course C120. Letter grading.

241A—241B. Heaven, Earth, and Monarchy in Ancient China. (4–4) Seminar, three hours. Preparation: working knowledge of classical Chinese. Close reading of chapters from Han dynasty collection of writings on forms of music, social interaction, education, marriage, and mourning in Zhou period, with discussion of topics in recent cultural semiotics and anthropology. In Progress (241A) and letter (241B) grading.

242A—242B. Chinese Classics and Exegetical Traditions. (4–4) Seminar, three hours. Recommended preparation: command of literary Chinese. Reading and discussions of selections from one traditional Chinese text. In Progress (242A) and letter (242B) grading.

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ship, and research methodology. Topics vary from year to year. May be repeated for credit. In Progress (242A) and letter (242B) grading.

243. Translation Workshop: Premodern Chinese Texts. (2) Seminar, two hours. Translation, grammatical analysis, and discussion of selections from premodern Chinese texts. Students must be able to read Chinese and be interested in improving their translation skills. Concurrently scheduled with course C175. Letter grading.

244. Translation Workshop: Modern Chinese Texts. (4) Lecture, three hours; discussion, one hour. Preparation: bilingual competency in Chinese and English. Workshop focuses on translation of modern Chinese literature and culture, designed to improve translation skills. Concurrently scheduled with course C144. S/U or letter grading.

245A-245B. Seminars: Traditional Chinese Narrative and Drama. (4-4) Seminar, three hours. Preparation: reading knowledge of colloquial and literary Chinese. Seminar topics alternate yearly between traditional narrative and drama, with emphasis on generic, hermeneutical, and historical approaches. Topics in narrative derive from the Confucian tradition, while those in drama are drawn from the Chinese novel. Some seminars may be designed to improve translation skills. Concurrently scheduled with course C145. S/U or letter grading.

250A-250B. Chinese Literature in Translation: Traditional Narrative and Fiction. (4) Lecture, three hours; discussion, one hour. Knowledge of Chinese is not required. Seminar lectures cover Chinese literary works, including novels, short stories, poetry, and drama. In Translation Workshop, students draft and polish a short narrative in Chinese, with emphasis on understanding the original text and translation strategies. Concurrently scheduled with course C150A. Students must be in good academic standing and enrolled in at least 12 units (exclusive of this course). Letter grading.

250B. Chinese Literature in Translation: Modern Chinese Literature. (4) Lecture, three hours; discussion, one hour. Preparation: knowledge of Chinese is not required. Seminar lectures cover Chinese literary works, including novels, short stories, poetry, and drama. In Translation Workshop, students draft and polish a short narrative in Chinese, with emphasis on understanding the original text and translation strategies. Concurrently scheduled with course C150B. S/U grading.

250A. Lyrical Traditions. (4) Lecture, three hours; discussion, one hour. Readings of poetic and critical writings of traditional China, with emphasis on development of subjectivity and model of address. Concurrently scheduled with course C150A. Students must be in good academic standing and enrolled in at least 12 units (exclusive of this course). Letter grading.

250B. Chinese Literature in Translation: Modern Chinese Culture and Synophsone Culture. (4) Seminar, three hours. Topics in Chinese literature, history, or religion, with emphasis on textual readings and independent research. S/U or letter grading.

297A. Seminar: Research Topics in Premodern China. (4) Seminar, three hours. Topics in premodern Chinese literary history or religion, decline, and development of cultural forms. Critical readings of primary sources in Chinese are used to initiate the concept of past through interpretation of material culture. S/U or letter grading.

297B. Seminar: Research Topics in Modern Chinese and Synophsone Culture. (4) Seminar, three hours. Topics in modern Chinese literature or religion, with emphasis on textual readings and independent research. S/U or letter grading.

FILIPINO

Lower-Division Courses

1. Introductory Filipino. (5) Lecture, two hours; discussion, three hours. Coverage of basic Filipino/Tagalog grammar, with equal emphasis on reading, writing, conversation, and comprehension. P/NP or letter grading.

2. Introductory Filipino. (5) Lecture, two hours; discussion, three hours. Enforced requisite: course 1 with grade of C or better. Coverage of basic Filipino/Tagalog grammar, with equal emphasis on reading, writing, conversation, and comprehension. P/NP or letter grading.

3. Introductory Filipino. (5) Lecture, two hours; discussion, three hours. Enforced requisite: course 2 with grade of C or better. Coverage of intermediate Filipino/Tagalog grammar and coverage of more advanced topics. P/NP or letter grading.

4. Intermediate Filipino. (5) Lecture, two hours; discussion, three hours. Enforced requisite: course 3 with grade of C or better. Coverage of advanced topics. P/NP or letter grading.

5. Intermediate Filipino. (5) Lecture, two hours; discussion, three hours. Enforced requisite: course 4 with grade of C or better. Coverage of advanced topics. P/NP or letter grading.

Upper-Division Courses

100A. Advanced Filipino: Reading and Writing. (4) Lecture, three hours. Enforced requisite: course 6 with grade of C or better. Coverage of Filipinos/Tagalog grammar, with equal emphasis on reading, writing, conversation, and comprehension. P/NP or letter grading.

100B. Advanced Filipino: Reading and Writing. (4) Lecture, three hours. Enforced requisite: course 6 with grade of C or better. Coverage of Filipinos/Tagalog grammar, with equal emphasis on reading, writing, conversation, and comprehension. P/NP or letter grading.

110. Advanced Tutorial Instruction in Filipino. (2) Tutorial, two hours. Enforced requisite: course 6 or Filipino/Tagalog placement test. Tutorial and guided independent study to help students develop advanced proficiency in oral and written Filipino. May be repeated for credit. P/NP or letter grading.

130A. Filipino Short Story. (4) Lecture, three hours. Enforced requisite: course 6 or Filipino/Tagalog placement test. General background knowledge on how Filipinos view themselves and society, historically and diachronically. Sample of short stories written in Filipino/Tagalog language with some written in English for purposes of contrasting rhetoric, themes, and sensibilities. P/NP or letter grading.


290A-290B. Seminars: Selected Topics in Chinese Archaeology. (4-4) Seminar, three hours. Requisite: course 290A. Designated to move students with intermediate reading knowledge of classical Chinese. Selected readings from religious traditions of China, with introduction to different disciplinary approaches, secondary scholarship, and research methodology. Topics rotate among chronological periods and major religious traditions. May be repeated for credit with consent of instructor. In Progress (290A) and letter (290B) grading.

291. Archaeological Process in China. (4) Seminar, three hours. Introduction to major bibliographical and methodological resources in field of Chinese archaeology to provide deeper understanding of formulation of conceptual categories of philosophers of early China used to make sense of past through interpretation of material culture. S/U or letter grading.

295A-295B. Seminars: Selected Topics in Chinese Historical Culture. (4-4) Seminar, three hours. Enforced requisite: course 295A. Designated to move students with intermediate reading knowledge of classical Chinese. Selected readings from religious traditions of China, with introduction to different disciplinary approaches, secondary scholarship, and research methodology. Topics rotate among chronological periods and major religious traditions. May be repeated for credit with consent of instructor. In Progress (295A) and letter (295B) grading.

297A. Seminar: Research Topics in Premodern China. (4) Seminar, three hours. Topics in premodern Chinese literary history or religion, with emphasis on textual readings and independent research. S/U or letter grading.

297B. Seminar: Research Topics in Modern Chinese and Synophone Culture. (4) Seminar, three hours. Topics in modern Chinese literature or religion, with emphasis on textual readings and independent research. S/U or letter grading.

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

89. Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to lower-division lecture course. Exploration of topics in greater depth through supplementary readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

89H. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to lower-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplementary readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

190. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

199. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in a minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.
Hindi-Urdu

Lower-Division Courses

1. Introductory Hindi-Urdu. (5) Lecture, two hours; discussion, three hours. Coverage of basic Hindi grammar, with equal emphasis on reading, writing, conversation, and comprehension. P/NP or letter grading.

2. Introductory Hindi-Urdu. (5) Lecture, two hours; discussion, three hours. Enforced requisite: course 1 with grade of C or better. Coverage of basic Hindi grammar, with equal emphasis on reading, writing, conversation, and comprehension. P/NP or letter grading.

3. Introductory Hindi-Urdu. (5) Lecture, two hours; discussion, three hours. Enforced requisite: course 2 with grade of C or better. Coverage of basic Hindi grammar, with equal emphasis on reading, writing, conversation, and comprehension. P/NP or letter grading.

3R. Elementary Hindi-Urdu Reading and Writing. (5) Lecture, five hours. Recommended preparation: speaking and listening skills in Hindi-Urdu, training in reading and writing skills at elementary level, equivalent to completion of one year of Hindi. P/NP or letter grading.

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

89. Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to lower-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be repeated for credit. P/NP or letter grading.

89HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to lower-division lecture course. In- dividual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

89HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to lower-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be repeated for credit. P/NP or letter grading.

189. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

189HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to lower-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be repeated for credit. P/NP or letter grading.

Indonesian

Lower-Division Courses

1. Introductory Indonesian. (5) Lecture, three hours; discussion, two hours. Not open to students who have learned enough Indonesian to qualify for more advanced courses. Coverage of basic Indonesian grammar, with equal emphasis on reading, writing, listening, and speaking skills. P/NP or letter grading.

2. Introductory Indonesian. (5) Lecture, three hours; discussion, two hours. Requisite: course 1 with grade of C or better. Not open to students who have learned enough Indonesian to qualify for more advanced courses. Coverage of basic Indonesian grammar, with equal emphasis on reading, writing, listening, and speaking skills. P/NP or letter grading.

3. Introductory Indonesian. (5) Lecture, three hours; discussion, two hours. Requisite: course 2 with grade of C or better. Not open to students who have learned enough Indonesian to qualify for more advanced courses. Coverage of basic Indonesian grammar, with equal emphasis on reading, writing, listening, and speaking skills. P/NP or letter grading.

4. Intermediate Indonesian. (5) Lecture, five hours. Designed to expand language skills acquired in introductory courses and to equip students with good communicative competence in Indonesian. P/NP or letter grading.

5. Intermediate Indonesian. (5) Lecture, five hours. Enforced requisite: course 4 with grade of C or better. Designed to expand language skills acquired in introductory courses and to equip students with good command of communicative competence in Indonesian. P/NP or letter grading.

6. Intermediate Indonesian. (5) Lecture, five hours. Enforced requisite: course 5 with grade of C or better. Designed to expand language skills acquired in introductory courses and to equip students with good command of communicative competence in Indonesian. P/NP or letter grading.

Japanese

Lower-Division Courses

1. Elementary Modern Japanese. (5) Lecture, two hours; discussion, three hours. Not open to students who have learned, from whatever source, enough Japanese to qualify for more advanced courses. Introduction to modern Japanese with attention to conversation, grammar, and written forms. P/NP or letter grading.

88. Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to lower-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be repeated for credit. P/NP or letter grading.

89HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to lower-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be repeated for credit. P/NP or letter grading.

1A. Elementary Modern Japanese for Kansui Native Students. (5) Lecture, two hours; discussion, three hours. Not open to students who have learned, from whatever source, enough Japanese to qualify for more advanced courses. Introduction to modern Japanese with attention to conversation, grammar, and written forms for those with some Kansui knowledge. P/NP or letter grading.

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2. Elementary Modern Japanese. (5) Lecture, two hours; discussion, three hours. Enforced requisite: course 1 with grade of C or better or Japanese placement test. Not open to students who have learned, from whatever source, enough Japanese to qualify for more advanced courses. Continuation of course 1. P/NP or letter grading.

2A. Elementary Modern Japanese for Kansu Native Students. (5) Lecture, two hours; discussion, three hours. Requisite: course 1A or Japanese placement test. Not open to students who have learned, from whatever source, enough Japanese to qualify for more advanced courses. Introduction to modern Japanese with attention to conversation, grammar, and waicca forms for those with some Kansu knowledge. Conversation drill based on material covered in class. P/NP or letter grading.

3. Elementary Modern Japanese. (5) Lecture, two hours; discussion, three hours. Enforced requisite: course 2 with grade of C or better or Japanese placement test. Not open to students who have learned, from whatever source, enough Japanese to qualify for more advanced courses. Continuation of course 2. P/NP or letter grading.

3A. Elementary Modern Japanese for Kansu Native Students. (5) Lecture, two hours; discussion, three hours. Requisite: course 2A or Japanese placement test. Not open to students who have learned, from whatever source, enough Japanese to qualify for more advanced courses. Continuation to modern Japanese with attention to conversation, grammar, and written forms for those with some Kansu knowledge. Conversation drill based on material covered in class. P/NP or letter grading.

4. Intermediate Modern Japanese. (5) Lecture, three hours; discussion, two hours. Requisite: course 2 or 3 or 8 with grade of C or better or Japanese placement test. Not open to students who have learned, from whatever source, enough Japanese to qualify for more advanced courses. Introduction to modern Japanese with attention to conversation, grammar, and waicca forms for those with some Kansu knowledge. Conversation drill based on material covered in class. P/NP or letter grading.

4A. Intermediate Modern Japanese. (5) Lecture, three hours; discussion, two hours. Requisite: course 3 with grade of C or better or Japanese placement test. Not open to students who have learned, from whatever source, enough Japanese to qualify for more advanced courses. Continuation of course 4. P/NP or letter grading.

5. Intermediate Modern Japanese. (5) Lecture, three hours; discussion, two hours. Requisite: course 4 with grade of C or better or Japanese placement test. Not open to students who have learned, from whatever source, enough Japanese to qualify for more advanced courses. Continuation of course 5. P/NP or letter grading.

6. Intermediate Modern Japanese. (5) Lecture, three hours; discussion, two hours. Requisite: course 5 with grade of C or better or Japanese placement test. Not open to students who have learned, from whatever source, enough Japanese to qualify for more advanced courses. Continuation of course 6. P/NP or letter grading.

7. Elementary Japanese: Intensive. (15) Lecture, 10 hours; discussion, 10 hours. Not open to students who have learned, from whatever source, enough Japanese to qualify for more advanced courses. Intensive course equivalent to courses 1, 2, and 3. Introduction to fundamentals of standard Japanese, including pronunciation, grammar, and Japanese characters, with emphasis on four basic language skills—speaking, listening comprehension, reading, and writing. Offered in summer only. P/NP or letter grading.

10. Intermediate Modern Japanese: Intensive. (15) Lecture, 10 hours; discussion, 10 hours. Enforced requisite: course 3 with grade of C or better or Japanese placement test. Not open to students who have learned, from whatever source, enough Japanese to qualify for more advanced courses. Intensive course equivalent to courses 4, 5, and 6. Reviewing in modern Japanese, with emphasis on comprehension and structural analysis. Offered in summer only. P/NP or letter grading.

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.
varied specialized oral and written communication skills as well as high degree of cultural understanding. Oral and written business communication, social etiquette in business conduct, Japanese economic and business climate, business law and regulations, sources and environment, and business case studies. P/NP or letter grading.

105A-105B. Advanced Reading and Writing for Japanese-Heritage Speakers. (4–4) Lecture, three hours; discussion, one hour. Enforced prerequisite: Japanese placement test. Not open to students who have taken 100 series, 101 series, and/or 103 series courses or 104. Designed for advanced-level Japanese-heritage learners who are fluent in daily spoken Japanese. Emphasis on building vocabulary knowledge of Karyō, reading and writing, and honorific/humble style of Japanese. Each course may be taken independently for credit. P/NP or letter grading.

108FL. Special Studies: Readings in Japanese. (2) Seminar, two hours. Requisite: course 100C or 100S with grade of C or better or Japanese placement test. Students must be concurrently enrolled in affiliated main course. Additional work in Japanese to augment work assigned in main course, including reading, writing, and other exercises. May be repeated for credit. P/NP or letter grading.

109. Advanced Tutorial Instruction in Japanese. (2) Tutorial, two hours. Requisite: course 100C or 100S with grade of C or better or Japanese placement test. Tutorial and guided independent study to help students reach proficiency in oral and written Japanese. May be repeated for credit. P/NP or letter grading.


110B. Introduction to Classical Japanese: Reading Proficiency. (4) Lecture, three hours; discussion, one hour. Enforced requisite: course 110A. Grammar and readings of selected pre-modern texts. P/NP or letter grading.


M120. Introduction to Japanese Linguistics. (4) (Same as Linguistics M116.) Lecture, three hours; discussion, one hour. Enforced requisite: course 3 or 8 or Japanese placement test. Introduction to Japanese grammar and sociolinguistics through reading, discussion, and problem solving in phonology, syntax, semantics, and discourse pragmatics. Letter grading.


124. Language and Culture of Ryukyu/Okinawa. (4) Seminar, three hours. Requisite: course 6 or 10 or Japanese placement test. Research seminar with reading, discussion, linguistic analysis, and development of culminating project. Letter grading.


130A-130B-130C. Readings in Modern Japanese Literature. (4–4–4) Seminar, three hours. Enforced requisite: course 100C or 100S or Japanese placement test. Readings and discussion of works by modern Japanese writers. Each course may be taken independently for credit. Letter grading.


151. Japanese Literature in Translation: Modern. (4) Lecture, three hours; discussion, one hour. Requisite: English Composition 3 or 3H or one course from Comparative Literature 1A, 1B, 1C, 1D. Knowledge of Japanese not required. Survey of Japanese literature from 16th century to post-World War II. P/NP or letter grading.

154. Postwar Japanese Culture through Literature. (4) Lecture, three hours; discussion, one hour. Requisite: English Composition 3 or 3H or one course from Comparative Literature 1A, 1B, 1C, 1D. Knowledge of Japanese not required. Use of fiction and film to explore Japanese culture in postwar era in broad cross-disciplinary and cross-cultural context. P/NP or letter grading.


159. Variable Topics in Culture and Society in Japan. (4) Lecture, three hours; discussion, one hour. Knowledge of Japanese not required. Examination of relationship between culture (art, literature, film) and society in Japan. Reading, audio and visual material, discussion, and development of culminating project. May be repeated for credit with topic change. Concurrently scheduled with course C259. P/NP or letter grading.


161. Religious Life in Modern Japan. (4) Lecture, three hours; discussion, one hour. Knowledge of Japanese not required. Religious transformations accompanying rapid industrialization, urbanization, militiam, and defeat in the Pacific War, including analyses of Shinto mythology, secular position, and Buddhist reformation movements, new religions, and continuing role of traditional village/family religious rites. Letter grading.


170. Japanese Tales of Supernatural. (4) Lecture, three hours; discussion, one hour. Knowledge of Japanese not required. Readings of fictional works that feature supernatural beings, including Shinto gods, Buddhhas, bodhisattvas, Yin-yang diviners, ghosts, various types of demons, shape-shifting foxes and raccoon dogs, snakes, and dragons. Exploration of different treatments of supernatural themes from ancient to modern times, and of relationship between supernatural literature and expressions of fear, cruelty, violence, misogyny, desire, hope, compassion, and humor. Letter grading.

C171. Topics in Japanese Studies. (4) Lecture, three hours; discussion, one hour. Enforced requisite: course 100C or Japanese placement test. Advanced course that explores Japanese culture through in-depth reading of Japanese language texts and/or visual documents. Topics include culture, religion, language, Japanese literature, and society. Concurrently scheduled with course C271. P/NP or letter grading.

172. Fiction and Plays of Floating World. (4) Lecture, three hours; discussion, one hour. Enforced requisite: course 110A or Japanese placement test. Readings of classical poetry of Nara and Heian periods, with focus on poetry anthology called Man'yoshu (Collection of Myriad Ages, 8th century) and on Kokinwakashu (Collection of Ancient and Modern Japanese Poems, early 10th century). Letter grading.

C182. Japanese Folklore. (4) Lecture, three hours; discussion, one hour. Knowledge of Japanese not required. Examination of classical poetry of Nara and Heian periods, with focus on poetry anthology called Man'yoshu (Collection of Myriad Ages, 8th century) and on Kokinwakashu (Collection of Ancient and Modern Japanese Poems, early 10th century). Letter grading.


189. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

189HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to upper-division lecture course. Enforced requisite: course 65 or Japanese placement test. Readings in premodern Buddhist texts written by Japanese in Sino-Japanese or Kamibun and mixed Japanese/Chinese literary styles covering textual content, transmission, hagiographies, temple histories, etc. Coverage varies. May be repeated for credit with consent of instructor. Letter grading.
additional courses. S/U or letter grading.

Students who need to improve other skills should take prewar and postwar, with focus only on reading; stu-

201B. Designed for graduate students. Introduction to course 100A or 100R. Course 201A is requisite to

may be repeated for credit. Letter grading.

197. Individual Studies in Japanese. (4) Tutorial, to be arranged. Designed for graduate students who desire more advanced or specialized in-

struction. Individual intensive study, with scheduled meetings to be arranged between faculty member and student. Assigned reading and tangi-
table evidence of mastery of subject matter required. May be repeated for credit. Individual contract required; see undergraduate adviser. P/NP or letter grading.

Graduate Courses

200. Japanese Studies Seminar. (4) Seminar, three hours. Selected topics on introduction to major bibli-

ographical and methodological resources in field of Japanese studies. May be repeated for credit with topic change. Letter grading.

201A-201B. Introduction to Reading Japanese Academic Texts. (4–4) Lecture, three hours. Requisite: course 100A or 100R. Course 201A is requisite to 201B. Designed for graduate students. Introduction to modern Japanese academic texts, both prewar and postwar, with focus only on reading; stu-

dents who need to improve other skills should take additional courses. S/U or letter grading.


C212. Japanese Urban History and Culture. (4) Lecture, three hours. Knowledge of Japanese not re-

quired. Japanese urban history and culture with spe-
cial emphasis on cities of Nara, Kyoto, Edo/Tokyo, and Nagasaki. Concurrently scheduled with course C112. S/U or letter grading.

C222. Japanese Phonology and Morphology. (4) Lecture, three hours; discussion, one hour. Recom-


C223. Structure of Japanese. (4) Lecture, three hours; discussion, one hour. Enforced requisite: course 4 or 10 or Japanese placement test. Functional linguistic analysis of grammatical structures of Japa-

nese, often in form of contrastive analysis of Japa-

nese, English, and other languages. Concurrently scheduled with course CM122. Letter grading.

224A-224B. Seminars: Selected Topics in Japanese Discourse Linguistics. (4–4) Seminar, three hours. Requisite: course CM122. Critical reading and discus-

sion of selected topics in Japanese discourse linguistics. May be repeated for credit with consent of instruc-
tor. In Progress (224A) and letter (224B) grading.

226. Survey of Functional Linguistics. (4) Lecture, four hours. Survey of recent empirical and theoretical research in several areas of functional linguistics that has served as backbone for development of Japanese discourse linguistics. May be repeated for credit with consent of instructor. S/U or letter grading.

CM227. Contrastive Analysis of Japanese and Korea-

226A-226B. Seminars: Japanese and Korean Buddhist Texts. (4–4) Seminar, three hours. May be repeated for credit with consent of instructor. In Progress (226A) and letter (226B) grading.

270A-270B. Seminars: Japanese Ritual Arts. (4–4) Seminar, three hours. Reading knowledge of Japa-

tese not required. Lectures on ritual (performing) arts of Japan comprising music, dance, storytelling, viewing, purification, divination, disguise, mimicry, and competitive as well as acrobatic arts, with special emphasis on moral and ethical purposes and symbolic structure of these arts. In Progress (270A) and letter (270B) grading.

C211. Topics in Japanese Studies. (4) Lecture, three hours. Requisite: course 110A. Seminar on selected topics in premodern Japanese literature and thought. May be repeated for credit with consent of instructor. S/U or letter grading.

C225. Topics in Japanese Literature. (4–4) Seminar, four and one half hours. Reading knowledge of Japa-

nese not required. Discussions and readings on ritual (performing) arts of Japan comprising music, dance, storytelling, viewing, purification, divination, disguise, mimicry, and competitive as well as acrobatic arts, with special emphasis on moral and ethical purposes and symbolic structure of these arts. In Progress (225A) and letter (225B) grading.

M276. Reading Modern Bodies. (4) Same as Com-

parative Literature M276. Seminar, three hours. De-

scribed for graduate students of Japanese studies. May be repeated for credit with special emphasis on artistic behavior. Discussion of Shinto, Shinto/Buddhist syncretism, and other non-Buddhist belief systems. Concurrently scheduled with course C182. Letter grading.

C274. Japanese Folklore. (4) Lecture, three hours; discussion, one hour. Knowledge of Japanese not re-

quired. Lectures/discussions on native religious rituals (festivals) and observances of Japanese, with special emphasis on artistic behavior. Discussion of Shinto, Shinto/Buddhist syncretism, and other non-Buddhist belief systems. Concurrently scheduled with course C182. Letter grading.

Korean

Lower-Division Courses

1. Elementary Modern Korean. (5) Lecture, two hours; discussion, two hours. Open to students who have learned, from whatever source, enough Ko-

rean to qualify for more advanced courses. Introduc-
tion to standard spoken Korean and Korean writing, with emphasis on conversation. P/NP or letter grading.

1A. Elementary Korean for Korean-Heritage Speakers. (5) Lecture, two and one half hours; dis-

cussion, two hours. Open to students with some Korean-heritage background who want more Korean speaking/listening exposure than available in course 1. Emphasis on spelling, basic grammar, reading, writing, and daily conversation. P/NP or letter grading.

2. Elementary Modern Korean. (5) Lecture, two hours; discussion, three hours. Enforced requisite: course 1 with grade of C or better or Korean place-

ment test. Not open to students who have learned, from whatever source, enough Korean to qualify for more advanced courses. Continuation of course 1. P/ NP or letter grading.

2A. Elementary Korean for Korean-Heritage Speakers. (5) Lecture, two and one half hours; dis-

cussion, two hours. Enforced requisite: course 1A with grade of C or better or Korean placement test. Not open to students who have learned, from whatever source, enough Korean to qualify for more advanced courses. Designed for students who are not Korean-speaking family background and have some limited knowledge of Korean and to students with no Korean-
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1. Introduction to Korean Cinema. (5)
   Lecture, three hours; discussion, one hour. Overview of Korean film history, from beginning of 20th century to present. P/NP or letter grading.

2. Elementary Modern Korean. (5)
   Lecture, three hours; discussion, two hours. Enforced requisite: course 2A with grade of C or better or Korean placement test. Not open to students who have learned, from whatever source, enough Korean to qualify for more advanced courses. Designed for students with no Korean-heritage background who want more Korean speaking/listening exposure than available in course 3. Continuation of course 2A. P/NP or letter grading.

3. Intermediate Modern Korean. (5)
   Lecture, three hours; discussion, two hours. Enforced requisite: course 2A with grade of C or better or Korean placement test. Not open to students who have learned, from whatever source, enough Korean to qualify for more advanced courses. Intensive course equivalent to courses 1, 2, and 3. Introduction to fundamentals of standard Korean, including pronunciation, grammar, and Korean characters, with emphasis on advanced vocabulary and sentence structure. P/NP or letter grading.

4. Intermediate Modern Korean I. (5)
   Lecture, three hours; discussion, two hours. Knowledge of Korean not required. General survey of development of Korean culture within context of political, social, and economic history. P/NP or letter grading.

5. History of Korean Civilization. (5)
   Lecture, three hours; discussion, one hour. Knowledge of Korean language not required. General survey of history of religions in Korea—Samanism, Buddhism, Confucianism, Daoism, Christianity, Teng Mahism, and new religions—with focus on religious doctrines, practices, Korean characteristics, and social impacts. P/NP or letter grading.

6. Images of Korea. (5)
   Lecture, three hours; discussion, one hour. Knowledge of Korean culture, literature, or language not required. Exploration of visual language in Korean films and its relationship to transnational social and political contexts. P/NP or letter grading.

7. Introduction to Korean Literature and Culture. (5)
   Lecture, three hours; discussion, one hour. Broad overview of cultural history of Korea, from premodern to present. P/NP or letter grading.

8. Introduction to Korean Cinema. (5)
   Lecture, three hours; discussion, one hour. Knowledge of Asian languages not required. General survey of history of religions in Korea—Samanism, Buddhism, Confucianism, Daoism, Christianity, Teng Mahism, and new religions—with focus on religious doctrines, practices, Korean characteristics, and social impacts. P/NP or letter grading.

9. Honors Seminars. (1)
    Seminar, three hours. Limited to 20 students. Knowledge of Korean language or culture not required. Enrolled by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

10. Honors Contracts. (1)
    Tutorial, three hours. Limited to students in College Honors Program. Enrolled by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

11. Research Project. (1 to 4)
    Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students. P/NP or letter grading.

12. Graduate Reading and Research. (1 to 20)
    Seminar (su-

13. Independent Study. (1 to 20)
    Seminar (su-

14. Directed Research. (1 to 20)
    Seminar (su-

15. Independent Study. (1 to 20)
    Seminar (su-

16. Directed Research. (1 to 20)
    Seminar (su-

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100A-100B-100C. Advanced Modern Korean. (4–4–4)
   Lecture, three hours; discussion, two hours. Enforced requisite: course 6, 6A, or 10 with grade of C or better or Korean placement test. Intensive course equivalent to courses 101A-101B-101C. Knowledge of Korean not required. General survey of history of religions in Korea—Samanism, Buddhism, Confucianism, Daoism, Christianity, Teng Mahism, and new religions—with focus on religious doctrines, practices, Korean characteristics, and social impacts. P/NP or letter grading.

101A-101B-101C. Advanced Modern Korean. (4–4–4)
   Lecture, three hours. Enforced requisite: course 6 or 6A or course 101A with grade of C or better or Korean placement test. Not open to students who have attended elementary school in Korea for more than two years or who have learned, from whatever source, enough Korean to qualify for more advanced courses. Designed to improve spoken proficiency. Each course may be taken independently for credit. P/NP or letter grading.

102A-102B-102C. Advanced Modern Korean Conversation. (4–4–4)
   Lecture, three hours. Enforced requisite: course 101A or Korean placement test. Knowledge of Korean not required. General survey of history of religions in Korea—Samanism, Buddhism, Confucianism, Daoism, Christianity, Teng Mahism, and new religions—with focus on religious doctrines, practices, Korean characteristics, and social impacts. P/NP or letter grading.

103A-103B-103C. Readings in Sino-Korean Character. (4–4–4)
   Lecture, three hours; discussion, two hours. Enforced requisite: course 101A or Korean placement test. Intensive course equivalent to courses 101A, 101B, and 101C. Not open to students who attended elementary school in Korea for more than two years or who have learned, from whatever source, enough Korean to qualify for more advanced courses. Designed to improve spoken proficiency. Each course may be taken independently for credit. P/NP or letter grading.

104A-104B-104C. Korean Writing for Advanced Learners. (4–4–4)
   Lecture, three hours; discussion, one hour. Enforced requisite: course 101C or Korean placement test. Emphasis on academic writing in Korean, including rhetorical conventions, argument construction and coherence, and development of prose style. Readings include representative examples of diverse genres selected from magazines, journals, and books. Each course must be taken independently for credit. P/NP (undergraduates), S/U (graduates), or letter grading.

105A-105B-105C. Reading Korean Academic Texts. (4–4–4)
   Lecture, three hours. Enforced requisite: course 101C or Korean placement test. Intended to improve reading skills for students who have studied Korean to advanced level, with coverage in Korean of materials on Korean history, culture, and society. Each course must be taken independently for credit. Concurrently scheduled with courses C205A-C205B-C205C. P/NP or letter grading.
106A–106B–106C. Superior Korean. (4–4–4) Lecture, three hours; fieldwork, two hours. Recommended preparation: course 102A, 102B, or 102C. Use of speaking, listening, reading, and writing skills to participate effectively, or understand without difficulty any practical, social, and professional topics, whether those topics are familiar or not. Each course may be taken independently for credit. P/ NP or letter grading.

106SL. Superior Korean with Service Learning. (4) Lecture, three hours; fieldwork, two hours. Recommended preparation: course 101C. May not be taken concurrently with course 102A, 102B, 102C, 106A, or 107SL. Using reading/writing skills to participate effectively, or understand without difficulty any practical, social, and professional topics, whether those topics are familiar or not. Opportunity for students to communicate in Korean in authentic contexts while providing useful service to community. P/ NP or letter grading.

107A–107B–107C. Professional/Academic Korean. (4–4–4) Lecture, three hours. Requisite: course 101C or Korean placement test. Course 107A or Korean placement test is requisite to 107B; course 107B or Korean placement test is requisite to 107C. May not be taken concurrently with course 102A, 102B, or 102C. Development of professional and academic proficiency in oral and written Korean to understand many sociolinguistic and cultural references as well as variety of styles and forms pertinent to professional needs, make decisions, and carry out professional-level tasks in student specialization areas. Special attention to vocabulary development on professional level. Development of both interactive and native listening. Research projects to be assigned according to student interests. P/ NP or letter grading.

107SL. Professional/Academic Korean and Community-Based Learning. (4) Lecture, three hours; fieldwork, one hour. Requisite: course 101C or Korean placement test. May not be taken concurrently with course 102A, 102B, 102C, 106A, 106B, or 107A. Development of professional and academic proficiency in oral and written Korean to understand many sociolinguistic and cultural references as well as variety of styles and forms pertinent to professional needs, meet demands of professional interactions, and carry out professional-level tasks in student specialization areas. Special attention to vocabulary development on professional level. Research projects to be assigned according to student interests. Opportunity for students to communicate in Korean in authentic and professional contexts while providing useful service to community. P/ NP or letter grading.

108FL. Special Studies: Readings in Korean. (2) Seminar, two hours. Requisite: course 101C or Korean placement test. Students must be concurrently enrolled in affiliated main course. Additional work in Korean to augment work assigned in main course, including reading, writing, and other exercises. May be repeated for credit. P/ NP or letter grading.

109. Advanced Tutorial Instruction in Korean. (2) Tutorial, two hours. Requisite: course 100C or Korean placement test. Tutorial and guided independent study to help students advance their proficiency in oral and written Korean. May be repeated for credit. P/ NP or letter grading.

CM120. Structure of Korean. (4) (Same as Linguistics M177.) Lecture, three hours; discussion, one hour. Recommended preparation: two years of Korean, or one year of Korean and some knowledge of linguistics. Discussion of major syntactic, semantic, and pragmatic characteristics of Korean in light of linguistic universals and Korean typological features, and phonological structure of Korean. Concurrently scheduled with course C220. Letter grading.

124. Topics in Korean Language and Culture. (4) Lecture, three hours; discussion, one hour. Recommended preparation: one to two years of college-level Korean. Introduction of basic concepts in sociocultural linguistics, and modernized sources to analyze Korean language and culture. Study to increase understanding of variety of sociocultural variables of Korean language. Exploration of interrelationship among language, culture, and society, by examining Korean popular media (e.g., film/television drama, talk shows, music videos, digital discourse, advertisement, etc.). P/ NP or letter grading.


130A–130B. Readings in Modern Korean Literature. (4–4) Lecture, three hours. Enforced requisites: course 100C or Korean placement test. English Composition 3 or 3H or one course from Comparative Literature 1A, 1B, 1C, 1D. Readings and discussion of major modern Korean literary texts. Each course may be taken independently for credit. Letter grading.

148A. Reading Modern Korean Academic Texts. (4) Seminar, three hours. Requisite: Knowledge of 101C or Korean placement test. Designed to improve reading skills for students who have studied Korean to advanced level, and prepares them to understand of Ko-orean culture and covers. Korean academic texts (book chapters, journal articles, reviews, and primary sources) on various issues of modern Korean literature, history, politics, society, economy, and culture. P/ NP or letter grading.


C151. Korean Literature in Translation: Modern. (4) Lecture, three hours; discussion, one hour. Requisite: English Composition 3 or one course from Comparative Literature 1A, 1B, 1C, 1D. Knowledge of Korean not required. Survey of modern and contempo-rary Korean literature. Concurrently scheduled with course C251. P/ NP or letter grading.

153. Korea West Encounters. (4) Lecture, three hours; discussion, one hour. Knowledge of Korean not required. Exploration of major cross-cultural encounters between Korea and West from late 16th to early 20th century. Different views and writings of leading historical figures. Letter grading.

154. Contemporary Korean Culture through Literature and Film. (4) Lecture, three hours; discussion, one hour. Requisite: English Composition 3 or one course from Comparative Literature 1A, 1B, 1C, 1D. Knowledge of Korean not required. Use of fiction and film to explore contemporary Korean culture in cross-cultural context. P/ NP or letter grading.

155. Topics in Korean Cinema. (4) Lecture, one hour; discussion, one hour; film viewing, three hours. Knowledge of Korean not required. Historical and critical survey of Korean cinema, examining intersection between 20th-century Korea, literature, politics, and filmmaking. P/ NP or letter grading.

159. Variable Topics in Culture and Society in Korea. (4) Lecture, one hour; discussion, one hour. Requisite: course 101A or C105A or Korean placement test. Concurrently scheduled with course CM227. Letter grading.

165. Introduction to Korean Buddhism Texts. (4) Lecture, three hours; discussion, one hour. Recommended requisite: course 100A or Chinese 110C or Korean placement test. Introduction to reading pre-modern Korean Buddhist discourses and texts selected from indigenous doxographic materials and philosophical writings, Korean Buddhist apocryphal sources, historical Korean commentaries, and Son (Zen) texts. Coverage varies. Texts may be read in ei- ther Sino-Korean or literary Chinese. May be repeated with consent of instructor. Letter grading.

172. Topics in Korean Christianity. (4) Lecture, three hours; discussion, one hour. Knowledge of Korean not required. Historical development of Christianity in Korea, beliefs and practices, impact of Christianity on modern Korean culture and society. Coverage varies. May be repeated for credit with consent of instructor. Letter grading.

175. Intellectual History of Premodern Korea. (4) Lecture, three hours; discussion, one hour. Knowledge of Korean not required. General survey of Korean thought from earliest history, including shamanism, Taoism, Buddhism, Christianity, and Neo-Confucianism. Korean traditions and those found in India, China, Japan, and West. P/ NP or letter grading.

176. Introduction to Korean Confucian Texts. (4) Lecture, three hours; discussion, one hour. Enforced requisite: course 100C or Chinese 110C or Korean placement test. Reading in premodern Korean and Chinese texts on politics, so-ciety, and culture. Coverage varies. Texts may be read in either Sino-Korean or literary Chinese. May be re-peated with consent of instructor. P/ NP or letter grading.


181. Reading Korean Cultural Landscape. (4) Lecture, three hours; discussion, one hour. Knowledge of Korean not required. Introduction to Korean culture from historical/geographical perspective. Examination of human cultural imprint on land in religious, linguis-tic, rural, and urban landscapes. Letter grading.

182. 1894 Kabo Reforms: History at Crossroads of Civilizations. (4) Seminar, three hours. Knowledge of Korean not required. Examination of modernizing re-forms adopted in Korea in 1894. Consideration of conflict between radical Westernizers who had studied in Japan and U.S., moderate reformers who followed Chinese model of adopting Western technology to de fend Confucian order, and orthodox Confucians who fiercely opposed any change. Historiographical and intellectual background in first half, with debates among students who assume roles in Deliberative Council that was responsible for designing reforms in second half. Letter grading.

CM160. Korean Buddhism. (4) (Same as Religion M161C.) Lecture, three hours; discussion, one hour. Knowledge of Korean not required. Introduction and development of Buddhist in Korea, interactions between indigenous Korean culture and Sinitic traditions of Buddhism, Korean syntheses of imported Buddhist theological systems and meditative techniques, and independent Son (Zen) schools of Korea. Concurrently scheduled with course C250. Letter grading.

184A. Women in History: Premodern Korea. (4) Lecture, three hours: discussion, one hour. Knowledge of Korean not required. Examination of premodern Korean history from perspective of women. Consideration of how gender roles and identities were socially (re)constructed over time with focus on centralization of political authority by women and men within larger processes of political, social, and cultural changes such as formation of centralized bureaucratic systems, rise of aristocratic social order, and propagation of Confucian social values. Letter grading.

184B. Women in History: Modern Korea. (4) Lecture, three hours: discussion, one hour. Knowledge of Korean not required. Examination of modern Korean history from perspective of women since mid-19th century. Consideration of how gender roles and identities were socially (re)constructed over time, with focus on continual negotiation by women and men within larger processes of political, social, and cultural transformations. Discussion of issues such as changes in women’s education, employment, social/legal status, especially in context of colonialism, war, democratization, and economic development. P/NP or letter grading.

185. Education and Society in Korea. (4) Lecture, three hours. Knowledge of Korean not required. Coverage of historical and contemporary developments in education in Korea. Topics include Confucian background, colonial education, role of education in rapid economic development, views on education as vehicle for social mobility, and problems related to excessive emphasis on education. P/NP or letter grading.

M186. Korea and Vietnam: Comparative Modern Histories. (4) (Same as Vietnamese M186) Seminar, three hours. Comparative survey of intertwined and parallel histories of Korea and Vietnam, organized chronologically, but structured around key themes that serve as basis for comparison. Modern experiences of colonized Vietnam and Korea have many significant parallels, including imposition of colonial control, transition to modernized societies within context of colonialism, and shared experiences of World War II. Both were also divided by war between communist regimes in the north and strongly anticommunist regimes in the south. Each also experienced warfare after division and direct involvement of U.S. during height of cold war, 1950s and 1970s. P/NP or letter grading.


189. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth and with supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

189HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to upper-division lecture course. Individual or two-lecture course instructor explores topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

191A. Variable Topics Research Seminars: Premodern or Early Modern Korea. (4) Seminar, three hours. Research seminar on selected topics in pre-modern or early modern Korean. Reading, discussion, and development of culminating project. May be repeated for credit. Letter grading.

191B. Variable Topics Research Seminars: Contemporary Korean History. (4) Seminar, three hours. Research seminar on selected topics in modern Korean history. Reading, discussion, and development of culminating project. May be repeated for credit. Letter grading.

197. Individual Studies in Korean. (4) Tutorial, to be arranged. Limited to juniors/seniors and graduate students who desire more advanced instruction in Korean. Individual intensive study, with scheduled meetings to be arranged between faculty member and student. Assigned reading and tangible evidence of mastery of subject matter required. May be repeated for credit. Individual contract required; see undergraduate adviser. P/NP or letter grading.

Graduate Courses

200. Bibliography and Methods of Research in Korean. (4) Lecture, three hours. Requisites: course 101C, Chinese, Basic Western and modern Korean reference books, with concentration on Korean literature and language, and survey of basic bibliographical material. In addition, introduction to most important primary sources in student’s field of specialization. Letter grading.

203. Variable Topics in Korean Culture. (4) Seminar, three hours. Advanced course that explores Korean culture through in-depth reading of Korean-language texts and/or visual documents. Topics include literature, religion, folklore, cultural history, language, and society. May be repeated for credit. S/U or letter grading.

205A-C205B. Reading Korean Academic Texts. (4–4) Lecture, three hours. Requisite: course 101C or Korean placement test. Intended to improve reading skills for students who have studied Korean to advanced level, with coverage in Korean of materials on Korean history, culture, and society. Each course may be taken independently for credit. Concurrently scheduled with courses C105A-C105B. S/U or letter grading.

205C. Reading Korean Academic Texts. (4) Lecture, three hours. Intended to improve reading skills for students who have studied Korean to advanced level, with coverage in Korean of materials on Korean history, culture, and society. Each course may be taken independently for credit. Concurrently scheduled with course C105C. S/U or letter grading.


211. Thought and Society in Modern Korea. (4) Discussion, three hours. Preparation: reading knowledge of Korean. Designed for graduate students. Critical examination of major logical and ideological field of modern Korean history, including such topics as Korean capitalism and communism, intellectual history, social movements, and Korean War. Letter grading.

212. 19th-Century Korea. (4) Seminar, three hours: discussion, one hour. Requisite: course 180B or 180C. Proseminar covering crucial period from coronation of Sunjo in 1800 to annexation of Korea by Japan in 1897, including major historical scholarship on political, diplomatic, economic, cultural, and intellectual history. Letter grading.

215. Korean Literary History. (4) Lecture, three hours. Designed for graduate students. Critical history of development of traditional Korean literature, with emphasis on canonical works, historical context, literary genres, and critical issues in literary history. One particular area of focus to be nationalist canon that governs literary studies in Korea and West. Letter grading.

220. Structure of Korean. (4) Lecture, three hours: discussion, two hours. Recommended preparation: two years of Korean, or one year of Korean and some knowledge of linguistics. Discussion of major syntactic, semantic, and pragmatic characteristics of Korean in light of linguistic universals, with brief introduction to formation, typological features, and phonological and morphological aspects of Korean. Concurrently scheduled with course CM120. Letter grading.

224A-224B. Seminars: Selected Topics in Korean Linguistics. (4–4) Seminar, three hours. Critical reading and discussion of selected current research in functional linguistics (grammaticalization, discourse, pragmatics, sociolinguistics, syntax, morphology) and pedagogy. In Progress (224A) and letter (224B) grading.


230A-230B. Seminars: Literary Translation from Korean. (4–4) Seminar, three hours. Preparation: reading knowledge of Korean. In consultation with instructor, students select a text. Devoted to skill of producing accurate and readable translations, with emphasis on problems and techniques unique to poetry and prose. At end of term, students expected to produce publishable translations. May be repeated once with consent of instructor. In Progress (230A) and letter (230B) grading.

235A-235B. Seminars: Topics in Modern Korean Literature. (4–4) Seminar, three hours. Preparation: at least five years of Korean. Recommended reading knowledge of Chinese or Japanese. Limited to graduate students. Study of selected period, movement, theme, or author of 20th-century Korean literature, with critical review of secondary works in Western and Korean languages. May be repeated for credit with consent of instructor. In Progress (235A) and letter (235B) grading.


245A-245B. Seminars: Classical Korean Poetry. (4–4) Seminar, three hours. Preparation: reading knowledge of Korean. Critical reading and analysis of classical Korean poetry, including discussion of literary and cultural contexts of poetic genres. Nature of codes, conventions that make meaning possible. Reading of latest Korean scholarship. May be repeated once with consent of instructor. In Progress (245A) and letter (245B) grading.


250. Korean Buddhism. (Lecture) 4. Three hours; discussion, one hour. Knowledge of Korean not required. Introduction and development of Buddhism in Korea, interactions between indigenous Korean culture and Sinic traditions of Buddhism, Korean syntheses of imported Buddhist theological systems and meditative techniques, and independent Son (Zen) schools of Korea. Concurrently scheduled with course CM160. Letter grading.


274. Seminar: Readings in Korean Christianity. (4) Seminar, three hours. Reading of recent secondary sources of Christianity in Korea, covering doctoral dissertations, journal articles, book chapters, and books in English and Korean to help graduate students understand issues and write on diverse topics in Korean Christianity. Letter grading.

295A–295B. Seminars: Topics in Traditional Korean Cultural History. (4–4) Seminar, three hours. Preparation: reading knowledge of Korean or literary Chinese. Discussion and research on major topics in Korean cultural history, such as Confucianization of Korean society, Practical Learning movement of late Choson dynasty, or Korean reactions to West in Eastern learning and enlightenment movements of 19th century. May be repeated for credit. In Progress (295A) and letter (295B) grading.

296A–296B. Seminars: Topics in Modern Korean Cultural History. (3–4) Seminar, three hours. Preparation: reading knowledge of Korean. Designed for graduate students. Graduate research seminar on selected topics in modern Korean history. In Progress (296A) and letter (296B) grading.

South Asian

Lower-Division Courses

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

M60. Religion in Classical India: Introduction. (5) (Same as Religion M60C.) Lecture, three hours; discussion, one hour. Introduction to religions of classical India—Vedic, Brahmanical, Hindu, Jain, and Buddhist—paying equal attention to change and continuity, with emphasis on chronological development. P/NP or letter grading.

89. Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to lower-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

98HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to lower-division lecture course. Consideration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. Letter grading.

99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

110A. Elementary Sanskrit. (4) Lecture, three hours. Introduction to script and grammar, with reading exercises and attention to significance of Sanskrit for understanding of other Indo-European languages. P/NP or letter grading.


110C. Advanced Sanskrit. (4) Lecture, three hours. Requisite: course 110B. Reading of entire Bhagavadgita or comparable amount of other Sanskrit literature. P/NP or letter grading.

115. Readings in Sanskrit. (4) Lecture, three hours. Knowledge of Hindi/Urdu not required. Extensive reading in such texts as best serve students’ needs. May be repeated for credit with consent of instructor. P/NP (undergraduates), S/U (graduates), or letter grading.


155. Topics in South Asian Cinema and Literature. (4) Lecture, three hours. Knowledge of Hindi/Urdu not required. Critical analysis of language and culture in South Asian diaspora as represented in films and/or literature. May be repeated once for credit. P/NP or letter grading.

175. Introduction to Indic Philosophy. (4) Lecture, three hours. Survey of main trends in Indian philosophy from ancient to modern times. P/NP or letter grading.

185. Women and Gender in Ancient India. (4) Lecture, three hours. Knowledge of Asian languages not required. Examination of function and role of women in ancient India, primarily through study of key religious and legal texts. Topics include women’s life cycle, relation to social institutions, and challenges to their many paths of discovery. P/NP or letter grading.

Graduate Courses

M222A–M222B. Vedic. (4–4) (Same as Indo-European Studies M222A–M222B and Iranian M222A–M222B) Lecture, three hours. Preparation: knowledge of Sanskrit equivalent to course 110C. Characteristics of Vedic dialects and readings in Rig-Vedic hymns. Only course M222B may be repeated for credit. S/U or letter grading.

23A-234B. Introduction to Panini’s Grammar. (4–4) Lecture, three hours. Requisite: course 110C. Reading of selected passages of text, with introduction to Panini’s technique. S/U or letter grading.


236A. Pali, 236B. Prakrits.

243. Translation Workshop: Premodern Sanskrit, Pali, and/or Prakrit Texts. (2) Seminar, two hours. Preparation: course 110C. Translation, grammatical analysis, and exposure to such Sanskrit and Prakrit texts as best serve students’ needs. May be repeated for credit. P/NP or letter grading.

260. Buddhism in India. (4) Lecture, three hours; discussion, one hour. Knowledge of Indian languages not required. Overview of social and doctrinal history of Buddhism from its origin to its disappearance in India, based not only on texts but on archaeological, art historical, and inscriptive sources. Examination of both formal doctrine and actual practices and on what learned Buddhists wrote and ordinary Buddhists did, saw, and made. Concurrently scheduled with course CM160. Letter grading.

Southeast Asian

Lower-Division Courses

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

M20. Visible Language: Study of Writing. (5) (Same as Asian M20, Indo-European Studies M20, Near Eastern Languages M20, and Slavic M20.) Lecture, three hours; discussion, one hour. Consideration of concrete means of language representation in writing systems. Earliest representations of language known are those of Near East dating to end of 4th millennium
BC. While literate civilizations of Egypt, Indus Valley, China, and Mesoamerica left little evidence of corres-ponding earliest developments, their antiquity and, in case of China and Mesoamerica, their evident isola-tion mark these centers as loci of independent devel-opment. This course is characterized by study of early scripts, assessment of modern alphabetic writing sys-tems, and presentation of conceptual basis of semi-otic language representation. Origins and development of early writing systems are covered. How Greco-Roman alphabet arose in 1st millennium BC and how it compares to other modern writing sys-tems. P/NP or letter grading.

50. Southeast Asian Literatures and Cultures. (5) Lecture, three hours; discussion, one hour. General intro-duction to varied and diverse region of Southeast Asia. Designed to acquaint students with broad themes that characterize societies, cultures, and civiliza-tions of this vitaly important part of globe. Study of historical trajectories that have led eleven countries of region to present situations. Emphasis on examina-tions of these societies and important contemporary issues relating to geography, topography, politics, cul-ture, literature, gender issues, religion, human rights, and environment. P/NP or letter grading.

M60. Religious Traditions in Southeast Asia. (4) (Same as Religion C240) Lecture, three hours. Intro-duction to historical development and contemporary practice of religions in Southeast Asia. Examination of indigenous religious beliefs and major textually based religions introduced to region, including Hinduism, Buddhism, Islam, and Christianity. P/NP or letter grading.

70. Modern Southeast Asian Literature. (5) Lecture, three hours; discussion, one hour. Introduction to modern literatures of Southeast Asia. Designed to ex-pose students to ranges of literatures, predominantly novels and short stories, that were written across this region in response to dramatic changes caused by co-lonialism and its aftermath. P/NP or letter grading.

89. Honor Seminars. (1) Seminar, three hours. Lim-ited to 20 students. Designed as adjunct to lower-divi-sion lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible stu-dents. Honors content noted on transcript. P/NP or letter grading.

187A–170B–170C. Topics in Southeast Asian Stud-ies. (4–4–4) Lecture, three hours. Exploration of Southeast Asian culture through in-depth reading of texts and/or visual documents. Topics include litera-ture, religion, folklore, cultural history, and society. P/ NP or letter grading.

189. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible stu-dents. Honors content noted on transcript. P/NP or letter grading.

189HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. De-signed as adjunct to lower-division lecture course. Indi-vidual study with lecture course instructor to explore topics in greater depth through supplemental read-ings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract re-quired. Honors content noted on transcript. Letter grading.

195. Individual Studies in Southeast Asian. (4) Tuto-rial, to be arranged. Limited to juniors/seniors and graduate students who desire more advanced or spe-cialized treatment of one language offered in program beyond introductory course. Course content is adjusted to student's needs as requested. P/NP or letter grading.

205. Southeast Asian Culture and History. (4) Lecture, three hours; discussion, one hour. Recommended requisite: prior course in Asian cultures or history. Multidisciplinary survey of peoples of upland Southeast Asia and crit-i cal issues affecting them. Topics include history, cul-ture, human rights, ethnicity, religion, politics. Concurr-ently scheduled with course C240. P/NP or letter grading.

Graduate Courses

205. Southeast Asian Culture and History. (4) Sem-inar, three hours. Designed to expose graduate stu-dents to study of Southeast Asia as region across multiple disciplines. Discussions led by instructor and guest faculty members about core elements of their discipline's engagement with Southeast Asia, as well as latest research and development in that area. Reading of classic texts, as well as research articles representing current state of field. S/U or letter grading.

C240. Zomia: Peoples, Societies, and Cultures of Upland Southeast Asia. (4) Lecture, three hours; dis-cussion, one hour. Recommended requisite: prior course in Asian cultures or history. Multidisciplinary survey of peoples of upland Southeast Asia and crit-ical issues affecting them. Topics include history, cul-ture, human rights, ethnicity, religion, politics. Concur-rently scheduled with course C140. S/U or letter grading.

Upper-Division Courses

130. Topics in Southeast Asian Literature. (4) Lecture, three hours. Requisite: one course from Compar-ative Literature 1A, 1B, 1C, 1D, 2AW, 2BW, 2CW, or English Composition 3 or 3H. Knowledge of Southeast Asian languages not required. Advanced exploration of Southeast Asia through in-depth reading of texts from region. Topics include censorship, politics, lan-guage, and literature. P/NP or letter grading.

135. Religion and Society in Southeast Asia. (4) Lecture, three hours; discussion, one hour. Critical is-sues related to major religious traditions in Southeast Asia, with emphasis on reading and reflecting on re-cognition of challenges such complex interactions be-tween religion, state, and society in contemporary Southeast Asia. P/NP or letter grading.

C140. Peoples, Societies, and Cultures of Upland Southeast Asia. (4) (Formerly numbered 140.) Lecture, three hours; discussion, one hour. Recommended requisite: prior course in Asian cultures or history. Multidisciplinary survey of peoples of upland Southeast Asia and critical issues affecting them. Topics include history, culture, human rights, ethnicity, religion, politics. Concurrently scheduled with course C240. P/NP or letter grading.

157. Gender Issues in Southeast Asia. (4) Seminar, three hours. Critical examination of gender issues in one or more Southeast Asian countries as they con-nect to social historical contexts nationally, regionially, or globally. May be repeated for credit. P/NP or letter grading.

170A–170B–170C. Topics in Southeast Asian Stud-ies. (4–4–4) Lecture, three hours. Exploration of Southeast Asian culture through in-depth reading of texts and/or visual documents. Topics include litera-ture, religion, folklore, cultural history, and society. P/ NP or letter grading.

3C0C. Thai Scripts. (5) Tutorial, three hours. Emphasis on reading, writing, conversation, and compre-hension. P/NP or letter grading.


4. Interdisciplinary Thai. (5) Lecture, five hours. Re-inforcement of basic Thai grammar and coverage of more advanced topics. Broadening of skills in conversa-tion and composition; reading of selected texts. P/ NP or letter grading.

5. Intermediate Thai. (5) Lecture, five hours. Enforced requisite: course 4 with grade of C or better. Reinforcement of basic Thai grammar and coverage of more advanced topics. Broadening of skills in conver-sation and composition; reading of selected texts. P/ NP or letter grading.

189HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. De-signed as adjunct to lower-division lecture course. In-dividual study with lecture course instructor to explore topics in greater depth through supplemental read-ings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract re-quired. Honors content noted on transcript. Letter grading.

209HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. De-signed as adjunct to lower-division lecture course. In-dividual study with lecture course instructor to explore topics in greater depth through supplemental read-ings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract re-quired. Honors content noted on transcript. Letter grading.

227. Asian Languages and Cultures

Thai

Lower-Division Courses

1. Introductory Thai. (5) Lecture, three hours; discus-sion, two hours. Coverage of basic Thai grammar, with equal emphasis on reading, writing, conversation, and comprehension. P/NP or letter grading.

2. Introductory Thai. (5) Lecture, three hours; discus-sion, two hours. Coverage of basic Thai grammar, with equal emphasis on reading, writing, conversation, and comprehension. P/NP or letter grading.

3. Introductory Thai. (5) Lecture, three hours; discus-sion, two hours. Coverage of basic Thai grammar, with equal emphasis on reading, writing, conversation, and comprehension. P/NP or letter grading.


4. Intermediate Thai. (5) Lecture, five hours. Reinforcement of basic Thai grammar and coverage of more advanced topics. Broadening of skills in conversa-tion and composition; reading of selected texts. P/ NP or letter grading.

5. Intermediate Thai. (5) Lecture, five hours. Enforced requisite: course 5 with grade of C or better. Reinforcement of basic Thai grammar and coverage of more advanced topics. Broadening of skills in conver-sation and composition; reading of selected texts. P/ NP or letter grading.

100A-100B-100C. Advanced Thai. (4–4–4) Lecture, three hours. Course 100A with grade of C or better is requisite to 100B; course 100B with grade of C or better is requisite to 100C. Reinforcement of basic Thai grammar and vocabulary acquired at beginning and intermediate levels. Coverage of more advanced topics on various aspects of Thai society. Broadening
of skills in conversation and composition. Reading of selected texts and authentic materials. P/NP or letter grading.

109. Advanced Tutorial Instruction in Thai. (2) Tutorial, two hours. Required: course 6 or Thai placement test. Tutorial and guided independent study to help students develop advanced proficiency in oral and written Thai. May be repeated for credit. P/NP or letter grading.

189. Advanced Honors Seminars. (1) Seminar, three hours. Limited to students in College Honors Program. Designed as adjunct to upper-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be repeated for credit. P/NP or letter grading. Limited to students in College Honors Program. Designed as adjunct to lower-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities. May be repeated for credit. P/NP or letter grading.

189HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to upper-division lecture course. In- divisional study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for credit. P/NP or letter grading. Honors content noted on transcript. P/NP or letter grading.

190. War in Vietnamese Popular Culture. (5) Lecture, three hours; discussion, one hour. Knowledge of Vietnamese not required. Focus on popular culture produced and consumed by, or about, people in Vietnam and their diasporas. Materials include theoretical and other scholarly texts, as well as literature, music, visual art, films, and comics. Reading of scholarly writings for argument, date, and methods, and learning to apply theoretical frameworks in readings and lectures to analysis of popular cultural productions. P/NP or letter grading.

191. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

199. Student Research Program. (1 to 2) Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP or letter grading. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

219. Advanced Tutorial Instruction in Vietnamese. (2) Tutorial, two hours. Required: course 6 or Vietnamese placement test. Tutorial and guided independent study to help students develop advanced proficiency in oral and written Vietnamese. May be repeated for credit. P/NP or letter grading.

CM155. Topics in Vietnamese Cinema and/or Literature. (4) Formerly numbered M155. Same as Asian American Studies M173.) Lecture, three hours; discussion, one hour. Knowledge of Vietnamese not required. Critical and historical examination of literary and cultural representations of Vietnam and its people in social practices such as empire, nation, diaspora, and globalization. Original language course materials available for interested students. May be concurrently scheduled with course C255. P/NP or letter grading.

155FL. Readings in Vietnamese. (2) Seminar, two hours. Required: course 3 or 3A. Enforced corequisite: course M155. Additional work in Vietnamese to augment work assigned in course M155, including reading, writing, and other exercises in Vietnamese. P/NP or letter grading.

170. Variable Topics in Vietnamese Linguistics, Languages, and Cultures. (4) Lecture, three hours. Knowledge of Vietnamese may be required. Critical analysis of the language and culture associated with the notion of Vietnam as culture area, surveying literary landscape through poetry and short stories. May be repeated for credit. P/NP or letter grading.

180A. Vietnam: History and Civilization to 1858. (4) Lecture, three hours; discussion, one hour. Recommended preparation: at least one Asian history course. Exploration of Vietnamese society and culture from origins to early 19th century, with emphasis on examination of ways in which interactions between indigenous and Chinese/Southeast Asian political and cultural forces helped shape religious, literary, and sociocultural traditions. P/NP or letter grading.

180B. Vietnam: History and Civilization, 1858 to Present. (4) Lecture, three hours; discussion, one hour. Recommended preparation: at least one Asian history or civilization course. Exploration of Vietnamese history and civilization during colonial and postcolonial eras, with emphasis on profound changes that swept through Vietnamese society during period of extended political and military conflict. P/NP or letter grading.

M186. Korea and Vietnam: Comparative Modern Histories. (4) Same as Korean M186.) Seminar, three hours. Comparative survey of intertwined and parallel histories of Korea and Vietnam, organized chronologically, but structured around a few core themes or questions as basis for comparison. Modern experiences of colonized Korea and Vietnam have many significant parallels, including imposition of colonial control, transition to modernized societies within context of colonialism, and shared experiences of World War II. Both were also divided after war between communist regimes in north and strongly anticommunist regimes in south. Each also experienced warfare after division and direct involvement of U.S. during height of cold war between 1950s and 1970s. P/NP or letter grading.

189. Advanced Honors Seminars. (1) Seminar, three hours. Limited to students in College Honors Program. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

189HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to upper-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

Upper-Division Courses

100A-100B-100C. Advanced Vietnamese. (4-4-4) Lecture, three hours. Required: course 6 with grade of C or better and placement test. Designed to strengthen and build on language skills previously acquired at beginning and intermediate levels. Content-based readings and discussion, with various aspects of Vietnamese, particularly its culture,
Scope and Objectives

The atmospheric and oceanic sciences provide a wide variety of problems of compelling scientific interest and increasing social concern. This is exemplified by efforts to improve air quality, degradations caused by severe storms and floods, attempts to control or modify weather phenomena, problems of long-range weather forecasts, climate change, and predictions, and expanding scientific frontiers into our outer atmosphere and atmospheres of other planets.

The Department of Atmospheric and Oceanic Sciences offers a broad curriculum in dynamic and synoptic meteorology, atmospheric physics and chemistry, and upper atmosphere and space physics. The Bachelor of Science degree qualifies students for entry-level technical positions or represents valuable background for training in other professions. Master of Science and PhD degree holders work in universities, research centers, laboratories, and government services and, increasingly, in the rapidly burgeoning private sector.

Undergraduate Study

The Atmospheric and Oceanic Sciences/Mathematics major is a designated capstone major. Students acquire experience in conceiving and executing research projects designed to evaluate hypotheses and complete an individual project or thesis selected with the assistance of the program advisers and faculty mentor. The topic should reflect integrative application of mathematics to atmospheric and oceanic sciences. Students are expected to prepare a significant independent piece of work that applies knowledge gained in their coursework in a new and unique way.

Atmospheric and Oceanic Sciences BS

Learning Outcomes

The Atmospheric and Ocean Sciences major has the following learning outcomes:

• Display mastery of basic principles and tools of science: calculus, physics, chemistry, computer programming, and writing
• Display fundamental understanding of atmospheric and oceanic sciences
• Demonstrated analytical and mathematical skills through application of learned concepts and tools to solve theoretical, computational, and empirical problems
• Ability to apply knowledge to independently identify, analyze, and understand real-world problems and issues

Atmospheric and Oceanic Sciences/Mathematics BS

Capstone Major

Learning Outcomes

The Atmospheric and Oceanic Sciences/Mathematics major has the following learning outcomes:

• Fundamental knowledge of the atmospheric and oceanic sciences, and the mathematical tools that enable research to be conducted
• Identification of potential research areas of interest
• Experience in conceiving and executing research projects designed to evaluate hypotheses through courses that stress oral and written presentation of research results
• Proposition, execution, and evaluation of a research project with the assistance and supervision of a faculty mentor
• Tangible capstone product, such as a written thesis, that will be archived and possibly disseminated within and beyond the department

Preparation for the Major

Required: Atmospheric and Oceanic Sciences M71 or Program in Computing 10A, 90, Mathematics 31A, 31B, 32A, 32B, 33A, 33B, Physics 1A, 1B, 1C, and one course selected from Atmospheric and Oceanic Sciences 1, 2, 3, 5, 71, 81. Chemistry and Biochemistry 1AA and 14B (or 20A and 20B) may also be required, depending on atmospheric and oceanic sciences upper-division course selection. Each course must be taken for a letter grade and must be passed with a grade of C– or better, and students must have a minimum overall grade-point average of 2.0 for the courses.

Transfer Students

Transfer applicants to the Atmospheric and Oceanic Sciences/Mathematics major with 90 or more units must complete as many of the following introductory courses as possible prior to admission to UCLA: two years of calculus for majors, physics courses equivalent to Physics 1A, 1B, and 1C, and one MATLAB, Python, or C++ programming course.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

The Major

Required: Six mathematics courses, including Mathematics 115A, 131A, 134, and three elective courses selected from 115B, 131B, 135, 136, 151A, 151B, 170A, 170B, one of which must be 115B, 131B, 151B, or 170B; six upper-division atmospheric and oceanic sciences courses, including two core courses selected from Atmospheric and Oceanic Sciences 101, 103, 112, and two elective courses selected from C110, C115, M120, C144, C160, C170, 180, and any two additional upper-division Atmospheric and Oceanic Sciences courses.

One capstone senior projects/thesis course, Atmospheric and Oceanic Sciences 199, taken for 4 units, is also required. An individual project or thesis to be selected with the assistance of the program advisers and a faculty mentor must be completed. Thesis approval required from faculty adviser and submitted to department student affairs officer.

Climate Science BS

Learning Outcomes

The Climate Science major has the following learning outcomes:

• Demonstrated mastery of the basic principles and tools of science
• Demonstrated fundamental understanding of the atmospheric and oceanic sciences
• Demonstrated analytical and mathematical skills through the application of learned concepts and tools in solving relevant theoretical, computational, and empirical problems

• Ability to apply knowledge gained to independently identify, analyze, and understand real-world problems and issues
• Demonstrated effective oral and written communication of results and conclusions
• Understanding of the societal and policy context of climate change

Preparation for the Major

Required: Atmospheric and Oceanic Sciences 51, M71 or Program in Computing 10A; Chemistry and Biochemistry 1AA and 14B, or 20A and 20B; Mathematics 3A, 3B, and 3C, or 31A, 31B, 32A, and 33B; Physics 1A, 1B, and 1C, 1AH, 1BH, and 1CH, or 5A, 5B, and 5C; Statistics 10, 12, or 13.

Students interested in pursuing graduate studies in climate sciences or other branches of science are encouraged to select the Mathematics 31A through 33B sequence and the Physics 1 sequence.

Transfer Students

Transfer applicants to the Climate Science major with 90 or more units must complete as many of the following introductory courses as possible prior to admission to UCLA: one year of calculus, one year of calculus-based physics with laboratory, one general chemistry course with laboratory for majors, one course in programming (MATLAB or Python), and one introductory statistics course.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

The Major

Required: Atmospheric and Oceanic Sciences 101, M105, M110, 125, and two additional upper-division atmospheric sciences courses selected from 103, 104, M106, 107, C114, M120, 130, 141, 145, 150, C160, 170, 180, and any two additional upper-division Atmospheric and Oceanic Sciences courses.

A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor. One course may be taken on a Passed/Not Passed basis; each of the other minor courses must be taken for a letter grade, and students must have an overall grade-point average of 2.0 or better in the minor. Successful completion of the minor is indicated on the transcript and diploma.

Graduate Study

Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Division website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Graduate Degrees

The Department of Atmospheric and Oceanic Sciences offers Master of Science (MS), Candidate in Philosophy (CPhil), and Doctor of Philosophy (PhD) degrees in Atmospheric and Oceanic Sciences.
Atmospheric and Oceanic Sciences

Lower-Division Courses

1. Climate Change: From Puzzles to Policy. (4) Lecture, three hours; discussion, one hour. Overview of fundamentals of Earth’s climate, including greenhouse effect, water and chemical cycles, outstanding features of atmospheric and ocean circulation, and feedback between different system components. Exciting and contentious scientific puzzles of climate system, including causes of ice ages, greenhouse warming, and the climate science prediction to society, with emphasis on science’s role in identifying, qualifying, and solving environmental problems such as ozone hole and greenhouse warming. P/NP or letter grading.

2. Air Pollution. (4) Lecture, three hours; discussion, one hour. History, sources, and causes of high concentrations of pollutants in atmosphere. Topics include nature and sources of gaseous and particulate pollutants, their transport, dispersion, modification, and removal, with emphasis on aerosol physics, atmospheric processes governing transport ranging from individual sources to global effects; interaction with biosphere and oceans; stratospheric pollutants. P/NP or letter grading.


4. Introduction to Atmospheric Environment Laboratory. (1) Laboratory, one hour. Enforced corequisite: course 2. Investigations and demonstrations supporting material in course 2, including box model simulation, dose responses, air parcel motion and pollution dispersion, daily and seasonal variation of smog pollutants, and smog transport. P/NP or letter grading.

5. Climates of Other Worlds. (4) Lecture, three hours; discussion, one hour. Exploration of planets, conditions necessary for evolution of life, and evolution of atmospheres on planets. Climates on other planets. Exploration program. Elementary description of origin planet. 5L. Introduction to Computing for Geoscientists. (1) Seminar, three hours. Limited to 20 students. Designed as an introduction to lower-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. Letter grading.

6. Introduction to Undergraduate Research in Atmospheric and Oceanic Sciences. (4) Lecture, two hours; laboratory, two hours. Requisites: Earth, Planetary, and Space Sciences 71 or Civil Engineering M202 or Program in Computing 10A; Mathematics 3A, 3B, or 31A, 31B; Physics 1A or 5A or 6A. Students gain basic ability to understand, conduct, and communicate scientific research in atmospheric and oceanic sciences. Univariate and bivariate statistical data analysis, computer programming basics, statistics, and scientific understanding of oral and written form. Skills taught in context of projects from atmospheric and oceanic sciences. P/NP or letter grading.

7. Student Research Program. (1 to 2) Lecture, three hours; discussion, one hour. Designed for juniors/seniors. Exploration of knowledge and tools to solve complex problems in contemporary applied climatology, including current practices, influence of climate on environment, and human influence on changing climates. P/NP or letter grading.

Upper-Division Courses

M100. Earth and Its Environment. (4) Same as Environmental Science M111. Lecture, three hours. Overview of Earth as system of distinct, yet intimately related, physical and biological elements. Origins and characteristics of atmosphere, oceans, and land masses. Survey of historical evolution of Earth’s climate, atmospheric, oceanic, biological, and chemical processes governing this composition in past and present. Cycles of major and minor elements, processes, and cause and effect, water and chemical cycles, outstanding features of atmospheric and oceanic sciences, Univariate and bivariate statistical data analysis, computer programming basics, statistics, and scientific understanding of oral and written form. Skills taught in context of projects from atmospheric and oceanic sciences. P/NP or letter grading.

M71. Introduction to Computing for Geoscientists. (1) Seminar, three hours. Limited to 20 students. Designed as an introduction to lower-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. Letter grading.

M88. Lower-Division Seminar. (4) Seminar, three hours. Variable topics; consult Schedule of Classes or department for topics to be offered in specific term. P/NP or letter grading.

M99. Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as an introduction to lower-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. Letter grading.

102. Climate Change and Climate Modeling. (4) Lecture, three hours; discussion, one hour. Enforced requisites: Mathematics 3C or 32A, Physics 1B or 6C, with grades of C or better. Global environmental issues in climate change due to human activities or natural variability. Validation and introduction to new science of climate modeling to understand and predict these changes. Physical processes in climate system. Atmospheric and oceanic circulation. Use of climate models to predict climate change. Greenhouse effect and global warming. P/NP or letter grading.


104. Fundamentals of Air and Water Pollution. (4) Lecture, three hours; discussion, one hour. Requisite: Chemistry 14B or 20B. Chemistry and physics of air and water pollution, industrial chemistry, acid rain, air pollution meteorology and dispersion, ground-water and surface water pollution, chemical cycling, air/water interface, global atmospheric change. Letter grading.

M105. Introduction to Chemical Oceanography. (4) Same as Ecology and Evolutionary Biology M139. Lecture, three hours; discussion, one hour. Introduction to course for physical sciences, life sciences, and engineering majors interested in ocean environment. Chemical composition of oceans and nature of physical, chemical, and biological processes governing this composition in past and present. Cycles of major and minor elements, processes, and cause and effect, water and chemical cycles, outstanding features of atmospheric and oceanic sciences, Univariate and bivariate statistical data analysis, computer programming basics, statistics, and scientific understanding of oral and written form. Skills taught in context of projects from atmospheric and oceanic sciences. P/NP or letter grading.

M106. Applied Climatology: Principles of Climate Impact on Natural Environment. (4) Same as Geographical Science M111. Lecture, three hours; discussion, one hour. Designed for juniors/seniors. Exploration of knowledge and tools to solve complex problems in contemporary applied climatology, including current practices, influence of climate on environment, and human influence on changing climates. P/NP or letter grading.

107. Biological Oceanography. (4) Lecture, three hours; discussion, one hour. Introductory course for physical sciences, life sciences, and engineering majors interested in ocean environment. Review of how biological processes are intrinsically tied to physical and chemical processes in oceans. Examination of processes that control distribution, abundance, and production of marine organisms and their spatial and temporal variability. Letter grading.


C110L. Advanced Dynamic and Synoptic Meteorology Laboratory. (2) Laboratory, two hours. Comprehensive weather forecasting exercises and map discussions led by meteorologists. Concurrently scheduled with course C227L. P/NP or letter grading.

C111. Introduction to Machine Learning for Physical Sciences. (4) Lecture, 90 minutes; laboratory, 90 minutes. Designed for physical sciences students. Practical, hands-on introduction to seven of most popular algorithms of machine learning (ML). Students gain most practical skills to start working in industry or research immediately, using popular Python programming language, together with ScikitLearn ML library, and covering essential theory to understand what al-
112. Climate Change Assessment. (4) Lecture, three hours; discussion, one hour. Requisite: one course from Life Sciences 268, 40, Mathematics 3B, 31B, 90C, 104, 105, 106, 107, Environmental 175, or equivalent background for reading quantitative scientific literature in climate change. Projects of future anthropogenic climate change and understanding of natural climate variability depend on international climate model intercomparison projects, on large observational systems co-ordinating space and ground observations, and on multi-scientist climate assessments. Lectures, readings and projects with presentations address current issues in the scientific literature on assessment of climate change for students with prior background in the atmospheric, oceanic, and environmental sciences. P/ NP or letter grading.

CM114. Aquatic Geomicrobiology. (4) Same as Earth, Planetary, and Space Sciences C114.) Lecture, three hours; discussion, one hour. Requisite: course M105 or Earth, Planetary, and Space Sciences C107. Fundamental geomicrobiological processes and microbial communities occurring in aquatic systems, how they impact their environment, and how they interact in complex ecosystems such as methane seeps, hydrothermal vents, coral reefs, and the deep biosphere. Metabolisms include different phototrophic, heterotrophic, and chemoautotrophic pathways. Interpretation of geochemical profiles and understanding of how microbial communities govern mineralization and element cycling in aquatic systems. Concurrently scheduled with course CM237. P/NP or letter grading.

C115. Mesometeorology. (4) Lecture, three hours. Requisite: course 101. Observations of phenomena with length scales ranging from 20 km to 2,000 km. Topics include polar lows, airmass thunderstorms, multicell storms, supercell tornadoes, gust fronts, downbursts, microbursts, and dry line. Discussions on design of field project. Concurrently scheduled with course C228. P/NP or letter grading.


C130. California's Ocean. (4) Lecture, four hours. Requisite: course 103 or M105. Circulation, biogeochemistry, biota, water quality, measurement techniques, computational modeling, conservation, and management for California's coastal ocean, including coastal measurement cruise and term project (paper and presentation). Letter grading.

135. Ocean Change in the Anthropocene. (4) Lecture, 90 minutes; laboratory, 90 minutes. Requisites: courses 103, 107, 114. A review of main impacts of human activities on ocean, from warming and acidification to overfishing, pollution, and exploitation of marine resources. Discussion of concepts of governance and sustainability. Introduction to global ocean datasets and IPCC-class model output. Student-led presentation to review significant papers from scientific literature. Letter grading.


C144. Atmospheric Boundary Layer. (4) Lecture, three hours. Enforced requisite: course 101 with grade of B+ or better. Atmospheric boundary layer is lowest portion of atmosphere, representing interface between Earth’s surface and atmosphere, is strongly affected by turbulence, and plays important role in exchange of heat, momentum, trace gases, and aerosols between Earth’s surface and free troposphere. Investigation of properties of atmospheric boundary layer and processes that determine atmospheric conditions in a variety of environments. Concurrently scheduled with course C222. P/NP or letter grading.

145. Atmospheric Physics: Radiation, Clouds, and Aerosols. (4) Lecture, three hours; discussion, one hour. Requisites: Physics 1C, 6A, or 6B. Theory and application of atmospheric radiation, aerosol, and cloud processes. Topics include radiative transport, cloud and rain formation, aerosol properties, impact of aerosol and clouds on climate. Letter grading.

150. Atmospheric and Oceanic Sciences Laboratory. (5) Lecture, one hour; laboratory, six hours. Requisites: Mathematics 3B or 31B, Physics 1B and 1C or 6B and 6C. Laboratory experiments. Letter grading.

151. Introduction to Solar System Plasmas. (4) Lecture, three hours. Requisites: Physics 1C or 1B. Theory and techniques of remote sensing: atmospheric spectroscopy, scattering, and polarization studies; geophysical satellite systems; inversion methods; remote sensing of clouds, aerosols, temperature, precipitation, and trace constituents; remote sensing of oceans and biophysical properties. Topics include an introduction to uncovering principal components of these experimental methods and basic data analysis tools. P/NP or letter grading.

155. Introduction to Ecosystem-Atmosphere Interactions. (4) Lecture, three hours; discussion, one hour. Requisites: Mathematics 1C, 1A, 6A, or 6B. Theory and techniques of ecosystem processes that determine fluxes of energy, matter, and momentum between terrestrial ecosystems and atmosphere. Interactions and feedbacks between physical environment and physiological state of ecosystems. Topics include canopy structure and function, leaf energy balance, and carbon and water fluxes between plants, soils, and atmosphere. Letter grading.

C160. Remote Sensing of Atmosphere and Oceans. (4) Lecture, three hours. Requisite: Physics 1C or 6B. Theory and techniques of remote sensing: atmospheric spectroscopy, scattering, and polarization studies; geophysical satellite systems; inversion methods; remote sensing of clouds, aerosols, temperature, precipitation, and trace constituents; remote sensing of oceans and biophysical properties. Topics include canopy structure and function, leaf energy balance, and carbon and water fluxes between plants, soils, and atmosphere. Letter grading.

C170. Introduction to Solar System Plasmas. (4) Lecture, three hours; discussion, one hour. Requisites: Mathematics 3A, Physics 1C. Introduction to basic plasma physical processes occurring in sun, solar wind, magnetospheres, and ionospheres of planets, using simple fluid (magnetohydrodynamic) models as well as individual particle (radiation belt dynamics) approaches. Solar-planetary processes, geoelectric and magnetic phenomena, aurora. Concurrently scheduled with course C240B. P/NP or letter grading.


C182. Data Analysis in Atmospheric and Oceanic Sciences. (4) Lecture, three hours; discussion, one hour. Enforced requisite: course 101 through M105. Recommended: one probability course. Overview of data analysis methods in common use in atmospheric and oceanic research. Linear models, principal component analysis (empirical orthogonal function), time-series analysis, and clustering methods. Model validation and evaluation, significance tests, error analysis, bias detection. Emphasis on practical applications, with specific examples from atmospheric and oceanic sciences. Concurrently scheduled with course C260. P/NP or letter grading.

186. Operational Meteorology. (2) Laboratory, six hours. Requisite: course C110. Limited to junior/senior Atmospheric, Oceanic, and Environmental Sciences majors. Daily contact with weather data and forecasting, satellite and radar data. Introduction to weather forecasting for aviation, air pollution, marine and fire weather, and public use. Includes daily weather map discussions and visits to observing, radiosonde, and radar installations. Letter grading.

188. Special Topics in Atmospheric and Oceanic Sciences. (4) Lecture, three hours; discussion, one hour. Departmentally-sponsored experimental or temporary courses, such as those taught by visiting faculty members. May be repeated for credit with topic change. P/NP or letter grading.

189. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

189H. Honors Contracts. (1) Initial, three hours. Limited to students in College Honors Program. Designed as adjunct to upper-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

190. Research Colloquia in Atmospheric and Oceanic Sciences. (2 to 4) Seminar, two hours. Preparation: basic knowledge of meteorology (equivalent to course 3) and lower-division calculus, chemistry, and physics; course 101 strongly recommended. Limited to departmental majors and minors. Survey of current research projects presented by faculty members and research staff in seminar and/or panel discussion format. May be repeated for credit. P/NP grading.

197. Individual Studies in Atmospheric and Oceanic Sciences. (2 to 4) Tutorial, to be arranged. Limited to juniors/seniors. Individual intensive study, with scheduled meetings to be arranged between faculty member and student. Assembly of tangible evidence of mastery of subject matter required. May be repeated for credit. Individual contract required. P/ NP or letter grading.

199. Directed Research in Atmospheric and Oceanic Sciences. (2 to 4) Tutorial, to be arranged. Limited to juniors/seniors and required for Mathematics/ Atmospheric and Oceanic Sciences majors. Supervised individual research or investigation under guidance of faculty mentor. Culuminating paper or project required. May be repeated for credit. Individual contract required. P/NP or letter grading.

Graduate Courses


200B. Introduction to Dynamics of Earth System. (4) Lecture, three hours. Overview of general circulation of atmosphere and ocean; global energy balances; coupled circulations (such as el niño); meso-scale, synoptic, and tropical phenomena; boundary layers, clouds, and convection; biogeochemical cycles; climate variability and change. Su/ or letter grading.
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climate against much larger-scale atmospheric gen-
eral circulation and isolation gradients. Mesoclimatic-
ecosystem interaction, S/U or letter grading.

218. Dynamics of Atmosphere/Ocean System. (4) Lecture, three hours. Transfer of properties between atmosphere and ocean; wind-driven ocean currents; coastal upwelling; sea surface interactions. Effects of oceans on climate. S/U (for majors with consent of in-
structor after successful completion of written and oral comprehensive examination and for nonmajors at discretion of major department) or letter grading.

219. Statistical Analysis and Visual Explanation of Large Climate Data. (4) Lecture, three hours; discussion, one hour. Introduction to statistical methods to analyze complex data sets with visualization of data. Emphasis on understanding of quantitative information. Review of basic statistical concepts. Principles of visual display of quantita-
tive information. Parametric and non-parametric tests for auto-correlated and non-stationary data, multi-
plicity, and field significance. Spatial-temporal pattern analyses including cross-spectral analysis, spatial-temporal spectral analysis, empirical orthogonal function (EOF) and extension of EOFs (complex EOF, multivariate EOF, extended EOF). Spatial-temporal can-
onical correlation analysis (CCA), time-lagged CCA, maximum correlation analysis (or singular value de-

C222. Atmospheric Boundary Layer. (4) Lecture, three hours. Atmospheric boundary layer is lowest portion of atmosphere, representing interface between Earth’s surface and atmosphere, is strongly affected by turbulence, and plays important role in exchange of heat, momentum, trace gases, and aerosols between Earth’s surface and upper troposphere. Investigation of properties of atmospheric boundary layer and pro-
cesses that determine them. Concurrently scheduled with course C144. S/U or letter grading.

224A. Atmospheric Turbulence. (4) Lecture, three hours. Kinematics of homogeneous and shear flow turbulence in the boundary layer including heat and momentum transfer and turbulent convection. Survey of field and laboratory observations and their interpre-
tation by theory. S/U (for majors with consent of in-
structor after successful completion of written and oral comprehensive examination and for nonmajors at discretion of major department) or letter grading.

M224B. Atmospheric Diffusion and Air Pollution. (4) (Same as Earth and Planetary C222B.) Lecture, three hours. Nature and sources of atmospheric pollution; diffusion from point, line, and area sources; pollution dispersion in urban complexes; meteorological factors and air pollution; theoretrical aspects of air pollution. S/U (for majors with consent of instructor after successful completion of written and oral comprehensive examination and for nonmajors at discretion of major department) or letter grading.

C227. Advanced Dynamic and Synoptic Meteorology. (4) Lecture, three and one half hours. Requisite: course 101. Weather map analysis, thermodynamic di-
grams, satellite interpretation, severe weather fore-
casting, lightning analysis, forecasting, quasi-geo-

trophic omega equation. Concurrently scheduled with course C110. S/U (for majors with consent of in-
structor after successful completion of written and oral comprehensive examination and for nonmajors at discretion of major department) or letter grading.

C227L. Advanced Dynamic and Synoptic Meteorology Laboratory. (2) Laboratory, two hours. Compre-
hensive weather forecasting exercises and map dis-
cussions led by meteorologist. Concurrently sched-
uled with course C110L. S/U or letter grading.

C228. Mesometeorology. (4) Lecture, three hours. Requisite: course 101. Observations of phenomena with length scales from 100 km to 2,000 km. Topics include polar lows, airmass thunderstorms, multicell storms, supercell tornadoes, gust fronts, downbursts, microbursts, and dry line. Discussions on design of field activity. Concurrently scheduled with course C115. S/U (for majors with consent of in-
structor after successful completion of written and oral comprehensive examination and for nonmajors at discretion of major department) or letter grading.

229. Mesoscale Modeling. (4) Lecture, three hours. Requisites: courses 201C, 222B. Numerical and ana-
tomical modeling of convective and mesoscale mo-
tions, from shallow heat sources to large complex sys-
tems. Model frameworks, assumptions, parameteri-
zations, and solution of problems in developing and 

solving efforts in understanding dynamic structure and be-
havior of systems. S/U (for majors with consent of in-
structor after successful completion of written and oral comprehensive examination and for nonmajors at discretion of major department) or letter grading.

Atmospheric Physics and Chemistry

230A. Atmospheric Chemistry I. (4) Lecture, three hours. Requisite: course 203A. Photochemistry of troposphere; physical chemistry of surfaces and solu-
tions; precipitation chemistry and acid rain; atmo-
spheric organic chemistry; regional and global biogeo-
chemical cycles; current issues in global change. S/U (for majors with consent of instructor after successful completion of written and oral comprehensive exami-
nation and for nonmajors at discretion of major de-
partment) or letter grading.

230B. Atmospheric Chemistry II. (4) Lecture, three hours. Requisite: course M203A. Photochemistry of stratosphere and mesosphere; basic ionospheric pro-
cesses; stratospheric pollution and ozone layer; phys-
ical chemistry of stratospheric clouds and aero-

sols; comparative photochemistry of planetary atmos-
spheres; observational techniques and results. S/U (for majors with consent of instructor after successful completion of written and oral comprehensive exami-
nation and for nonmajors at discretion of major de-
partment) or letter grading.

232. Chemical Transport Modeling. (4) Lecture, three hours. Requisites: courses 203A, 230A, 230B. Equations of tracer transport and chemical kinetics modeling in three dimensions; numerical techniques; coupled simulations of gas-phase and aerosol micro-
physics; analysis of results. Emphasis on verif-
ying observational results; current problems in tracer modeling. S/U (for majors with consent of instructor after suc-
cessful completion of written and oral comprehensive exami-
nation and for nonmajors at discretion of major de-
partment) or letter grading.

M235. Ocean Biogeochemical Dynamics and Cli-
mate. (4) (Same as Ecology and Evolutionary Biology M238.) Lecture, three hours. Interaction of ocean-
biogeochemical cycles and climate system. Bio-
geochemical processes controlling carbon dioxide and oxygen in oceans and atmosphere over time-
scales from few million years to several years. Anthro-
pogetic perturbations of the carbon cycle and cli-

cimate. Response of ocean ecosystems to past and fu-
ture global changes. Use of isotopes to study ocean biogeochemical cycles and climate. Interactions be-
tween biogeochemical cycles on land and in ocean. S/U or letter grading.

236. Terrestrial Biogeochemical Dynamics and Cli-
mate. (4) Lecture, three hours. Corequisites: graduate atmospheric, oceanic, hydrologic, and climate sci-
cence courses. Biogeochemical cycles in terrestrial biosphere. Carbon/water/energy/nutrient dynamics. Observational techniques and results. Interactions of terrestrial biogeochemical cycles and climate. Persistent changes on timescales of seconds to centuries. Use of iso-
topes to study land biogeochemical cycles and cli-
nimate. Anthropogenic perturbations of global terrestrial biogeochemical cycles and climatic feedbacks. Re-
sponse of land ecosystems to persistent changes. S/U or letter grading.

CM237. Aquatic Geomicrobiology. (4) (Same as Earth, planetary, and Space Sciences CM234.) Lec-
ture, three hours. Requisite: course M105 or Earth, Planetary, and Space Sciences C107. Fundamental geomicro-
obiological metabolisms and biogeochemical reactions occurring in aquatic ecosystems, how they impact their environment, and how they interact in complex eco-
systems such as methane seeps, hydrothermal vents, coral reefs, microbial mats, or deep biosphere. Metab-
olisms include different photautotrophic, heterotro-
phic, and chemooautotrophic pathways. Interpretation of geochemical profiles and understanding of how mi-
croorganisms govern mineralization and element cy-
cling in aquatic systems. Concurrently scheduled with course CM114. S/U or letter grading.

238. How to Write and Publish Scientific Paper. (4) Lecture, three hours. Recommended preparation: previous good grades in writing and scientific literature review, understanding of scientific manuscripts. Introduction to process of scientific manuscript writing and publishing. Offers insights into fun and frustration of manuscript writing, important rules for manuscript structuring and scientific lan-
guage, and advice on how to deal with review pro-
cess. Students gain familiarity with general principles of successful publishing and write several drafts, including final stages of manuscript writing and publishing by an-
swering when are data ready for publishing, where to publish, how to structure manuscript, best way to present data, how to properly get out messages, which writing ethics to consider, how to effectively use cita-

tions and references; current problems in tracer modeling. S/U or letter grading.

C240A. Remote Sensing of Atmosphere and Oceans. (4) Lecture, three hours. Requisite: Physics IC or 6B. Theory and techniques of remote sensing: atmospheric spectroscopy, scattering, and polariza-
tion; passive and active techniques; relevant satellite systems; inversion methods; remote sensing of clouds, aerosols, temperature, precipitation, and trace con-
stituents; remote sensing of oceans and bio-

sphere. Concurrently scheduled with course C160. S/
U (for majors with consent of instructor after suc-
cessful completion of written and oral comprehensive exami-
nation and for nonmajors at discretion of major de-
partment) or letter grading.

C240B. Remote Sensing of Atmosphere and Oceans. (4) Lecture, three hours. Requisite: course 203B. Presentation of com-
putational methods for solar and thermal infrared radi-
ative fluxes and heating rates in clear, aerosol, and cloudy atmospheres; radiative transfer in planetary atmos-
spheres; inversion methods; remote sensing of clouds, aerosols, temperature, precipitation, and trace con-
stituents; remote sensing of oceans and bio-

sphere. Concurrently scheduled with course C160. S/
U (for majors with consent of instructor after suc-
cessful completion of written and oral comprehensive exami-
nation and for nonmajors at discretion of major de-
partment) or letter grading.

244A. Atmospheric Radiation. (4) Lecture, three hours. Requisite: course 203B. Presentation of com-
putational methods for solar and thermal infrared radi-
ative fluxes and heating rates in clear, aerosol, and cloudy atmospheres; radiative transfer in planetary atmos-
spheres; inversion methods; remote sensing of clouds, aerosols, temperature, precipitation, and trace con-
stituents; remote sensing of oceans and bio-

sphere. Concurrently scheduled with course C160. S/
U (for majors with consent of instructor after suc-
cessful completion of written and oral comprehensive exami-
nation and for nonmajors at discretion of major de-
partment) or letter grading.

244B. Radiation and Climate. (4) Lecture, three hours; laboratory, one hour. Requisite: course 203B. Radiation budget of Earth/atmosphere system ob-
served from satellites. Introduction to one-dimensional radiative-convective and energy-balance climate models. Climatic impact of increases in greenhouse gases and anthropogenic aerosols. Climatic impact of changes in solar constant, solar insolation, and vol-
canic eruptions. Radiative forcing in global climate models: clouds and aerosols. Role of radiation in nu-
merical simulation of interannual variability. S/U or letter grading.

245. Air-Sea and Climate Interactions. (4) Lecture, three hours. Requisite: course 203B. Recommended requi-
site: course 203A. Study of how aerosols can affect weather and climate by interacting with clouds through their potential to act as cloud condensation nuclei and with radiation through their ability to scatter and absorb solar and terrestrial radiation. Or-
igin of large uncertainty estimates attributed to aerosol-cloud and aerosol-radiation interactions in cli-
nate change assessments. Reading and discussion of scientific publications. S/U or letter grading.
Upper Atmosphere and Space Physics

M250A. Solar System Magnetohydrodynamics. (4) (Formerly numbered 2520A.) (Same as Earth, Planetary, and Space Sciences M262A.) Lecture, three hours. Required. Course C205A. Derivation of MHD equations with two fluid aspects, generalized Ohm's law, small amplitude waves, discontinuities, shock waves, and instabilities. Application of statics and dynamics of solar wind and planetary magnetospheres and to solar wind/magnetosphere/ionosphere coupling. S/U (for majors with consent of instructor after successful completion of written and oral comprehensive examination and for nonmajors at discretion of major department) or letter grading.

250B. Solar System Microscopic Plasma Processes. (4) Lecture, three hours. Required. Course C205A. Adiabatic charged particle dynamics; incoherent radiation processes; collective effects in plasma; propagation characteristics of electrostatic and electromagnetic waves; introduction to resonant interaction between charged particles and plasma waves. S/U (for majors with consent of instructor after successful completion of written and oral comprehensive examination and for nonmajors at discretion of major department) or letter grading.

256. Ionospheric Electrodynamic. (4) Lecture, three hours. Ionospheric structure, currents, and electric fields; equatorial and high-latitude ionospheres; ionosphere/plasmasphere couplings; plasmasheet/magnetosheath interactions. S/U (for majors with consent of instructor after successful completion of written and oral comprehensive examination and for nonmajors at discretion of major department) or letter grading.

257. Radiation Belt Plasma Physics. (4) Lecture, three hours. Required. Course 250B. Turbulent plasma instabilities and their relation to satellite observations and magnetospheric structure. Processes responsible for source, transport, and trapping of energetic radiation belt particles. S/U (for majors with consent of instructor after successful completion of written and oral comprehensive examination and for nonmajors at discretion of major department) or letter grading.


259. Space Weather. (4) Lecture, three hours. Identifi-
cation, description, and theories for major disturbances in magnetosphere/ionosphere/thermosphere system. Storms, substorms, convection belts, and other disturbances. Connections to interplanetary conditions, particle injection and precipitation, currents and fields. S/U or letter grading.

C260. Data Analysis in Atmospheric and Oceanic Sciences. (4) Lecture, three hours; laboratory, one hour. Enforced prerequisite: one course from 101 through 110. Overview of data analytic methods in common use in atmospheric and oceanic research. Linear models, principal component analysis (empirical orthogonal function), time-series analysis, and clustering methods. Model validation and evaluation, significance tests, e.g., analysis, bias detection, Empirical orthogonal functions on practical applications, with specific examples from atmospheric and oceanic sciences. Concurrently scheduled with course C182. S/U or letter grading.

Special Studies

270. Seminar: Atmospheric Sciences. (2) Seminar, one hour. May be repeated for credit. S/U or letter grading.

271. Seminar: Atmospheric Dynamics. (2) Seminar, one hour. May be repeated for credit. S/U or letter grading.


274. Seminar: Atmospheric Chemistry. (2) Seminar, one hour. May be repeated for credit. S/U or letter grading.


276. Seminar: Mesoscale Processes. (2) Seminar, one hour. Selected topics of current research interest in convection, extratropical cyclones, and fronts. May be repeated for credit. S/U or letter grading.

277. Seminar: Coastal Ocean. (2) Seminar, one hour. Selected topics of current interdisciplinary research in marine and coastal sciences, including physical oceanography, biogeochemistry, marine biology, coastal engineering, atmospheric processes, and health-related issues. May be repeated for credit. S/U grading.

281. Special Topics in Dynamic Meteorology. (2 to 4) Lecture, two hours. Individual meetings with instructor to be arranged. Content varies from year to year. S/U or letter grading.

282. Special Topics in Oceanography. (2 to 4) Lecture, two hours. Individual meetings with instructor to be arranged. May be repeated for credit. S/U or letter grading.

283. Special Topics in Atmospheric Physics. (2 to 4) Lecture, two hours. Individual meetings with instructor to be arranged. May be repeated for credit. S/U or letter grading.

285. Special Topics in Solar Planetary Relations. (2 to 4) Lecture, two hours. Individual meetings with instructor to be arranged. Selected topics of current research interest in solar wind, magnetospheric, or ionospheric physics. S/U or letter grading.

286. Statistical Prediction and Verification. (3) Seminar, one hour; discussion, one hour. Statistical prediction and verification. Topics include multiple linear regression, logistic regression (probability prediction), objective prediction using traditional statistical methods, ensemble prediction. S/U or letter grading.

296A-296L. Advanced Topics in Atmospheric Sciences. (2 to 8) Seminar, to be arranged. S/U grading.

296A. Ocean Dynamics. Research group meeting, two hours. S296B. Boundary Layers, Clouds, and Climate. S296C. Numerical Mesoscale Modeling. S296D. Climate Dynamics. S296E. Numerical Modeling of Atmosphere and Ocean. S296F. Hierarchical Modeling of Ocean/Atmosphere System. S296G. Upper Atmosphere and Space Physics. S296H. Recent Advances in Atmospheric Chemistry. S296I. Upper Atmospheric Dynamics. S296J. Experimental Mesoscale Meteorology. S296K. Geophysical Fluid Dynamics, Oceanography, and Climate. S296L. Radiation and Remote Sensing. S296M. Tropospheric Chemistry and Climate Modeling and Analysis. S296N. Atmospheric Chemistry of Air Pollution, Aerosols, and Climate. S296O. Regional to Local Modeling of Atmospheric Composition and Climate Interactions. (2) Research group meeting, two hours. Presentation and discussion of research on modeling of air quality and atmospheric composition from local to regional scales. Some topics include research in air quality forecasting to improve predictive capability of pollution episodes (e.g., haze conditions, forest fires, dust outbreaks); data assimilation and inverse modeling, i.e., using atmospheric composition observations (e.g., satellite, ground based, airborne) to improve air quality forecasts or better constrain emission sources; and investigation on modeling of aerosols (particles in atmosphere) and their interactions with clouds and radiation, which are in part responsible for uncertainties in climate change projections. Presentations by participants and invited speakers from other research groups. S/U or letter grading.

375. Teaching Apprentice Practicum. (1 to 4) Seminar, to be arranged. Preparation: apprenticeship under active guidance and supervision of regular faculty members responsible for curriculum and instruction at UCLA. May be repeated for credit. S/U grading.

495. Teaching Atmospheric and Oceanic Sciences. (2) Seminar, one hour; two-day intensive training session prior to Fall Quarter. Required of all new teaching assistants and recommended for new PhD students and graduate students intending to be teaching assistants during academic year. Introduction to classroom teaching for general education and upper-division departmental courses. Topics include pedagogical techniques, preparation, academic integrity, and integration of technology and electronic communications. S/U grading.


599. Preparation for MS Comprehensive Examination. (2 to 8) Tutorial, to be arranged. S/U grading.


Innovative bioengineering solutions to meet the interface of biology and engineering and to develop advanced knowledge of mathematics, science, and engineering principles to address problems at the interface of biology and engineering.

Design of a system, component, or process to meet desired needs

Function as a productive member of a multidisciplinary team

Effective oral and written communication

Identification, formulation, and solution of engineering problems

Preparation for the Major

Required: Bioengineering 10; Chemistry and Biochemistry 20A, 20B, 20L, 30A, 30AL, 30B; Civil and Environmental Engineering M20 or Computer Science 31 or Mechanical and Aerospace Engineering M20; Life Sciences 7A (satisfies school GE life sciences requirement) and 7C; Mathematics 31A, 31B, 32A, 32B, 33A, 33B, Physics 1A, 1B, 1C, 4AL.

The Major

Students must complete the following courses:

1. Bioengineering 100, 110, 120, 167L, C175, 176, 180, Electrical and Computer Engineering 100, Engineering 181EW or 182EW or 183EW or 185EW; three technical breadth courses (12 units) selected from an approved list available in the Office of Academic and Student Affairs; two capstone design courses (Bioengineering 177A, 177B)

2. Six additional major field elective courses (24 units) from Bioengineering C101, C102, C103, C104, C105, C106, C107, 121, C131, C139A, C139B, C140A, C145, C147, C153, C155, C178, C179, 180L, M182, C183, C185, C186, C187, 199 (8 units maximum)

Three of the major field elective courses and the three technical breadth courses may also be selected from one of the following tracks. Bioengineering majors cannot take bioengineering technical breadth courses to fulfill the technical breadth requirement.

Biomaterials and Regenerative Medicine: Bioengineering C104, C105, C140A, C147, C183, C185, 199 (8 units maximum), Materials Science and Engineering 104, 110, C111, 120, 130, 132, 143A, 150, 151, 160, 161. The above materials science and engineering courses may be used to satisfy the technical breadth requirement.

Biomedical Devices: Bioengineering C131, C153, 199 (8 units maximum), Electrical and Computer Engineering 102, Mechanical and Aerospace Engineering C187L. The electrical and computer engineering or mechanical and aerospace engineering courses listed above may be used to satisfy the technical breadth requirement.

For Bioengineering 199 to fulfill a track requirement, the research project must fit within the scope of the track field, and the research report must be approved by the supervisor and vice chair.

For information on UC, school, and general education requirements, see the College and Schools chapter.

Graduate Study

Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Division website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Graduate Degrees

The Department of Bioengineering offers Master of Science (MS) and Doctor of Philosophy (PhD) degrees in Bioengineering.

Bioengineering

Lower-Division Courses

10. Introduction to Bioengineering. (2) Lecture, two hours; discussion, one hour; outside study, three hours. Preparation: high school biology, chemistry, mathematics, physics. Introduction to scientific and technological bases for established and emerging subfields of bioengineering, including biosensors, bioinstrumentation, and biosignal processing, biomechanics, biomaterials, tissue engineering, biotechnology, biological imaging, biomedical optics and lasers, neuroengineering, and biomolecular machines.

Letter grading.

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA.

Letter grading.

99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Courses

100. Bioengineering Fundamentals. (4) Lecture, four hours; discussion, one hour; outside study, seven hours. Enforced requisites: Mathematics 32A, Physics 1A. Fundamental basis for analysis and design of biological and biomedical devices and systems. Classical and statistical thermodynamic analysis of biological systems. Material, energy, charge, and force balances. Introduction to network analysis. Letter grading.


Scope and Objectives

The faculty members in the Department of Bioengineering have created state-of-the-art facilities for cutting-edge research and developed an innovative curriculum for the education of the next generation of bioengineers.

The bioengineering program offers forward-looking courses dedicated to producing graduates who are well-grounded in the fundamental sciences and highly proficient in rigorous analytical engineering tools necessary for lifelong success in the wide range of possible bioengineering careers. Combined with a strong emphasis on research, the program provides a unique engineering educational experience that responds to the growing needs and demands of bioengineering.

Undergraduate Study

The bioengineering program is accredited by the Engineering Accreditation Commission of ABET.

The bioengineering major is a designated capstone major. Utilizing knowledge from previous courses and new skills learned from the capstone courses, undergraduate students work in teams to apply advanced knowledge of mathematics, science, and engineering principles to address problems at the interface of biology and engineering and to develop innovative bioengineering solutions to meet specific sets of design criteria. Coursework entails construction of student designs, project updates, presentation of projects in written and oral format, and team competition.
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C102. Human Physiological Systems for Bioengineering I (4) [Formerly numbered CM112F]. Lecture, three hours; laboratory, two hours. Preparation: human molecular biology, biochemistry, and cell biology. Not open for credit to Physiology major. Introduction to the basic physiological organization and function of human body in system (organ/tissue) to system basis, with particular emphasis on molecular basis. Modeling/simulation of functional aspects of physiological regulatory networks. Actual construction of biomimetic devices, as well as visits to biomedical facilities. Concurrently scheduled with course C202. Letter grading.

C104. Introduction to Chemistry of Biomacromolecules. (4) Lecture, three hours; discussion, two hours; outside study, seven hours. Requisites: Chemistry 20A, 20B, 30A, Life Sciences 2, 3. To understand biological materials and design synthetic replacements, it is imperative to understand their physical chemistry. Biomacromolecules such as protein or DNA can be analyzed and characterized by applying fundamentals of polymer physical chemistry. Investigation of polymer structure and conformation, bulk and solution thermodynamics and phase behavior, polymer networks, and viscoelasticity. Application of engineering principles to problems in biomacromolecules such as protein conformation, solvation of charged species, and separation and characterization of biomacromolecules. Concurrently scheduled with course C204. Letter grading.

C105. Engineering of Bioconjugates. (4) Lecture, four hours; discussion, one hour; outside study, seven hours. Enforced requisites: Chemistry 20A, 20B, 20L. Highly recommended: one organic chemistry course. Bioconjugation is chemistry for coupling bio molecules for wide range of applications. Oligonuleotides may be coupled to one surface in gene chip, or one protein may be coupled to one polymer to enhance stability in serum. Wide variety of bioconjugates are used in delivery of pharmaceuticals, in sensors, in medical diagnostics, and in tissue engineering. Basic concepts of chemical ligation, including choice and design of conjugators depending on type of biomolecule and desired application, such as degradable versus nondegradable linkers. Presentation and discussion of design and synthesis of synthetic bioconjugates for some sample applications. Concurrently scheduled with course C205. Letter grading.

C106. Topics in Bioelectricity for Bioengineers. (4) Lecture, three hours; discussion, one hour; outside study, eight hours. Requisites: Chemistry 20B, Life Sciences 7A, 7B, Mathematics 32B. Physical phenomena that emerge in depth of physical processes associated with biological membranes and channel proteins, with specific emphasis on electrophysiology. Basic physical principles of voltage-gated ion channels and statistics in electric and electromagnetic fields building on complexity to ultimately address action potentials and signal propagation in nerves. Topics include: Nernst/Planck and Poisson/Boltzmann equations, Nerst potential, Donnan equilibrium, GHK equations, energy barriers in ion channels, cable equation, action potentials, Hodgkin/Huxley equations, impulse propagation, axon geometry and conduction, dendritic integration. Concurrently scheduled with course C206. Letter grading.

C107. Polymer Chemistry for Bioengineers. (4) Lecture, four hours; discussion, one hour; outside study, seven hours. Preparation: course C102. Fundamental concepts of polymer synthesis, including step-growth, chain growth (ionic, radical, metal catalyzed), and ring-opening, with focus on factors that can be used to control chain length, chain length distribution, and chain-end functionality, chain copolymerization, and stereochemistry in polymerizations. Presentation of applications of use of different polymer synthesis methods. Concepts of step-growth, chain-growth, ring-opening, and coordination polymerization, and effects of synthesis route on polymer properties. Lectures include both theory and practical issues with polymer syntheses. Examples. Concurrently scheduled with course C207. Letter grading.

110. Biotransport and Bioreaction Processes. (4) Lecture, four hours; discussion, one hour; outside study, seven hours. Enforced requisites: course 100, Mathematics 33B. Introduction to analysis of fluid flow, heat transfer, mass transfer, binding events, and biochemical reactions in systems of interest to bioengineers, including cells, tissues, organs, human body, extracorporeal devices, tissue engineering systems, and bioartificial organs. Introduction to pharmacokinetics and transport phenomena. Case study on current topics, including drug delivery, gene therapy, cancer therapeutics, emerging pathogens, and relation of self-assembly to disease states. May be taken independently for credit. Concurrently scheduled with course C239B. Letter grading.

C140. Introduction to Biomechanics. (4) (Same as Mechanical and Aerospace Engineering CM140). Lecture, four hours; discussion, outside study, six hours. Requisites: Mechanical and Aerospace Engineering 101, 102, and 156A or 166A. Introduction to fundamental physics of human body; skeletal adaptations to optimize load transfer, mobility, and function. Dynamics and kinematics. Fluid mechanics applications. Heat and mass transfer. Power generation. Laboratory simulations and tests. Concurrently scheduled with course CM145. Letter grading.

C145. Molecular and Biotechnology for Engineers. (4) (Same as Chemical Engineering CM145). Lecture, four hours; discussion, outside study, seven hours. Requisites: Chemical Engineering 45. Selected topics in the emerging field of biotechnology and biomedical industry today. Topics include recombinant DNA technology, molecular research tools, manipulation of gene expression, direct and indirect applications of synthetic biology, research and development of diagnostics and DNA microarrays, antibody and protein-based diagnostics, genomics and bioinformatics, isolation of human genes, gene therapy, and tissue engineering. Concurrently scheduled with course CM245. Letter grading.

C147. Applied Tissue Engineering: Clinical and Industrial Perspective. (4) Lecture, three hours; discussion, two hours; outside study, seven hours. Requisites: CM102, CM145. Introduction to Microscale and Nanoscale Manufacturing. (4) (Same as Chemical Engineering CM153 and Mechanical and Aerospace Engineering M183B). Lecture, three hours; laboratory, four hours; outside study, five hours. Enforced requisites: Chemistry 20A, Physics 1A, 1B, 4AL, 4BL. Introduction to general manufacturing methods, mechanisms, constraints, and microfabrication and nanofabrication. Focus on concepts, physics, and instruments of various microfabrication and nanofabrication techniques that have been broadly applied in industry and academia, including various photolithography technologies, physical and chemical deposition methods, and physical and chemical etching methods. Case study on current topics, including drug delivery, tissue engineering, and biodegradable drug delivery systems. Concurrently scheduled with course C247. Letter grading.

M153. Introduction to Microscale and Nanoscale Manufacturing. (4) (Same as Chemical Engineering CM153 and Mechanical and Aerospace Engineering M183B) Lecture, three hours; laboratory, four hours; outside study, five hours. Enforced requisites: Chemistry 20A, Physics 1A, 1B, 4AL, 4BL. Introduction to microscale and nanoscale manufacturing techniques that have been broadly applied in industry and academia, including various photolithography technologies, physical and chemical deposition methods, and physical and chemical etching methods. Case study on current topics, including drug delivery, tissue engineering, and biodegradable drug delivery systems.
and separations for biotechnology. Helps students become sufficiently fluent with fluid mechanics vocabulary and techniques, design and model microfluidic systems to manipulate fluids, cells, and particles, and develop strong intuition for how fluid and particle behavior change in arbitrary microchannels or between droplets of Reynolds numbers. Concurrently scheduled with course C255. Letter grading.

185EW. Bioengineering Ethics. (4) Lecture, four hours; discussion, three hours; outside study, five hours. All professions have ethical rules that derive from moral theory. Bioethics is well-established discipline that addresses ethical problems about life, such as when and how human life should begin or end. What are the ethical implications of activities, such as genetic screening or genetic manipulation? What should be the roles of patients, parents, and health care professionals? How can we build consensus about morally acceptable practices? Concurrently scheduled with course C255. Letter grading.

177B. Bioengineering Capstone Design II. (4) Lecture, two hours; laboratory, six hours; outside study, four hours. Enforced requisite: course 177A. Lectures, seminars, and discussions on aspects of biomedical device and therapeutic design, including design of novel drug delivery systems that can provide spatial and temporal control of drug release. Introduction to biomaterials with specialized structural and interfacial properties. Exploration of both chemistry of materials and physical presentation of devices and compounds used in delivery and release. Concurrently scheduled with course C258, Letter grading.

M184. Introduction to Computational and Systems Biology. (2) (Same as Computational and Systems Biology M184 and Computer Science M184.) Lecture, two hours; outside study, four hours. Enforced requisites: one of Mathematics CM31, Mechanical and Aerospace Engineering M287, or Computer Science 31, Mechanical and Aerospace Engineering M287, or Program in Computing 10A; and Life Sciences 104. Course designed to introduce students to computational and systems modeling and simulation in biology and medicine, providing motivation, flavor, culture, and cutting-edge contributions in computational biologies and aiming for more informed basis for focused studies by students with computational and systems biology interests. Presentations by individual UCLA researchers on their active computational and systems biology research. P/NP grading.

C185. Introduction to Tissue Engineering. (4) Lecture, four hours; discussion, one hour; outside study, eight hours. Enforced requisites: course CM102 or CM202, Chemistry 20A, 20B, 20L, or Materials Science 104. Course designed to introduce students to computational and systems modeling and simulation in biology and medicine, providing motivation, flavor, culture, and cutting-edge contributions in computational biologies and aiming for more informed basis for focused studies by students with computational and systems biology interests. Presentations by individual UCLA researchers on their active computational and systems biology research. P/NP grading.

CM186. Computational Systems Biology: Modeling and Simulation of Biological Systems. (6) (Same as Computational and Systems Biology M186, Computer Science CM186, and Ecology and Evolutionary Biology M178.) Lecture, four hours; laboratory, three hours; outside study, eight hours. Dynamic biosystems modeling and computational methods for studying biological/biomedical processes and systems at multiple levels of organization. Control systems, multicomponent, predator-prey, pharmacokinetic (PK), pharmacodynamic (PD), and other structural modeling methods applied to life sciences problems at molecular, cellular (biochemical pathways/networks), organ, and organismic levels. Both theoretical and data-driven modeling, with focus on translating biomodeling goals and data into mathematical models and implementing them for simulation and analysis. Basics of numerical simulation algorithms, clustering models, and visualization and PC laboratory assignments. Concurrently scheduled with course CM286. Letter grading. Lecture.

CM187. Research Communication in Computational and Systems Biology M187 and Computer Science CM187.) Lecture, four hours; outside study, eight hours. Enforced requisites: course CM182 or CM186 or Computational and Systems Biology M150. Closely directed, interactive, and real research experience in active quantitative systems biology research laboratory. Direction on how to focus on topics of current interest in scientific community, appropriate to student interests and capabilities. Critiques of oral presentations and written progress reports explain how to proceed with search for research results. Major emphasis on effective research reporting, both oral and written, and on scientific ethics. Concurrently scheduled with course CM287. Letter grading.

188. Special Courses in Bioengineering. (4) Lecture, four hours; discussion, one hour; outside study, seven hours. Special topics in bioengineering for upper-division students. Topics vary each term. Credit is not given for more than one such course for any student. Prior permission of instructor required. May be repeated for credit with topic or instructor change. Letter grading.

188SA. Individual Studies for USIE Facilitators. (1) Topics: (Same as Computer and Systems Biology M186, Computer Science CM186, and Ecology and Evolutionary Biology M178.) Lecture, four hours; outside study, seven hours. Special topics in bioengineering for upper-division students. Topics vary each term. Credit is not given for more than one such course for any student. Prior permission of instructor required. May be repeated for credit with topic or instructor change. Letter grading.

188BA. Individual Studies for USIE Facilitators. (1) Topics: (Same as Computer and Systems Biology M186, Computer Science CM186, and Ecology and Evolutionary Biology M178.) Lecture, four hours; outside study, seven hours. Special topics in bioengineering for upper-division students. Topics vary each term. Credit is not given for more than one such course for any student. Prior permission of instructor required. May be repeated for credit with topic or instructor change. Letter grading.

188SC. Individual Studies for USIE Facilitators. (2) Tutorial, to be arranged. Enforced requisite: course 188B. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor while facilitating USIE 885 course. Individual contract with faculty mentor required. May not be repeated for credit. Letter grading.

194. Research Group Seminars: Bioengineering. (4) Seminar, three hours. Limited to bioengineering undergraduate students who are part of research group. Study and analysis of current topics in bioengineering. Discussion of current research literature in research specialty of faculty member teaching course. Student presentation of projects in research specialty. May be repeated for credit. Letter grading.

190. Directed Research in Bioengineering. (2 to 8) Tutorial, to be arranged. Limited to juniors/seniors. Supervised individual research or investigation under guidance of faculty mentor. Culminating paper or project is required. Repeated for credit. May be repeated for credit. Limited to eight hours. Letter grading.

Graduate Courses


C204. Physical Chemistry of Biomacromolecules. (4) Lecture, three hours; discussion, two hours; outside study, seven hours. Requisites: Chemistry 20A, 20B, 30A. Life Sciences 2, 3. To understand biological materials and design synthetic replacements, it is imperative to understand the fundamental chemistry. Bio-macromolecules such as protein or DNA can be analyzed and characterized by applying fundamentals of polymer physics chemistry. Investigation of polymer structure: chain conformation, bulk and solution thermodynamics and phase behavior, polymer networks, and viscoelasticity. Application of engineering principles to problems involving biomacromolecules such as protein conformation, solution of charged species, and separation and characterization of biomacromolecules. Concurrently scheduled with course C104. Letter grading.

C205. Engineering of Bioconjugates. (4) Lecture, four hours; discussion, one hour; outside study, seven hours. Enforced requisites: Chemistry 20A, 20B, 20L. Highly recommended: one organic chemistry course. Bioconjugate chemistry is science of coupling biomolecules for wide range of applications. Glyconjugates may be coupled to one surface in gene chip, or one protein may be coupled to one polymer to enhance its stability in serum. Wide variety of bioconjugates are used in delivery of pharmacologicals, in sensors, in medical diagnostics, and in tissue engineering. Basic concepts of chemical ligation, including choice and design of conjugate linkers depending on type of biomolecule and desired application, such as degradable versus nondegradable, functionalization and discussion of design and synthesis of synthetic bioconjugates for some sample applications. Concurrently scheduled with course C105. Letter grading.

C206. Topics in Bioelectricity for Bioengineers. (4) Lecture, three hours; discussion, one hour; outside study, eight hours. Requisites: Chemistry 20B, Life Sciences 7A, Mathematics 33B, Physics 1C. Coverage in depth of physical processes associated with biomedical engineering devices and systems. Lecture and laboratory via simulation software, with specific emphasis on electrophysiology. Basic physical principles governing electrophysiology in dielectric media, building on complexity and ultimate address action potentials and signal propagation in nerves. Topics include Nernst/Planck and Poisson/Boltzmann equations, Nernst potential, Donnan equilibrium, GHK equations, energy barriers in ion channels, receptor activation, active potentials, Hodgkin/Huxley equations, impulse propagation, axon geometry and conduction, dendritic integration. Concurrently scheduled with course C106. Letter grading.

C207. Polymer Chemistry for Bioengineers. (4) Lecture, four hours; discussion, one hour; outside study, seven hours. Requisite: course C204 or C205. Fundamental concepts of polymer synthesis, including step-growth polymerization (ionic, radical, metal catalyzed), and ring-opening, with focus on factors that can be used to control chain length, chain length distribution, and chain-end functionality, chain topology (statistical, telechelic, linear) in polymerization presentations. Application of use of different polymerization techniques. Concepts of step-growth, chain-growth, ring-opening, and coordination polymerization, and the route on polymer properties. Lectures include both theory and practical issues demonstrated through examples. Concurrently scheduled with course C107. Letter grading.


M214A. Digital Speech Processing. (4) Same as Electrical and Computer Engineering M214A.) Lecture, three hours; laboratory, two hours; outside study, seven hours. Requisite: Electrical and Computer Engineering 113. Theory and applications of digital processing of speech signals. Mathematical models of human speech production and perception mechanisms, such as phoneme, segmental, and pitch, and their implementation in real-time software. Techniques include linear prediction, filter-bank models, and formant filtering. Applications to speech synthesis, automatic recognition, and hearing aids. Letter grading.

M215. Biochemical Reaction Engineering. (4) Same as Electrical and Computer Engineering M215. Lecture, four hours; discussion, one hour; outside study, seven hours. Enforced requisite: Chemical Engineering 101C. Use of previously learned concepts of biophysical chemistry, thermodynamics, transport properties, and reaction kinetics to develop tools needed for technical design and economic analysis of biological reactors. Letter grading.

M216. Biomedical Imaging. (4) Same as Electrical and Computer Engineering M216, M217.) Lecture, three hours; discussion, one hour; outside study, eight hours. Requisite: Electrical and Computer Engineering 114 or 211A. Optical imaging modalities in biomedicine. Other nonoptical imaging modalities discussed briefly for comparison purposes. Letter grading.

M219. Principles and Applications of Magnetic Resonance Imaging. (4) Same as Physics and Biology in Medicine M219.) Lecture, three hours; discussion, two hours. Basic magnetic resonance (MR), physics, and image formation. Emphasis on hardware, Bloch equations, analytic expressions, image contrast mechanisms, spin and gradient echo, and RF pulse. Study of the structure of pulse sequences, and various scanning parameters. Introduction to advanced techniques in rapid imaging, quantitative imaging, and spectroscopy. Letter grading.

M220. Introduction to Medical Informatics. (4) Lecture, two hours; outside study, four hours. Designed for graduate students. Introduction to research topics and principles of medical information and physiology, with particular emphasis on understanding and visualization of anatomy and physiology through medical images. Topics relevant to acquisition, representation, and dissemination of anatomical knowledge in computerized clinical applications. Topics include chest, cardiac, neurology, gastrointestinal/gentouri-nary, endocrine, and musculoskeletal systems. Introduction to basic ideas of magnetic resonance, computed tomography, ultrasound, computed radiography) to provide context for imaging modalities predominantly used to view human anatomy. Geared toward physicians who require more formal understanding of human anatomy/physiology. Letter grading.

223A-223B–223C. Programming Laboratories for Medical and Imaging Informatics I, II, III. (4–4–4) Lecture, two hours; laboratory, two hours; outside study, eight hours. Designed for graduate students. Programming laboratories to support coursework in other medical and imaging informatics courses. Exposure to programming concepts for medical applications, with focus on basic abstraction techniques used in image processing and medical informatics. Specific requirements: courses 223A, 223B. Requisite: Computer Science 31, 32. Program in Computing 20A, 20B. Course 223A is requisite to 223B, which is requisite to 223C. Integrated with topic issues in course M223 to reinforce concepts presented with practical experience. Projects focus on understanding medical networking issues and implementation of basic protocols for healthcare environment, with emphasis on use of DICOM. Introduction to basic tools and methods used within informatics. 223B. Requisite: course 223A, Integrated with topics presented in courses 223A, M227, and M228 to reinforce concepts presented with practical experience. Projects focus on medical image manipulation and decision support systems. 223C. Requisite: course 223B. Exposure to programming concepts for medical applications, with focus on basic abstraction techniques used to extract meaningful features from medical text and imaging data and visualize results. Integrated with topics presented in courses 223B and M228 to reinforce concepts presented with practical experience. Projects focus on medical information retrieval, knowledge representation, and visualization.

224A. Physics and Informatics of Medical Imaging. (4) Lecture, four hours; laboratory, eight hours. Requisite: Mathematics 33A. Programming in C++ for graduate students. Introduction to principles of medical imaging and imaging informatics for nonphysicists. Overview of core imaging modalities: X ray, computed tomography (CT), and magnetic resonance (MR). Topics in
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Introduction to MEMS design: Design methods, design rules, sensing and actuation mechanisms, microsensors, and microactuators. Designing MEMS to be produced with both foundry and nonfoundry processes. Computer-aided design for MEMS. Design project required. Letter grading.

256. Drug Delivery Devices: Innovation and Translation. (4) Lecture, four hours; outside study, eight hours. Introduction to modern topics in drug delivery devices and relevant biomedical applications. Topics provide comprehensive and critical examination of current and emerging research and development on drug delivery devices, with emphasis on innovation and translation of biomedical devices. Topics include drug delivery systems, drug delivery reservoirs, MEMS and micro/nanorobots for drug delivery, nanomedicine-device combination products, and development and regulation of drug delivery devices. Students acquire theoretical and practical knowledge of drug delivery devices. Students gain ability to identify advanced approaches for drug delivery mediated by devices in effective and safe manner, from systemic administration to site-specific release; design appropriate mechanisms, materials, and structures for engineering drug delivery devices to deliver different therapeutics for treating specific diseases; and propose methods and relevant experiments to validate efficacy of certain drug delivery devices. Letter grading.


M256. Neuroengineering. (4) (Same as Electrical and Computer Engineering M255 and Neuroscience M256.) Lecture, four hours; laboratory, three hours; outside study, six hours. Prequisites: Mathematics 12A, Pre 19B or 21B, Pre 80, or both. Introduction to principles of technologies of bioelectricity and neural signal recording, processing, and stimulation. Topics include bioelectricity, electrophysiology (action potentials, local field potentials, EEG, EOG), intracellular and extracellular recording, microelectrode technology, neural signal processing (neural frequency bands, filtering, spike detection, spike sorting, stimulation artifact removal), brain-computer interfaces, deep-brain stimulation, and prosthetics. Letter grading.


M263. Anatomy of Central Nervous System. (4) (Same as Neuroscience M203.) Lecture, 75 minutes; discussion/lab, two hours. Prior to first laboratory meeting, students must complete Bioengineering Pathways training course through UCLA Environment, Health and Safety. Study of anatomical locations and relationships between ascending and descending neurotransmission systems from spinal cord to cerebral cortex. Covers cranial nerves and brainstem anatomy along with anatomy of ventricular and vascular systems of brain. Subcortical forebrain areas covered in detail. Integrated anatomy laboratory includes brain dissections and overview of tools for MRI analysis. Letter grading.

C275. Machine Learning and Data-Driven Modeling in Bioengineering. (4) Lecture, four hours; laboratory, two hours; outside study, six hours. Requisites: Civil Engineering and Applied Mechanics M206, Computer Science 34A, Mathematics 133A, 133B. Overview of foundational data analysis and machine-learning methods in bioengineering, focusing on their application to interpret experimental observations. Topics include probability, distributions, cross-validation, analysis of variance, reproducible computational workflows, dimensionality reduction, regression, hidden Markov models, and clustering. Students gain theoretical and practical knowledge of data analysis and machine-learning methods relevant to bioengineering. Application of these methods to experimental data from bioengineering studies. Students become sufficiently familiar with these techniques to design studies incorporating such analyses, execute analysis, and work in teams using similar approaches and ensure correctness of their results. Concurrently scheduled with course C175. Letter grading.

CM278. Introduction to Biomaterials. (4) (Same as Materials Science C278.) Lecture, three hours; discussion, two hours; outside study, seven hours. Requisites: Chemistry 20A, 20B, and 20L, or Materials Science 104. Engineering materials used in medicine and dentistry, including dental prosthetic and natural tissues. Topics include relationships between material properties, suitability to task, surface chemistry, processing and treatment methods, and biocompatibility. Consent required with course CM178. Letter grading.

C279. Biomaterials-Tissue Interactions. (4) Lecture, three hours; outside study, nine hours. Requisite: course CM278. In-depth exploration of host cellular response to biomaterial structure and function, biocompatibility, and cell adhesion, and role of mechanical forces. Concurrently scheduled with course C179. Letter grading.

281. Advanced Bioconjugate Design and Methods. (4) Lecture, four hours; outside study, eight hours. Requisite: course CM205. Builds upon basic concepts of chemical ligand covered in course C281 and focuses on current state-of-the-art methods and designs for precise bioconjugation formation, especially in context of living cells. Focus on recently developed bioconjugate methods that can be used in current applications in bioengineering. Students gain deep understanding of principles of bioconjugation: coupling of biologically active molecules to substrates, devices, or live animal cells for applications in living cells and in vivo. Letter grading.

282. Biomaterial Interfaces. (4) Lecture, four hours; laboratory, eight hours. Requisite: course CM178 or CM278. Function, utility, and biocompatibility of biomaterials depend critically on their surface and interfacial properties. Discussion of morphology and composition of biomaterials and surfaces, mesoscales, and macroscales, techniques for characterizing structure and properties of biomaterial interfaces, and methods for designing and fabricating biomaterials with prescribed structure and properties in vitro and in vivo. Letter grading.

C283. Targeted Drug Delivery and Controlled Drug Release. (4) Lecture, three hours; discussion, two hours; outside study, seven hours. Requisites: Chemistry 20A, 20B, 20L. New therapies require comprehensive understanding of modern biology, physiology, biophysics, and pharmacology. Targeted delivery of genes and drugs and their controlled release are important in treatment of challenging diseases and relevant to tissue engineering and regenerative medicine. Drug delivery and pharmaceutical pharmacokinet- ics. Application of engineering principles (diffusion, transport, kinetics) to problems in drug formulation and delivery to establish rationale for design and development of methods that can provide spatial and temporal control of drug release. Introduction to biomaterials with specialized structural and interfacial properties. Exploration of both chemistry, and physical presentation of devices and compounds used in delivery and release. Concurrently scheduled with course C183. Letter grading.

M284. Functional Neuroimaging: Techniques and Applications. (3) (Same as Neuroscience M285, Physics and Biology M285, Psychiatry M289, and Psychology M278.) Lecture, three hours. In-depth examination of activation imaging, including MRI and electrophysiological methods, data acquisition and analysis, experimental design, and results obtained using both human and animal models. Focus on understanding technologies, how to design activation imaging paradigms, and how to interpret results. Laboratory visits and design of presentation of functional MRI experiment. S/U or letter grading.

C285. Introduction to Tissue Engineering. (4) Lecture, three hours; discussion, one hour; outside study, eight hours. Requisites: course CM102 or CM202, Chemistry 20A, 20B, 20L. Tissue engineering applies principles of biology and physical sciences with engineering approach to regenerate tissues and organs. Guiding principles for proper selection of three basic components for tissue engineering: scaffold, and molecular signals. Concurrently scheduled with course CM185. Letter grading.

CM286. Computational Systems Biology: Modeling and Simulation of Biological Systems. (3) (Same as Computational Science CM288.) Lecture, four hours; laboratory, three hours; outside study, eight hours. Dynamic biosystems modeling and computer simulation methods for studying biological/biomedical processes and systems at multiple levels of organization. Conceptual, system, multicompartmental, predator-prey, pharmacokinetic (PK), pharmacodynamic (PD), and other structural modeling methods applied to life sciences problems at molecular, cellular (biochemical pathways/nets), organ, and organismic levels. Both theory- and data-driven modeling, with focus on translating biomodeling goals and data into mathe- matical models and optimization. Applications of numerical simulation algorithms, with modeling software exercises in class and PC laboratory assignments. Concurrently scheduled with course CM186. Letter grading.

CM287. Research Communication in Computational and Systems Biology. (4) (Same as Computer Science CM287.) Lecture, four hours; outside study, eight hours. Requisite: course CM112 or CM286 or Computational and Systems Biology M150. Closely directed, interactive, and real research experience in active quantitative systems biology research laboratory. Students will work hands-on with current interest in scientific community, appropriate to student interests and capabilities. Critiques of oral presentations and written progress reports explain how to produce effective research reporting, both oral and written. Concurrently scheduled with course CM187. Letter grading.


M296A. Advanced Modeling Methodology for Dynamic Biomedical Systems. (4) (Same as Computer Science M296A and Medicine M270C.) Lecture, four hours; outside study, eight hours. Requisite: Electrical Engineering 141A, 141B, or Mathematics 115A or Mathematics 115C, and Aerospace Engineering 173. Development of dynamic systems modeling methodology for physiological, biomedical, pharmaceutical, chemical, and related systems. Control system, multicom-
departmental, nondepartmental, and input/output models, linear and nonlinear. Emphasis on model applications, limitations, and relevance in biomedical sciences and other limited data environments. Problem solving in PC laboratory. Letter grading.

M296B. Optimal Parameter Estimation and Experiment Design for Biomedical Systems. (4) (Same as Biostatistics M297E.) Lecture, four hours; outside study, eight hours. Requisite: course CM286 or M296A. Estimation methodology and model parameter estimation algorithms for fitting dynamic system models to biomedical data. Model discrimination. Theory and algorithms for designing optimal experiments for developing and quantifying models, with special focus on optimal sampling schedule design for kinetic models. Exploration of PC software for model building and optimal experiment design via applications in physiology and pharmacology. Letter grading.

M296C. Advanced Topics and Research in Biomedical Systems Modeling and Computing. (4) (Same as Computer Science M296E and Medicine M270E.) Lecture, four hours; outside study, eight hours. Requisite: course M296B. Research techniques and experience on special topics involving models, modeling methods, and model/computing in biological and medical sciences. Review and critique of literature. Research project and writing and formulation. Approaches to solutions. Individual MS- and PhD-level project training. Letter grading.

M296D. Introduction to Computational Cardiology. (4) (Same as Computer Science M296D.) Lecture, four hours; outside study, eight hours. Requisite: course CM186. Introduction to mathematical modeling and computer simulation of cardiovascular electrophysiological process. Ironic models of action potential (AP). Theory of AP propagation in one-dimensional and two-dimensional cardiac tissue. Simulation on sequential and parallel supercomputers, choice of numerical algorithms, to optimize accuracy and to provide computational stability. Letter grading.

298. Special Studies in Bioengineering. (4) Lecture, four hours; outside study, eight hours. Study of selected topics in bioengineering taught by resident and visiting faculty members. May be repeated for credit. Letter grading.

299. Seminar: Bioengineering Topics. (2) Seminar. Two hours; outside study, four hours. Designed for graduate bioengineering students. Seminar by leading academic and industrial bioengineers from UCLA, other universities, and bioengineering companies such as Baxter, Beckman, Molecare, and Guidant on development and application of recent technological advances in discipline. Exploration of cutting-edge developments and challenges in wound healing models, stem cell biology, angiogenesis, signal transduction, gene therapy, cDNA microarray technology, bioartificial cultivation, nano- and micro-hybrid devices, scaffold engineering, and bioinformatics. S/U grading.

375. Teaching Apprentice Practicum. (1 to 4) Seminar. To be arranged. Preparation: apprentice personnel employment as teaching assistant, associate, or fellow. Teaching apprenticeship under active guidance and supervision of regular faculty member responsible for curriculum and instruction at UCLA. May be repeated for credit. S/U grading.

495. Teaching Assistant Training Seminar. (2) Seminar. Two hours; outside study, four hours. Limited to graduate bioengineering students. Required of all departmental teaching assistants. May be taken concurrently while holding TA appointment. Seminar on communicating bioengineering and biomedical engineering principles, methods, and teaching assistant preparation, organization, and presentation of material, including use of visual aids, grading, advising, and rapport with students. S/U grading.

596. Directed Individual or Tutorial Studies. (2 to 6) Tutorial, to be arranged. Limited to graduate bioengineering students. Petition forms to request enrollment may be obtained from program office. Supervised investigation of advanced technical problems. S/U grading.

597A. Preparation for MS Comprehensive Examination. (2 to 12) Tutorial, to be arranged. Limited to graduate bioengineering students. Reading and preparation for MS comprehensive examination. S/U grading.

597B. Preparation for PhD Preliminary Examinations. (2 to 16) Tutorial, to be arranged. Limited to graduate bioengineering students. S/U grading.

597C. Preparation for PhD Oral Qualifying Examination. (2 to 16) Tutorial, to be arranged. Limited to graduate bioengineering students. Preparation for oral qualifying examination, including preliminary research on dissertation. S/U grading.

598. Research for and Preparation of MS Thesis. (2 to 12) Tutorial, to be arranged. Limited to graduate bioengineering students. Supervised independent research for MS candidates, including thesis prospectus. S/U grading.

599. Research for and Preparation of PhD Dissertation. (2 to 16) Tutorial, to be arranged. Limited to graduate bioengineering students. Usually taken after students have been advanced to candidacy. S/U grading.

BIOINFORMATICS

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College of Letters and Science

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Xinshu Grace Xiao, PhD (Integrative Biology and Physiology)
Xiaohong Jasmine Zhou, PhD (Pathology and Laboratory Medicine)

Scope and Objectives

Bioinformatics is defined broadly as the study of the inherent structure of biological information. It is the marriage of biology and computation sciences. Examples of current bioinformatics research include the analysis of gene and protein sequences to reveal protein evolution and alternative splicing, the development of computational approaches to study and predict protein structure to further understanding of function, the analysis of mass spectrometry data to understand the connection between phosphorylation and cancer, the development of computational methods to utilize expression data to reverse engineer gene networks in order to more completely model cellular biology, and the study of population genetics and its connection to human disease.

Graduates in bioinformatics can expect to engage in any combination of research, teaching, clinical service, and consultation. Within universities and research centers there is a growing need for bioinformatics researchers who can analyze new sources of high-throughput experimental data in biology, medicine, and bioengineering. Biotechnology and pharmaceutical companies also seek bioinformatics graduates for applied research on disease—and drug discovery. Medical centers are also increasingly hiring bioinformatics graduates as genomics data become important in medical research and clinical applications.

Graduate Study

Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Division website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Graduate Degrees

The Bioinformatics Program offers Master of Science (MS) and Doctor of Philosophy (PhD) degrees in Bioinformatics.

Bioinformatics

Graduate Courses

201. Seminar: Advanced Methods in Computational Biology. (2) (Formerly numbered M252.) Seminar, one hour discussion, one hour. Designed for advanced graduate students. Examination of computational methodology in bioinformatics and computational biology through presentation of current research literature. How to select and apply methods from computational and mathematical disciplines to problems in bioinformatics and computational biology; development of novel methodologies. S/U or letter grading.

202. Bioinformatics Interdisciplinary Research Seminar. (4) (Formerly numbered M252.) Seminar, two hours; discussion, two hours. Concrete examples of how biological questions about genomics data map to and are solved by methodologies from other disciplines, including statistics, computer science, and mathematics. May be repeated for credit. S/U or letter grading.

M221. Introduction to Bioinformatics. (4) (Formerly numbered M250A.) (Same as Chemistry CM250A, Computer Science CM221, and Human Genetics M260A.) Lecture, four hours; discussion, two hours. Requisites: Computer Science 32 or Program in Computing 10C with grade of C- or better, and one course from Biostatistics 100A, Civil Engineering 110, Electrical Engineering 131A, Mathematics 170A, or Statistics 100A. Prior knowledge of biology not required. Required of all graduate students as well as students from biological sciences and medical school. Introduction to bioinformatics and methodologies, with emphasis on concepts and inventing new computational and statistical techniques to analyze biological data. Focus on sequence analysis and alignment algorithms. S/U or letter grading.

M222. Algorithms in Bioinformatics. (4) (Formerly numbered M250B.) (Same as Chemistry CM280B and Computer Science CM222.) Lecture, four hours; discussion, two hours. Requisites: Computer Science 32
or Program in Computing 10C with grade of C– or better, and one course from Biostatistics 100A, Civil Engineering 110, Electrical Engineering 131A, Mathematics 170A, or Statistics 100A. Course M221 is not requisite to M222. Designed for engineering students as well as students in the biological sciences and medical school. Development and application of computational approaches to biological questions, with focus on formulating interdisciplinary problems as computational problems and then solving these problems using algorithmic techniques. Computational techniques include those from statistics and computer science. Letter grading.

M223. Statistical Methods in Computational Biology. (4) (Formerly numbered M271.) (Same as Biostatistics M271 and Statistics M254.) Lecture, three hours; discussion, one hour. Preparation: elementary probability concepts. Requisite: course M221 or Statistics 100A or 200A. Introduction to statistical methods developed and widely applied in several branches of computational biology, such as gene expression, sequence alignment, motif discovery, comparative genomics, and biological processes. Emphasis on understanding of basic statistical concepts and use of statistical inference to solve biological problems. Letter grading.

M224. Machine Learning Applications in Genetics. (4) (Same as Computer Science CM224 and Human Genetics CM224.) Lecture, four hours; discussion, two hours; outside study, six hours. Requisites: Computer Science 10, Programming 10C with grade of C– or better, Mathematics 33A, and one course from Civil Engineering 110, Electrical and Computer Engineering 131A, Mathematics 170A, or Statistics 100A. Designed for engineering students as well as students from biological sciences and medical school. Introduction to computational analysis of genetic variation and computational interdisciplinary research in genetics. Topics include techniques and procedures in bioinformatics, identification of genes involved in disease, inferring human population history, technologies for obtaining genetic information, and genetic sequencing. Focus on formulating interdisciplinary problems as computational problems and then solving those problems using computational techniques from statistics and computer science. Letter grading.

M225. Computational Methods in Genomics. (4) (Formerly numbered M265.) (Same as Computer Science M265 and Human Genetics M265.) Lecture, two and one half hours; discussion, two and one half hours; outside study, seven hours. Introduction to computational analysis in bioinformatics, genomics, and computational genetics and preparation for computational interdisciplinary research in genetics and genomics. Topics include genome analysis, regulatory genomics, association analysis, association study design, isolated and admixed populations, population substructure, human structural variation, model organisms, and genomic technologies. Computational techniques and methods include those from statistics and computer science. Letter grading.

M226. Machine Learning in Bioinformatics. (4) (Same as Computer Science M226 and Human Genetics M226.) Lecture, four hours; outside study, eight hours. Enforced requisite: Computer Science 32 or Program in Computing 10C with grade of C– or better. Recommended: one course from Biostatistics 100A, 110A, Civil Engineering 110, Electrical Engineering 131A, Mathematics 170A, or Statistics 100A. Familiarity with probability, statistics, linear algebra, and algorithms expected. Designed for engineering students as well as students from biological sciences and medical school. Biology has become data-intensive science. Bottleneck in being able to make sense of biological processes has shifted from data generation to statistical analysis and inference algorithms that can analyze these datasets. Statistical machine learning provides important toolkit in this endeavor. Biological datasets offer new challenges to field of machine learning requiring training of statistical and computational aspects of machine learning techniques and their application to key biological questions. Letter grading.

275A. Applied Bioinformatics Lab for Biologists: Fundamentals. (2) Laboratory, six hours (five weeks). Introduction to contemporary methods and techniques in bioinformatics that are used to analyze high-throughput genomic data. Topics include introduction to UNIX, Next Generation Sequencing (NGS) data analysis, ChIP-seq, BS-seq and RNA-seq, and others. Letter grading.

275B. Applied Bioinformatics Lab for Biologists: Intermediate. (2) Laboratory, six hours (five weeks). Requisite: course 275A. Contemporary methods and techniques in bioinformatics that are used to analyze high-throughput genomic data. Topics include Galaxy server, R, MATLAB, Python, and variant calling. Letter grading.

296. Seminar: Research Topics in Bioinformatics. (2) Seminar, to be arranged. Preparation and current research in bioinformatics. Discussion of current research and literature in research specialty of faculty member teaching course. May be repeated for credit. S/U grading.

375. Teaching Apprentice Practicum. (1 to 4) Seminar, to be arranged. Preparation and current teaching apprentice personnel employment as teaching assistant, associate, or fellow. Teaching apprenticeship under active guidance and supervision of regular faculty member responsible for curriculum and instruction at UCLA. May be repeated for credit. S/U grading.

596. Directed Individual Study or Research in Bioinformatics. (2 to 12) Tutorial, to be arranged. May be repeated for credit. S/U grading.

597. Preparation for MS Comprehensive Examination or PhD Qualifying Examinations. (2 to 12) Tutorial, to be arranged. May be repeated for credit. S/U grading.

598. MS Thesis Research and Writing. (2 to 12) Tutorial, to be arranged. May be repeated for credit. S/U grading.

599. PhD Dissertation Research and Writing. (2 to 12) Tutorial, to be arranged. May be repeated for credit. S/U grading.

**BIOLOGICAL CHEMISTRY**

David Geffen School of Medicine

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Molecular biology is also involved in the basic education of students who will be physicians, dentists, and other health professionals. For these students become involved in laboratory research in the department. In part because of this breadth of experience students find careers in many aspects of basic and applied scientific research and education.

**Biological Chemistry Lower-Division Courses**

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required. Final paper required. Undergraduate Research Center. May be repeated. P/NP grading.

**Upper-Division Courses**

M140. Cancer Cell Biology. (8) (Same as Molecular, Cell, and Developmental Biology M140.) Lecture, three hours; discussion, one hour. Requisites: Molecular, Cell, and Developmental Biology 165A. Cancer causes and genetics. Effects of cell transformation on cell growth and metabolism. Altered cell cycle, metabolism, and differentiation pathways in cancer cells. Tumor microenvironment contributions to cancer malignancy, including angiogenesis, metastasis, and immune system evasion. Letter grading.

194. Research Group Seminars: Biological Chemistry. (2 to 8) Seminar, two hours. Limited to juniors/seniors. Supervised individual research or investigation under guidance of faculty mentor. Culminating paper required. May be repeated for maximum of 16 units. Individual contract required. P/NP or letter grading.

**Graduate Courses**

201A-201B. Biological Chemistry. (5–5) Lecture, five hours. Preparation: organic chemistry. Open to non-medical students with consent of instructor. Primarily for first-year medical students and runs throughout School of Medicine’s second semester. General biochemistry with emphasis on mammalian systems. Structure, function, and metabolism of major cellular components. To receive credit, both courses must be taken together in same academic year. In Progress (201A) and S/U (201B) grading.

202. Advanced Topics in Cryogenic Electron Microscopy. (3) Lecture, two hours; discussion, one hour. Students master advanced topics in membrane protein biology, and learn both theory and practice of cryo-electron microscopy (cryo-EM) as an emerging technology in structural biology. Cryo-EM methodologies covered include cryotomography, single particle reconstruction, electron crystallography, and microtome electron cryo-microscopy.

204. Human Biological Chemistry and Nutrition Laboratory. (3) Laboratory, four hours. Open to non-medical students with consent of instructor. Experiments illustrating techniques and procedures in medically related biochemistry and nutrition, analysis of experimental results. S/U or letter grading.
M265. Mechanisms of Gene Regulation. (4) (Same as Chemistry CM259.) Lecture, four hours. Requisite: Chemistry 153B. RNA polymerase structures and mechanisms; promoter recognition and transcription cycle; mechanisms of activation; transcriptional poising and elongation control; mediator of transcription; chromatin remodeling and modification; epi-genetic regulation; cotranscriptional and transcription-coupled RNA processing; impact of transcription on mRNA processing and stability; nuclear export of mRNA. S/U or letter grading.

266A-266B-266C. Seminars: Cell, Stem Cell, and Developmental Biology. (2–2–2) Seminar, two hours. Open to undergraduate students with consent of instructor. Advanced courses in cell, stem cell, and development biology intended for graduate students working or rotating in laboratories of new cell and developmental biology home area. S/U grading.

296. Research Seminar Series in Biological Chemistry. (1 Seminar, one hour. Limited to biological chemistry students. Research presentations from second- through fourth-year graduate students related to their research. Designed to be highly interactive, with time for questions from fellow graduate students, postdoctoral students, and faculty members during and after presentations. May be repeated for credit. S/U grading.

375. Teaching Apprentice Practicum. (1 to 4) Seminar, to be arranged. Preparation: apprentice personnel experience as teaching assistant, associate, or fellow. Teaching apprenticeship under active guidance and supervision of regular faculty member responsible for curriculum and instruction at UCLA. May be repeated for credit. S/U grading.

596. Directed Individual Study and Research. (2 to 12) Tutorial, to be arranged. Preparation: apprenticeship under active guidance and supervision of regular faculty member responsible for independent research. Students are trained to analyze research literature, present their research in oral and poster formats, and appreciate the ethical, historical, and philosophical issues facing biomed- ical research.

Scope and Objectives

The Biomedical Research minor is designed to incorporate research into undergraduate science education at UCLA. Applications may be submitted by any UCLA student who meets the admission requirements and has the potential to satisfy the requirements. Students explore the scientific questions and experimental approaches of biomedical research. Faculty members and staff facilitate early placement of students into laboratories on campus for independent research. Students are trained to analyze research literature, present their research in oral and poster formats, and appreciate the ethical, historical, and philosophical issues facing biomedical research.

Undergraduate Study

To be arranged. Preparation: apprenticeship under active guidance and supervision of regular faculty member responsible for independent research. Students are trained to analyze research literature, present their research in oral and poster formats, and appreciate the ethical, historical, and philosophical issues facing biomedical research.
Biomedical Research

Lower-Division Courses

1A. Science in Your Time. (4) Lecture, three hours. Exploration of current topic in biomedical research beginning with two topically related layman media sources such as TED Talks. Investigation of science behind the stories through reading newspaper and magazine articles. Examination of primary literature layman material is based upon. Students formulate hypotheses independently, then investigate published experiments and data banks for evidence supporting or refuting hypotheses. Letter grading.

5HA. Biomedical Research: Concepts and Strategies. (4) Lecture, three hours. Desired for freshmen/sophomores. Exploration of scientific concepts and experimental approaches through seminars by UCLA faculty members on their cutting-edge research. Topics may include areas of study such as cancer, stem cells, and infectious disease, as well as more basic research in cell and molecular biology. Letter grading.

5HB. Biomedical Research: Essential Skills and Concepts. (4) Lecture, three hours; discussion, one hour. Required: course 5HA. Designed for freshmen/sophomores. Exploration of scientific concepts and experimental approaches through seminars by UCLA faculty members on their cutting-edge research. Topics may include areas of study such as cancer, stem cells, and infectious disease, as well as more basic research in cell and molecular biology. Letter grading.

10H. Research Training in Genes, Genetics, and Genomics. (6) Lecture, 90 minutes; laboratory, six hours; computer laboratory, 90 minutes. Limited to 30 students. Basic training in biological research, including techniques in genetics, model organism, bioinformatics, functional genomics, electron microscopy. Part of Undergraduate Research Consortium in Functional Genomics sponsored by Howard Hughes Medical Institute Professors Program. Letter grading.

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

89. Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to lower-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

89HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to lower-division lecture course. May be repeated for credit. Individual contract required. Letter grading.

99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated for credit. Individual contract required. Letter grading.

Upper-Division Courses

100HA-100HB-100HC. Advanced Research in Genes, Genetics, and Genomics. (4–4–4) Formerly numbered Life Sciences 100HA-100HB-100HC. Lecture, two hours; laboratory, 10 hours. Required: course 101E. Course 100HA is requisite to 100HB, which is requisite to 100HC. Designed for undergraduates who are committed to pursuing research. Advanced research training in genetics, cell and development biology, bioinformatics, functional genomics. Topics may include areas of study such as cancer, stem cells, and infectious disease, as well as more basic research in cell and molecular biology. Letter grading.

89SA. Individual Studies for USIE Facilitators. (1) Tutorial, to be arranged. Required: course 101E. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to discuss selected USIE seminar topic, conduct preparatory research, and begin preparation of syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.

89SB. Individual Studies for USIE Facilitators. (1) Tutorial, to be arranged. Required: course 101E. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to finalize course syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.

89SC. Individual Studies for USIE Facilitators. (2) Tutorial, to be arranged. Required: course 101E. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to finalize course syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.

169. Advanced Honors Seminars. (1) Seminar, three hours. Required: three units of 100 series. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. P/NP or letter grading.

189HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to upper-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. P/NP or letter grading.

193H. Journal Club Seminars: Current Topics in Biomedical Research. (2) Seminar, three hours. Limited to Biomedical Research minor students. Presentation and discussion of recent papers from primary literature in biosciences. Letter grading.

194H. Research Group Seminars: Data Presentation in Biomedical Research. (2) Seminar, three hours. Required: course 193H. Limited to Biomedical Research minor students. Preparation of oral presentations based on student laboratory research at UCLA. May be repeated for credit. Letter grading.

199. Directed Biomedical Research. (4) Tutorial, 12 hours. Limited to Biomedical Research minor students. Supervised individual research under guidance of faculty mentor. Culminating report describing progress and signed by student and faculty mentor required. May be repeated for credit. Individual contract required. Letter grading.

Biostatistics

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Catherine A. Sugar, PhD, in Residence
Robert E. Weiss, PhD
Weng Kee Wong, PhD
Hua Zhou, PhD

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Abdelmonem A. Afifi, PhD
Nancy Berman, PhD
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Virginia A. Clark, PhD
William G. Cumberland, PhD
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Donald Guthrie, PhD
Robert I. Jennrich, PhD

Associate Professors
Grace H.J. Kim, PhD, in Residence
Donatello Telesca, PhD

Assistant Professors
Hilary J. Aralis, PhD, in Residence
Zhe Fei, PhD, in Residence

Lecturer
Fei Yu, PhD

Adjunct Professors
David Elashoff, PhD
David W. Gjertson, PhD
Martin L. Lee, PhD

Scope and Objectives

In recent years biostatistics has become one of the most stimulating areas of applied statistics. The field encompasses the methodology and theory of statistics as applied to problems in the life and health sciences. Biostatisticians are trained in the skilled application of statistical methods to the solution of problems encountered in public health and medicine. They collaborate with scientists in nearly every area related to health and have made major contributions to our understanding of AIDS, cancer, ge-
Graduate Study

Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Division website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Graduate Degrees

The Department of Biostatistics offers Master of Science (MS) and Doctor of Philosophy (PhD) degrees in Biostatistics.

Biostatistics

Lower-Division Courses

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated, P/NP grading.

Upper-Division Courses

100A. Introduction to Biostatistics. (4) Lecture, three hours; discussion, one hour; laboratory, one hour. Preparation: credit for course 110A. Introduction to methods and concepts of statistical analysis. Sampling situations, with special attention to those occurring in biological sciences. Topics include distributions, test of hypotheses, estimation, types of error, significance and confidence levels, sample size. P/NP or letter grading.

100B. Introduction to Biostatistics. (4) Lecture, three hours; discussion, one hour; laboratory, one hour. Prerequisite: course 100A. Not open to credit for students with credit for course 110B. Introduction to analysis of variance, linear regression, and correlation analysis. P/NP or letter grading.

197. Individual Studies in Biostatistics. (2 to 4) Tutorial, four hours. Limited to juniors/seniors. Individual intensive study, with scheduled meetings to be arranged between faculty member and student. Assignment and tangible evidence of mastery of subject specified at outset may be required for credit. Individual contract required. P/NP or letter grading.

Graduate Courses

200A. Methods in Biostatistics A. (4) Lecture, three hours; discussion, one hour; laboratory, one hour. First course in biostatistical methods intended for graduate students in biostatistics to prepare students pursuing careers as practicing biostatisticians. Prior knowledge of probability or statistics not assumed. Students should have working knowledge of calculus and be very comfortable with mathematical and algebraic reasoning. Introduction to basic concepts in analysis, presentation of data, and statistical aspects of design of studies. Special emphasis is given to application of statistical methods to public health, medical, biological, and health sciences. Interpretation and communication of statistical findings is stressed. Focus on methodology, applications, and concepts rather than mathematical statistics or probability theory. S/U or letter grading.

200B. Methods in Biostatistics B. (4) Lecture, three hours; discussion, one hour; laboratory, one hour. Prerequisites: linear algebra. Required: course 200A. Designed for students pursuing graduate degrees in biostatistics. Theory and practice of linear regression analysis and analysis of variance (ANOVA). S/U or letter grading.

200C. Methods in Biostatistics C. (4) Lecture, three hours; discussion, one hour; laboratory, one hour. Prerequisites: preparation: courses 200A, 200B, and previous coursework in linear algebra. Designed for students pursuing graduate degrees in biostatistics. Generalized linear models, description, and analysis of discrete data with applications to public health. Students are trained to identify different types of discrete data; use statistical software package STATA to manage, summarize, and analyze data; use appropriate statistical techniques for analyzing public health data using generalized linear models; apply generalized estimating equations for analyzing longitudinal data; and write formal statistical report of data analysis for public health researcher. S/U or letter grading.

201A. Topics in Applied Regression. (4) Lecture, three hours; discussion, one hour; laboratory, one hour. Requisites: courses 100B, or 200A and 200B. Designed for master’s and doctoral students in fields outside biostatistics. Topics in linear regression and other related methods. When and how to use linear regression methods and how to properly interpret results. Heavy emphasis on practical application as opposed to theoretical development. S/U or letter grading.

201B. Topics in Applied Regression. (4) Lecture, three hours; discussion, one hour; laboratory, one hour. Prerequisite: course 201A. Further studies in multiple linear regression, including applied multiple regression models, regression diagnostics and model assessment, factorial and repeated measure analysis of variance models, nonlinear regression, logistic regression, propensity scores, matching versus stratification, Poisson regression, and classification trees. Applications to biomedical and public health scientific problems. Letter grading.

202A-202B. Mathematical Statistics A, B. (4–4) Lecture, three hours; discussion, one hour. Designed primarily for students pursuing PhD, MS, and PhD degrees in biostatistics. Introduction to main principles of probability, random variables, discrete and continuous distributions, multivariate distributions, and distributions of functions of random variables. S/U or letter grading. 202B. Requisite: course 202A.

202C. Theory of Bayesian Statistics. (4) Lecture, three hours; discussion, one hour. Requisites: courses 200A, 200B, 202B, or equivalent, or consent of instructor. Mathematical foundations of Bayesian approach to statistical inference; closed form computations; computation; hierarchical models; model selection; hypothesis testing; prior specification; comparative inference; nonparametric methods. S/U or letter grading.

203A. Introduction to Data Management and Statistical Computing. (4) Formerly numbered 403A. Laboratory, two hours; discussion, one hour. Prior knowledge of programming not assumed. Coverage of mechanics of converting data from whatever form it may arrive and preparing it for processing by statistical software. Letter grading.

210. Introduction to Data Science. (4) Lecture, three hours; laboratory, two hours. Requisite: course 203A. Principles of data science. Topics include Health Insurance Portability and Accountability Act (HIPAA) and data ethics, data retrieval, data merging and cleaning, data visualization and web presentation, reproducible research, collaborative research, cluster computing, and cloud computing. S/U or letter grading.

210B. Introduction to Demographic Methods. (4) Same as Community Health Sciences M208, Economics M208, and Sociology M213A. Lecture, four hours. Preparation: one introductory statistics course. Introduction to methods of demographic analysis. Topics include demographic rates, standardization, decomposition of differences, life tables, survival analysis, cohort analysis, birth interval analysis, models of population growth, population projection, and demographic data sources. Letter grading.

210. Statistical Methods for Categorical Data. (4) Formerly numbered M210. Lecture, four hours; discussion, one hour. Requisites: course 100B, Statistics 100B. Statistical techniques for analysis of categorical data; discussion and illustration of their applications and limitations. S/U or letter grading.


216. Mathematical Methods for Biostatistics. (2) Lecture, two hours. Requisites: Mathematics 31A, 31B, 33A. Designed for incoming first-year MS and PhD students. Review, and in some cases introduc- tion, of specialized topics in linear algebra, multivari- able calculus, and scientific computing. Interplay between mathematical methods and scientific com- puting within R statistical computing environment. Detailed training on numerical algorithms used in linear algebra and probabilistic simulations commonly used by statisticians. S/U or letter grading.


230. Statistical Graphics. (4) Lecture, three hours; laboratory, one hour. Requisite: course 200A (may be taken concurrently). Graphical data analysis emphasizes use of visual displays of quantitative data to gain insight into data structure by exploring patterns and relationships, and to enhance classical numerical analyses, especially assumption validity checking. Principles of graph construction, graphical methods, and perception issues. S/U or letter grading.
231. Statistical Power and Sample Size Methods for Health Research. (4) Lecture; three hours; laboratory, one hour. Requisites: courses 200A, 200B. Strongly recommended: variety of other graduate coursework. Sample size and power analysis methods for common study designs, including construction of means and proportions, ANOVA, time-to-event data, group sequential trials, linear regression, cluster randomized trials and multilevel data, with emphasis on designing randomized trials. Discussion also of multiple endpoints. S/U or letter grading.


M234. Applied Bayesian Inference. (4) (Same as Biomathematics M234.) Lecture, three hours; laboratory, one hour. Requisite: course 200B or equivalent. Sources of incomplete data, recognizing familiar methods as solutions to missing-data problems, missing-data mechanisms, weighting and imputation strategies, model-based and design-based inference, likelihood-based and Bayesian methods, statistical computing strategies, multivariate models for diverse data types, nonignorable models, review of available statistical software. Emphasis on incorporating incomplete-data perspective into broader statistical-science framework. S/U or letter grading.

M235. Causal Inference. (4) (Same as Psychiatry M232.) Lecture, three hours; discussion, one hour. Requisite: course 200B or equivalent. Sources of incomplete data, recognizing familiar methods as solutions to missing-data problems, missing-data mechanisms, weighting and imputation strategies, model-based and design-based inference, likelihood-based and Bayesian methods, statistical computing strategies, multivariate models for diverse data types, nonignorable models, review of available statistical software. Emphasis on incorporating incomplete-data perspective into broader statistical-science framework. S/U or letter grading.

M236. Longitudinal Data. (4) (Same as Biomathematics M238.) Lecture, three hours; laboratory, one hour. Requisite: course 200A or equivalent. Sources of incomplete data, recognizing familiar methods as solutions to missing-data problems, missing-data mechanisms, weighting and imputation strategies, model-based and design-based inference, likelihood-based and Bayesian methods, statistical computing strategies, multivariate models for diverse data types, nonignorable models, review of available statistical software. Emphasis on incorporating incomplete-data perspective into broader statistical-science framework. S/U or letter grading.


M238. Methodology of Clinical Trials. (4) (Same as Biomathematics M284.) Lecture, three hours; discussion, one hour. Requisite: course 200B. Introductory material on design and analysis of clinical trials, including adaptive methods for early and late randomized trials. S/U or letter grading.

M239. Mathematical and Statistical Phylogenetics. (4) (Same as Biomathematics M211 and Human Genetics M211.) Lecture, three hours; laboratory, one hour. Theoretical models in molecular evolution, with focus on phylogenetic techniques. Topics include evolutionary models, studies of viral evolution, phylogeny, and coalescent approaches. Examples from evolutionary biology and medicine. Laboratory for hands-on computer analysis of real data.


244. Master’s Seminar and Research Resources for Grading. (1) Seminar, three hours. Introduction to resources for finding statistical literature. Discussion of principles of making statistical presentations and how to write statistical reports, including writing abstracts and choice of key words. S/U or letter grading.


250A. Linear Statistical Models. (4) Lecture, three hours; discussion, one hour. Requisite: Intermediate probability: statistical theory and linear algebra. Designed for students pursuing graduate degrees in biostatistics. Theoretical foundation for linear models with applications to a broad range of data types. Emphasis on mathematical training and understanding of theory and applications of linear models. Letter grading.

250B. Linear Statistical Models. (4) Lecture, three hours; discussion, one hour. Requisites: courses 200A, 200B, 202C, 250A. Theoretical foundation for linear models with applications to different types of data, including longitudinal and clustered data. Emphasis on mathematical training and understanding of theory and applications of linear models. Letter grading.

250C. Multivariate Biostatistics. (4) (Formerly numbered 251.) Lecture, three hours; discussion, one hour. Requisites: courses 200A, 200B, 202C, 250A. Theoretical foundation for linear models with applications to different types of data, including longitudinal and clustered data. Emphasis on mathematical training and understanding of theory and applications of linear models. Letter grading.

255A. Advanced Probability and Statistics. (4) (Formerly numbered 255.) Lecture, three hours; discussion, one hour. Requisites: course 200A or equivalent, Human Genetics M213A or consent of instructor. Survey of probability theory, with special emphasis on applications to biostatistics. Topics include probability spaces and random variables, generating functions, conditioning, discrete-time martingales, applications to finite sample analysis of statistical procedures. S/U or letter grading.

255B. Advanced Probability and Statistics. (4) (Formerly numbered 256.) Lecture, three hours; discussion, one hour. Requisites: course 255A or consent of instructor, Mathematics 131A. Survey of advanced topics in probability and mathematical statistics, with special emphasis on applications to biostatistics. Topics include laws of large numbers, central limit theorem, sequential decision problems from stochastic processes, and applications to large sample theory in biostatistics. S/U or letter grading.

257. Computational Methods for Biostatistical Research. (4) Lecture, three hours; discussion, one hour. Requisites: course 250A or Statistics 100C, Mathematics 115A. Preparation for quantitative research in statistics and data sciences. Numerical analysis and hands-on computing techniques for handling big data. Numerical analysis topics include computer arithmetic, solving linear equations, Cholesky factorization, QR factorization, regression computations, eigenvalue problems, iterative solvers, numerical optimization, and R and analytical computer experiments. Computing techniques include basics of R programming, reproducible research using R and RStudio, collaborative research, parallel computing, and reproducible computing. No prior knowledge of R assumed. S/U or letter grading.


M272. Theoretical Genetic Modeling. (4) (Same as Biomathematics M207A and Human Genetics M207A.) Lecture, three hours; discussion, one hour. Requisites: Mathematics 115A, 131A, Statistics 100B. Mathematical models in statistical genetics. Topics include population genetics, genetic epidemiology, gene mapping, and a detailed discussion of a genetics experiment, DNA sequence analysis, and molecular phylogeny. S/U or letter grading.


275. Advanced Survival Analysis. (4) Lecture, three hours; discussion, one hour. Requisites: courses 250A, 255. Time-to-event data arise in many fields, such as medicine, reliability theory, demography, sociology, economics, and astronomy. Overview of common stochastic process models and methods for analysis of such data. Examples include continuous-time Markov chain and semi-Markov models, and frailty and copula models. S/U or letter grading.

276. Inferential Techniques that Use Simulation. (4) Lecture, three hours; discussion, one hour. Requisites: Statistics 200A, 200B. Recommended: course 213. Introduction to simulation and application of simulation techniques for statistical inference that use computer simulation. Topics include bootstrap, multiple imputation, data augmentation, stochastic relaxation, and sampling/importance resampling algorithm. S/U or letter grading.


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285. Advanced Topics: Recent Developments. (4) Lecture, three hours: discussion, one hour. Advanced topics and developments in biostatistics not covered in Biostatistics M210 through 219 or 270 through 276 or in other courses. Possible topics include time-series analysis, classification procedures, correspondence analysis, S/U or letter grading.

296. Seminar: Research Topics in Biostatistics. (1 to 4) Seminar, two hours. Advanced study and analysis of current topics in biostatistics. Discussion of current research and literature in research specialty of faculty member teaching course. S/U grading.

375. Teaching Apprentice Practicum. (1 to 4) Seminar, to be arranged. Teaching apprentice under active guidance and supervision of regular faculty member fundamental principles and instruction. In Biostatistics M210 through 270 or in other courses. May not be arranged toward MS minimum course requirement; 4 units may be applied toward 44-unit minimum total required for MPH degree. Letter grading.

402A. Principles of Biostatistical Consulting. (2) Lecture, one hour; discussion, one hour. Requisite: course 200A. Techniques for statistical consulting. Role of statistician and client. Reviews of current statistical practice and instruction at UCLA. Apprentices meet with faculty and other apprentices to discuss both substance of curriculum and appropriate approaches to teaching, learning, and evaluation. May be repeated for credit. S/U grading.

400. Field Studies in Biostatistics. (4) Fieldwork, to be arranged. Field observation and studies in selected community organizations for health promotion or medical care. Students must file field placement and program training documentation on form available from Student Affairs Office. May not be arranged toward MS minimum course requirement; 4 units may be applied toward 44-45 unit minimum total required for MPH degree. Letter grading.

402B. Biostatistical Consulting. (4) Discussion, two hours; laboratory, two hours. Requisite: course 402A. Principles and practices of biostatistical consulting. May be repeated for credit. S/U grading.

M403B. Computer Management and Analysis of Health Data Using SAS. (4) (Same as Biostatistics M403B.) Lecture, three hours; laboratory, two hours. Introduction to practical issues in management and analysis of health data using SAS programming language. Cross-sectional and longitudinal population-based data sets are used to illustrate principles of data management and analysis for addressing biomedical and health-related hypotheses. Letter grading.

406. Applied Multivariate Biostatistics. (4) Lecture, three hours; laboratory, one hour. Preparation: at least two upper-division research courses. Requisite: course 100B. Use of multiple regression, principal components, factor analysis, discriminant function analysis, logistic regression, and canonical correlation in biomedical data analysis. S/U (optional for non-division majors) or letter grading.

409. Doctoral Statistical Consulting Seminar. (2) Seminar, one hour; laboratory, four hours. Designed for doctoral students. Development of experience and expertise in collaborating with faculty in Schools of Public Health and Medicine. Students meet with investigators and develop design and protocol for data analysis, implement data protocol when data is obtained, and write up study with lead investigators. S/U grading.

410. Statistical Methods in Clinical Trials. (4) Lecture, three hours: discussion, two hours. Requisites: courses 100A, 100B. Design of studies in animals to assess antimumor response; randomization, historical controls, p-values, size of study, and stratification in human experimentation; various types of controls; prognostic factors, survivorship studies, and design of prognostic studies; organization of clinical trials—administration, comparability, protocols, clinical standards, data collection and management. S/U (optional only for nonmajors) or letter grading.


413. Introduction to Pharmaceutical Statistics. (4) Lecture, three hours: discussion, one hour. Requisites: courses 100A, 100B. Exploration of various types of statistical techniques used in pharmaceutical and related industries. Topics include bioassay and other assay techniques (e.g., ELISAs and FAQs analysis), quality control techniques, and pharmacokinetic and pharmacodynamic modeling. S/U or letter grading.

414. Principles of Sampling. (4) Lecture, three hours: discussion, one hour. Requisites: course 100B, Epidemiology 100. Statistical aspects of design and implementation of current topics in biostatistics. Discussion of current research and literature in research specialty of faculty member teaching course. S/U grading.

495. Teacher Preparation in Biostatistics. (2) Seminar, two hours. Preparation: 18 units of cognate courses in area of specialization. Requisite: course 410 toward master’s degree minimum total course requirement. May be repeated for credit. S/U grading.

595. Effective Integration of Biostatistical Concepts in Public Health Research. (4) Tutorial, to be arranged. Enforced requisites: courses 110A, 110B, 400, 402A. Students meet weekly with their adviser and also work independently on their proposed projects. Course fosters ability of students to select relevant design and analysis techniques, synthesize knowledge, and apply insights to address public health problems. Oral examination and written report describing how students have used biostatistical methods to assess data from public health study required. May be repeated for credit. S/U grading.

596. Directed Individual Study or Research. (2 to 8) Tutorial, to be arranged. Limited to graduate students. Individual guided studies under direct faculty supervision. Only 4 units may be applied toward MPH and MS minimum total course requirement. May be repeated for credit. Letter grading.

597. Preparation for Master's Comprehensive or Doctoral Qualifying Examinations. (2 to 12) Tutorial, to be arranged. Limited to graduate students. May not be applied toward any degree course requirements. May be repeated for credit. S/U grading.

599. Doctoral Dissertation Research. (2 to 12) Tutorial, to be arranged. May not be applied toward any degree course requirements. May be repeated for credit. S/U grading.

**Brain and Behavioral Health Minor**

Scope and Objectives

Issues of brain and behavioral health have become central to the understanding of human development, well-being, and productivity. Sometimes called translational science, the focus on evidence-based prevention and treatment programs at multiple levels—individual, family, school, community—has become a primary focus of the behavioral health fields. Key features of the approach include an understanding of the basic science of the brain and behavioral issues at hand, their interaction with contextual factors, the development of programs and policies derived directly from that science, and the rigorous evaluation of those programs and policies.

**Undergraduate Study**

**Brain and Behavioral Health Minor**

The minor offers students the opportunity to learn about how to apply scientific advances to the promotion of brain and behavioral health across the lifespan. The Brain and Behavioral Health minor is intended to supplement the education of undergraduate students enrolled in the Cognitive Science, Human Biology and Society, Neuroscience, Psychobiology, and Psychology majors. As a minor, the program is able to take advantage of the core knowledge gained by students from their majors and focus on how to use that knowledge to develop programs and policies focusing on brain and behavioral health. The program offers students depth in a topic (e.g., autism, dementia) that is required when trying to solve a pressing problem.

To enter the minor students must have an overall grade-point average of 2.7 or better, have completed Psychiatry 79, and submit an application demonstrating interest in the application of science to improving brain and behavioral health by the end of the fall quarter of the student’s third year.

**Required Lower-Division Courses (5 units): Psychiatry 79.**

**Required Upper-Division Courses (24 units):**

(1) Psychiatry 174 or 176; (2) three upper-division electives selected from Neuroscience CM123, C177, M187, 192C, Psychiatry 174 or 176 (whichever course was not applied above); 175, M182, Psychology M107, M278, S29C, M152, M161, M164, Society and Genetics 102, M140, 141, M144; (3) two capstone courses: Psychiatry 177A, 177B. Each course must be completed with a grade of C or better. A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor.

**BRAIN AND BEHAVIORAL HEALTH**

**Interdisciplinary Minor**

**College of Letters and Science**

310-206-5100

E-mail contact

Andrew J. Fuligni, PhD, Chair

**Faculty Committee**

Robert M. Bilder, PhD (Psychiatry and Biobehavioral Sciences, Psychology)
Christopher S. Caldwell, PhD (Psychiatry and Biobehavioral Sciences)
Christopher J. Evans, PhD (Psychiatry and Biobehavioral Sciences, Psychology)
Adriana Galván, PhD (Psychiatry and Biobehavioral Sciences, Psychology)
Andrew J. Fuligni, PhD (Psychiatry and Biobehavioral Sciences, Psychology)
Christina G.S. Palmer, PhD (Human Genetics, Psychiatry and Biobehavioral Sciences, Society and Genetics)
Tara S. Peris, PhD (Psychiatry and Biobehavioral Sciences)
Each minor course must be taken for a letter grade. Successful completion of the minor is indicated in the transcript and diploma.

**Chemical and Biomolecular Engineering**

Henry Samueli School of Engineering and Applied Science

5531 Boelter Hall
Box 951592
Los Angeles, CA 90095-1592

Chemical and Biomolecular Engineering 310-825-2046
Department e-mail

Panagiotis D. Christofides, PhD, Chair
Philippe Sautet, PhD, Vice Chair

Professors
Emily A. Carter, PhD
Jane P. Chang, PhD (William Frederick Seyer Professor of Materials Electrochemistry)
Panagiotis D. Christofides, PhD (William D. Van Vorst Professor of Chemical Engineering Education)
Yoram Cohen, PhD
James F. Davis, PhD
Vijay K. Dhir, PhD
Aleza Khademhosseini, PhD
Yunfeng Lu, PhD
Vasilios I. Manousiouthakis, PhD
Harold G. Monboquette, PhD
Stanley J. Osher, PhD
Philippe Sautet, PhD
Yi Tang, PhD (Ralph M. Parsons Foundation Professor of Chemical Engineering Education)

Professors Emeriti
Robert F. Hicks, PhD
Eldon L. Kruth, PhD
James C. Liao, PhD
Selim M. Senkan, PhD
Vincent L. Vilker, PhD
A.R. Frank Wazzan, PhD, Dean Emeritus

Associate Professors
Irene A. Chen, PhD
Yvonne Y. Chen, PhD

Assistant Professors
Nasim Annabi, PhD
Carissa N. Eisler, PhD
Yuzhang Li, PhD
Carlos G. Morales-Guijo, PhD
Junyoung O. Park, PhD
Dante A. Simonetti, PhD
Samanvaya Srivastava, PhD

Scope and Objectives

The Department of Chemical and Biomolecular Engineering conducts undergraduate and graduate programs of teaching and research that focus on the areas of biomolecular engineering, systems engineering, and advanced materials processing and span the general themes of energy/environment and nanotechnology. Aside from the fundamentals of chemical engineering (thermodynamics, transport phenomena, kinetics, reactor engineering and separations), particular emphasis is given to bolic engineering, protein engineering, synthetic biology, bio-nano-technology, biomaterials, air pollution, environmental modeling, pollution prevention, molecular simulation, process systems engineering, membrane science, semiconductor processing, chemical vapor deposition, plasma processing, and polymer engineering.

Students are trained in the fundamental principles of these fields while acquiring sensitivity to society’s needs—a crucial combination needed to address the challenge of continued industrial growth and innovation in an era of economic, environmental, and energy constraints.

The undergraduate curriculum leads to a BS in Chemical Engineering and includes the standard core curriculum, as well as biomedical engineering, biomolecular engineering, environmental engineering, and semiconductor manufacturing engineering options. The department also offers graduate courses and research leading to MS and PhD degrees. Both graduate and undergraduate programs closely relate teaching and research to important industrial problems.

Undergraduate Study

The chemical engineering program is accredited by the Engineering Accreditation Commission of ABET.

The Chemical Engineering major is a designated capstone major. The capstone project requires students to first work individually and learn how to integrate chemical engineering fundamentals taught in prior required courses; they then work in groups to produce a paper design of a realistic chemical process using appropriate software tools. Graduates should be able to design a chemical or biological system, component, or process that meets technical and economical design objectives, with consideration of environmental, social, and ethical issues, as well as sustainable development goals. In addition, they should be able to apply their knowledge of mathematics, physics, chemistry, biology, and chemical and biological engineering to analysis and design of chemical and biochemical processes and products; function on multidisciplinary teams; identify, formulate, and solve complex chemical and biological engineering problems; and communicate effectively, both orally and in writing.

Chemical Engineering BS Capstone Major

The Chemical Engineering curricula offer a high-quality, professionally oriented education in modern chemical engineering. The biomedical engineering, biomolecular engineering, environmental engineering, and semiconductor manufacturing engineering options provide students with an opportunity for exposure to a subfield of chemical and biomolecular engineering. In all cases, balance is sought between engineering science and practice.

Learning Outcomes

The Chemical Engineering major has the following learning outcomes:

- Application of knowledge of mathematics, physics, chemistry, biology, and chemical and biological engineering, especially to integration of molecular- to micro-scale information into macro-scale analysis and design of chemical and biochemical processes and products
- Design of a chemical or biological system, component, or process that meets technical and economical design objectives with consideration of environmental, social, and ethical issues, as well as sustainable development goals
- Identification, formulation, and solution of complex chemical and biological engineering problems
- Function as a productive member of a multidisciplinary team
- Effective oral and written communication

Chemical Engineering Core Option

Preparation for the Major

Required: Chemical Engineering 10; Chemistry and Biochemistry 20A, 20B, 20L, 30A, 30AL, 30B; Civil and Environmental Engineering M20 or Mechanical and Aerospace Engineering M20; Mathematics 31A, 31B, 32A, 32B, 33A, 33B; Physics 1A, 1B, 1C, 4AL.

The Major

Required: Chemical Engineering 45, 100, 101A, 101B, 101C, 102A, 102B, 103, 104A, 104B, 106, 107, 109; three technical breadth courses (12 units) selected from an approved list available in the Office of Academic and Student Affairs; two capstone analysis and design courses (Chemical Engineering 108A, 108B); and two elective courses (8 units) from Chemical Engineering 110, 111, 112, 113, CM114, CM115, CM116, CM118, C119, C121, C125, C128, CM135, CM140.

For information on UC, school, and general education requirements, see the College and Schools chapter.

Biomedical Engineering Option

Preparation for the Major

Required: Chemical Engineering 10; Chemistry and Biochemistry 20A, 20B, 20L, 30A, 30AL, 30B; Civil and Environmental Engineering M20 or Mechanical and Aerospace Engineering M20; Mathematics 31A, 31B, 32A, 32B, 33A, 33B; Physics 1A, 1B, 1C, 4AL.

The Major

Required: Chemical Engineering 45, 100, 101A, 101B, 101C, 102A, 102B, 103, 104A, 104B, 106, 107, 109; Chemistry and Biochemistry 153A; three technical breadth courses (12 units) selected from an approved list available in the Office of Academic and Student Affairs; two capstone analysis and design courses (Chemical Engineering 108A, 108B); and one biomedical elective course (4 units) from Chemical Engineering C115, C121, C124, C125, CM127, CM135, or CM145 (another chemical engineering elective may be substituted with approval of the faculty adviser).

For information on UC, school, and general education requirements, see the College and Schools chapter.
Biomolecular Engineering Option

Preparation for the Major

Required: Chemical Engineering 10; Chemistry and Biochemistry 20A, 20B, 20L, 30A, 30AL, 30B; Civil and Environmental Engineering M20 or Mechanical and Aerospace Engineering M20; Mathematics 31A, 31B, 32A, 32B, 33A, 33B; Physics 1A, 1B, 4A, 4AL.

The Major


Graduate Study

Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Division website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Graduate Degrees

The Department of Chemical and Biomolecular Engineering offers Master of Science (MS) and Doctor of Philosophy (PhD) degrees in Chemical Engineering.

Chemical Engineering

Lower-Division Courses

2. Technology and Environment. (4) Lecture. four hours; outside study, eight hours. Natural and anthropogenic flows of materials at global and regional scales. Case studies of natural cycles include global warming (CO2 cycles), stratospheric ozone depletion (chlorine and ozone cycles), and global nitrogen cycles. Flow of materials in industrial economies compared and contrasted with natural flows; presentation of lifecycle methods for evaluating environmental impact of processes and products. P/NP or letter grading.

10. Introduction to Chemical and Biomolecular Engineering. (1) Lecture, one hour; outside study, two hours. General introduction to field of chemical and biomolecular engineering. Description of how chemical and biomolecular engineering analysis and design skills are applied for creative solution of current technology problems in production of microelectronic devices, design of chemical plants for minimum environmental impact, application of nanotechnology to chemical sensing, and genetic-level design of recombinant microbes for chemical synthesis. Letter grading.

19. Fiat Lux Freshman Seminars. (1) Seminar; one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

45. Biomolecular Engineering Fundamentals. (4) Lecture, four hours; discussion, one hour; outside study, seven hours. Recommended requisites: Chemistry 20A, 20L, 30A, 30L. Intended for those students who have not taken Life Sciences 2, 3, and Chemistry 153A. Fundamentals of modern biomolecular engineering. Topics include structure and function of biomolecules, central dogma of molecular biology, cellular information and energy processing, and experimental methods, with strong emphasis on applications in medicine, industry, and bioenergy. Letter grading.

99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrollment minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Courses

100. Fundamentals of Chemical and Biomolecular Engineering. (4) Lecture, four hours; discussion, one hour; outside study; seven hours. Enforced requisites: Chemistry 20A, 20L, Mathematics 32B (may be taken concurrently). Physics 1A. Introduction to analysis and design of industrial chemical processes. Material and energy balances. Introduction to programming in MATLAB. Letter grading.


101C. Mass Transfer. (4) Lecture; discussion, one hour; outside study; seven hours. Enforced requisites: courses 101B. Introduction to analysis of mass transfer in systems of interest to chemical engineering practice. Fundamentals of mass species transport, Fick law of diffusion, diffusion in chemically reacting flows, interphase mass transfer, multicomponent systems. Letter grading.

102A. Thermodynamics I. (4) Lecture, four hours; discussion, one hour; outside study; seven hours. Introduction to thermodynamics of chemical and biological processes. Work, energy, heat, and first law of thermodynamics. Second law, extremum principle, entropy, and free energy. Ideal and real gases, property evaluation. Thermodynamics of flow systems. Applications of first and second laws in biological processes and living organisms. Letter grading.


103. Separation Processes. (4) Lecture, four hours; discussion, one hour; outside study; seven hours. Enforced requisites: courses 100, 101B. Application of principles of heat, mass, and momentum transport to design and operation of separation processes such as distillation, gas absorption, filtration, and reverse osmosis. Letter grading.

104A. Chemical and Biomolecular Engineering Laboratory I. (4) Lecture, two hours; laboratory, six hours; outside study, four hours. Enforced requisites: course 100. Enforced corequisite: course 101B. Recommended: course 102B. Investigation of basic transport phenomena in 10 predetermined experiments, collection of data for statistical analysis and individually written technical reports and group presentations. Design and performance of one original experimental study involving transport, separation, or another aspect of chemical and biomolecular engineering. Basic statistics: mean, standard deviation, confidence limits, comparison of two means and of multiple means, linear and multiple variable linear regression, and brief introduction to factorial design of experiments. Oral and poster presentations. Technical writing of sections of technical reports and their contents; writing clearly,
109. Numerical and Mathematical Methods in Chemical and Biological Engineering. (4) Lecture, four hours; discussion, one hour; outside study, seven hours. Enforced requisite: Civil and Environmental Engineering M20 or Mechanical and Aerospace Engineering M20. Enforced corequisite: course 101A. Numerical methods for computation of solution of systems or linear and nonlinear algebraic equations, ordinary differential equations, and partial equations. Chemical and biomolecular engineering examples used throughout to illustrate application of these methods. Use of MATLAB as programming environment to write programs based on numerical methods to solve problems arising in chemical engineering. Letter grading.

110. Intermediate Engineering Thermodynamics. (4) Lecture, four hours; discussion, one hour; outside study, eight hours. Enforced requisite: course 102B. Principles and engineering applications of statistical and phenomenological thermodynamics. Determination of partition function in terms of simple molecular models and special spectroscopic data; nonequilibrium gases; phase transitions and adsorption; nonequilibrium thermodynamics and coupled transport processes. Letter grading.

C111. Cryogenics and Low-Temperature Processes. (4) Lecture, four hours; discussion, one hour; outside study, ten hours. Enforced requisites: courses 101A, 102B (or Materials Science 130). Fundamentals of cryogenics and cryoengineering science pertaining to industrial low-temperature processes. Basic approaches to analysis and approaches needed for operation of cryogenic systems; low-temperature behavior of matter, optimization of cryosystems and other special conditions. Concurrently scheduled with course C111. Letter grading.

C112. Polymer Processes. (4) Lecture, four hours; discussion, one hour; outside study, seven hours. Requisites: course 101A, Chemistry 30A. Formation of polymers, criteria for selecting reaction scheme, polymerization techniques, characterization of Mechanical properties. Rheology of macromolecules, polymer process engineering. Diffusion in polymeric systems. Polymers in biomedical applications and in microelectronics. Concurrently scheduled with course C212. Letter grading.

113. Air Pollution Engineering. (4) Lecture, four hours; preparation, two hours; outside study, six hours. Enforced requisites: courses 101C, 103 (or C125), 106 (or C115), 108A. Chemical engineering fundamentals as design of human and heterogeneous chemical reactors. Letter grading.

104B. Chemical and Biomolecular Engineering Laboratory II. (6) Lecture, four hours; laboratory, eight hours; outside study, five hours. Enforced requisites: courses 101C, 103, 104A. Course consists of four experiments in chemical engineering unit operations, each of two weeks duration. Students present their results both written and orally. Written requirements, laboratory report includes sections on theory, experimental procedures, scaleup and process design, and error analysis. Letter grading.

104C. Semiconductor Processing. (3) Lecture, four hours; outside study, five hours. Enforced requisite: course 101C. Enforced corequisite: course 104CL. Basic engineering principles of semiconductor unit operations, including fabrication and characterization of semiconductor devices. Investigation of processing steps used to make CMOS devices, including wafer cleaning, oxidation, diffusion, lithography, chemical vapor deposition, plasma etching, metallization, and statistical design of experiments and error analysis. Presentation of student results in both written and oral form. Letter grading.

104CL. Semiconductor Processing Laboratory. (3) Laboratory, four hours; outside study, five hours. Enforced requisite: course 101C. Enforced corequisite: course 104C. Series of experiments that emphasize basic engineering principles of semiconductor unit operation, including fabrication and characterization of semiconductor devices. Investigation of processing steps used to make CMOS devices, including wafer cleaning, oxidation, diffusion, lithography, chemical vapor deposition, plasma etching, and metallization. Hands-on device testing includes transistors, diodes, and capacitors. Letter grading.

106. Chemical Reaction Engineering. (4) Lecture, four hours; discussion, one hour; outside study, seven hours. Enforced requisites: courses 100, 101C, 102B. Fundamentals of chemical kinetics and catalysis. Introduction to chemical reaction engineering basics and heterogeneous chemical reactors. Letter grading.

107. Process Dynamics and Control. (4) Lecture, four hours; discussion, one hour; outside study, seven hours. Enforced requisites: courses 101C, 103 (or C125), 106 (or C115), 108A. Chemical and Environmental Engineering M20 (or Mechanical and Aerospace Engineering M20). Introduction to application of some mathematical and computing methods to chemical engineering design problems; use of simulation programs as automated method of performing steady state material and energy balance calculations. Letter grading.

108A. Process Economics and Analysis. (4) Lecture, four hours; discussion, one hour; outside study, seven hours. Enforced requisites: courses 103 (or C125), 106 (or C115). Principles of dynamic modeling and start-up behavior of chemical engineering processes. Chemical process control elements. Design and applications of chemical process computer control. Letter grading.

108B. Chemical Process Computer-Aided Design and Analysis. (4) Lecture, four hours; discussion, one hour; outside study, seven hours. Enforced requisites: courses 103 (or C125), 106 (or C115). Principles of dynamics modeling and start-up behavior of chemical engineering processes. Chemical process control elements. Design and applications of chemical process computer control. Letter grading.

122. Hydrogen. (4) Lecture, four hours; discussion, one hour; outside study, seven hours. Enforced requisite: Chemistry 20A. Electronic, physical, and chemical properties of hydrogen. Various methods of production, including production from water, reforming, electrolysis, and thermochemical cycles. Description in depth of several uses of hydrogen, in
including hydrogen combustion and hydrogen fuel cells. Concurrently scheduled with course C22B. Letter grading.

C135. Advanced Process Control. (4) Lecture, four hours; discussion, one hour; outside study, seven hours. Enforced requisites: course 107. Introduction to advanced control techniques. Topics include (1) Lyapunov stability for autonomous nonlinear systems including converse theorems, (2) input to state stability, interconnected systems, and small gain theorems, (3) design of feedback compensation for various classes of nonlinear systems, (4) model predictive control of linear and nonlinear systems, (5) advanced methods for tuning of classical controllers and (7) introduction to control of distributed parameter systems. Concurrently scheduled with course C235. Letter grading.


CM145. Molecular Biotechnology for Engineers. (4) (Same as Bioengineering CM145.) Lecture, three hours; laboratory, four hours; outside study, five hours; discussion, one hour; outside study, seven hours. Requisites: course 45. Selected topics in molecular biology that form foundation of biotechnology and biomedical engineering today. Topics include recombinant DNA technology, molecular research tools, manipulation of gene expression, directed mutagenesis and protein engineering, DNA-based diagnostics and DNA microarray techniques, and biological characteristics of nanoparticles, genomics and bioinformatics, isolation of human genes, gene therapy, and tissue engineering. Concurrently scheduled with course C240. Letter grading.

M153. Introduction to Microscale and Nanoscale Manufacturing Processes. (4) (Same as Mechanical Engineering M153.) Lecture, two hours; discussion, one hour; outside study, seven hours. Requisites: Chemistry 20A, Physics 1A, 1B, 1C, 4A, 4BL. Introduction to general manufacturing methods, mechanisms, constraints, and microfabrication and nanofabrication. Focus on concepts, physical and chemical processes, including lithography and nanofabrication techniques that have been broadly applied in industry and academia, including various polymers, biological, physical, chemical, and physical and chemical etching methods. Hands-on experience for fabricating microstructures and nanostructures in modern construction. Letter grading.

188. Special Courses in Chemical Engineering. (4) Seminar, four hours; outside study, eight hours. Special topics in chemical engineering for undergraduate students taught on experimental or temporary basis, such as those taught by resident and visiting faculty members. May be repeated once for credit with topic or instructor change. Letter grading.

194. Research Group Seminars: Chemical Engineering. (4) Seminar, four hours; outside study, eight hours. Designed for and open only to students who are part of a research group. Discussion of research methods and current literature in field. May be repeated for credit. Letter grading.

199. Directed Research in Chemical Engineering. (2 to 8) Tutorial, to be arranged. Limited to juniors/seniors. Supervised individual research or investigation of selected topic under guidance of faculty mentor. Culminating experience required. Letter grading. May be repeated for credit with school approval. Individual contract required; enrollment petitions available in Office of Academic and Student Affairs. Letter grading.

Graduate Courses

200. Advanced Engineering Thermodynamics. (4) Lecture, four hours; outside study, eight hours. Requisite: course 102B. Phenomenological and statistical thermodynamics of chemical and physical systems with engineering applications. Presentation of role of atomic and molecular spectra and intermolecular forces in interpretation of thermodynamic properties of gases, liquids, solids, and plasmas. Letter grading.

201. Methods of Molecular Simulation. (4) Lecture, four hours; outside study, eight hours. Requisite: course 201C. Modern simulation techniques for classical molecular systems. Monte Carlo and molecular dynamics in various ensembles. Applications to liquids, solids, and polymers. Letter grading.

210. Advanced Chemical Reaction Engineering. (4) Lecture, four hours; outside study, eight hours. Requisites: courses 101C, 106. Principles of chemical reaction engineering and emphasis on simulation with complex chemical systems; non-reactant species; reactive transport and deposition, optical properties, ex-}

221. Cryogenic Systems and Low-Temperature Processes. (4) Lecture, four hours; outside study, seven hours. Fundamentals of cryogenics and cryoengineering science pertaining to industrial low-temperature processes. Basic approaches to analysis of cryogenic systems; low-temperature behavior of matter, vaporization of cryosystems and other special conditions. Concurrently scheduled with course C112. Letter grading.

212. Polymer Processes. (4) Lecture, four hours; discussion, one hour; outside study, seven hours. Requisites: course 101A, Chemistry 30A. Formation of polymers, criteria for selecting reaction scheme, polymerization techniques and characterization. Mechanical properties, synthesis of polymer processes. Diffusion in polymeric systems. Introduction to biomedical applications and in microelectronics. Concurrently scheduled with course C112. Letter grading.

CM214. Electrochemical Processes. (4) (Formerly numbered C214J.) (Same as Materials Science CM214.) Lecture, four hours; discussion, one hour; outside study, seven hours. Requisites: course 102B. Mechanical and Aerospace Engineering 105A (or Materials Science 130). Fundamentals of electrochemistry and engineering applications to industrial electrochemical processes. Primary emphasis on fundamental approach to analyze electrochemical processes. Specific topics include electrochemical reactions on metal and semiconductor surfaces, electrolyte electrodeposition, electron transfer, electroanalysis, fuel cells, aqueous and non-aqueous batteries, solid-state electrochemistry. May be concurrently scheduled with course C115. Letter grading.

C215. Biochemical Reaction Engineering. (4) (Same as Bioengineering M215.) Lecture, four hours; discussion, one hour; outside study, seven hours. Enforced requisite: course 101C. Use of previously learned concepts of biophysical chemistry, thermodynamics, transport phenomena, and reaction kinetics to develop tools needed for technical design and economic analysis of biological reactors. May be concurrently scheduled with course C215. Letter grading.

C216. Surface and Interface Engineering. (4) Lecture, four hours; discussion, one hour; outside study, seven hours. Introduction to surfaces and interfaces of engineering importance; energy balance at surface and thin films for solid-state electronic devices. Topics include classification of crystals and surfaces, analysis of structure and composition of crystals and their surfaces, introduction to industrial electrochemistry, surface engineering applications, including catalytic surfaces, interfaces in microelectronics, and solid-state laser. May be concurrently scheduled with course C217. Letter grading.

C217. Electrochemical Engineering. (4) Lecture, four hours; outside study, eight hours. Requisites: course 114. Transport phenomena in electrochemical systems; relationships between molecular transport, convec-}

C218. Multimedia Environmental Assessment. (4) Lecture, four hours; discussion, one hour; preparation, two hours; outside study, five hours. Recommended requisites: courses 101C, 102B. Pollutant sources, emission transport and deposition, optical properties, ex-}


C221. Membrane Science and Technology. (4) Lecture, four hours; outside study, eight hours. Introduction to membrane processes. Stochastic optimization, stochastic linear and dynamic programming. S/U or letter grading.


C223. Design for Environment. (4) Lecture, four hours; outside study, eight hours. Limited to graduate chemical engineering, materials science and engineering, or Master of Engineering program students. Design of sustainable systems to meet environmental objectives: life-cycle inventories; lifecycle impact assessment; design for energy efficiency; design for waste minimization, computer-aided design tools, materials selection methods. Letter grading.

C224. Cell Material Interactions. (4) Lecture, four hours; discussion, one hour; outside study, seven hours. Requisites: Life Sciences 2, 3, 23L. Introduction to the design and synthesis of materials for regenera- tive medicine, in vitro cell culture, and drug delivery. Biological principles of cellular microenvironment and design of extracellular matrix analogs using biological and engineering principles. Biomaterials as growth factor, and DNA and siRNA delivery as therapeutics and to facilitate tissue regeneration. Use of stem cells in tissue engineering. Concurrently scheduled with course C214. Letter grading.
CM225. Bioseparations and Bioprocess Engineering. (4) (Same as Bioengineering M225.) Lecture, four hours; discussion, one hour; outside study, seven hours. Enrolled corequisite: course 101C. Separation strategies, unit operations, and economic factors used to design processes for isolating, purifying, and purifying biomolecules. Examining specific cases of interest, consideration of scale-up of processes to industrial applications. Concurrently scheduled with course C125. Letter grading.

CM227. Synthetic Biology for Biofuels. (4) (Same as Chemistry CM227.) Lecture, four hours; discussion, one hour; outside study, seven hours. Requisite: Chemistry 101. Basic principles of genetic engineering, directed towards applications in the fields of synthetic biology and synthetic metabolic engineering. Laboratory, one hour; discussion, one hour; outside study, seven hours. Enrolled corequisite course 101C. Letter grading.

C228. Hydrogen. (4) Lecture, four hours; discussion, one hour; outside study, seven hours. Enrolled requisite: Chemistry 20A. Electronic, physical, and chemical properties of hydrogen and deuterium. Molecular-beam studies including hydrogen combustion and hydrogen fuel cells. Concurrently scheduled with course CM127. SU or letter grading.


C231. Molecular Dynamics. (4) Lecture, four hours; outside study, eight hours. Requisite: course 106 or 110. Analysis and design of molecular-beam systems. Molecular-beam sampling of reactive mixtures in combustion and chemical synthesis. Molecular-beam measurements of gas-surface interactions, including energy accommodation and heterogeneous reactions. Applications to air pollution control and to catalysis. Letter grading.


C233. Frontiers in Biotechnology. (2) Lecture, one hour. Requisite: Life Sciences 3. Integration of science and business in the context of biotechnology. Academic research leading to licensing and founding of companies that turn research breakthroughs into marketable products. Invited lecturers from academia and industry cover emerging areas of biotechnology from combinative science, engineering, and business points of view. SU or letter grading.


C235. Advanced Process Control. (4) Lecture, four hours; discussion, one hour; outside study, seven hours. Enrolled requisite: course 107. Introduction to advanced process control. Topics include (1) Lyapunov stability for autonomous nonlinear systems including converse theorems, (2) input to state stability for interconnected systems, and small gain theorems, (3) design of nonlinear and robust controllers for various classes of nonlinear systems, (4) model predictive control of linear systems, (5) advanced methods for tuning of classical controllers, and (6) introduction to control of distributed parameter systems. Concurrently scheduled with course C135. Letter grading.

C236. Chemical Vapor Deposition. (4) Lecture, four hours; outside study, eight hours. Requisites: courses 210, 212. Chemical vapor deposition is widely used to deposit thin films that comprise microelectronic devices. Topics include reactor design, transport phenomena, gas and surface chemical kinetics, structure and composition of deposited films, and relationship between process conditions and film properties. Letter grading.


CM245. Molecular Biotechnology for Engineers. (4) (Same as Bioengineering CM245.) Lecture, four hours; discussion, one hour; outside study, seven hours. Requisites: courses 106, 200, 232. Combining genetics with engineering concepts in a foundation of biotechnology and biomedical industry today. Topics include recombinant DNA technology, molecular research tools, manipulation of gene expression in bacteria, foreign gene expression in eukaryotic living cells, DNA-based diagnostics and DNA microarrays, antibody and protein-based diagnostics, genomics and bioinformatics, isolation of human genes, gene therapy, and tissue engineering. Concurrently scheduled with course CM145. Letter grading.


250. Computer-Aided Chemical Process Design. (4) Lecture, four hours; outside study, eight hours. Requisite: course 108B. Application of optimization methods in chemical process design; computer aids in process engineering; process modeling; systematic flowsheet invention; process synthesis; optimal design and operation of large-scale chemical processing systems. Letter grading.


270. Principles of Reaction and Transport Phenomena. (4) Lecture, four hours; laboratory, eight hours. Fundamentals in reaction phenomena, chemical reaction kinetics, and thermodynamics at the molecular level. Topics include Boltzmann equation, microscopic chemical kinetics, transition state theory, and statistical analysis. Examination of engineering applications related to state-of-art research areas in chemical engineering. Letter grading.

271. Advanced Research in Semiconductor Manufacturing. (6) Laboratory, nine hours; outside study, nine hours. Limited to graduate chemical engineering students in MS semiconductor manufacturing option. Supervision and participation in semiconductor materials and devices. Letter grading.

M280A. Linear Dynamic Systems. (4) (Same as Electrical and Computer Engineering M240A and Mechanical and Aerospace Engineering M270A.) Lecture, four hours; outside study, eight hours. Requisites: Electrical and Computer Engineering 240B or Mechanical and Aerospace Engineering 270A. Introduction to the theory and application of linear dynamic systems. Linear algebra concepts such as eigenvectors and eigenvalues, singular values, Cayley/Hamilton theorem, Jordan form; solution of state equations; stability, controllability, observability, reachability, and minimality. Stabilization design via state feedback and observers; separation principle. Connections with transfer function techniques. Letter grading.

M290C. Optimal Control. (4) (Same as Electrical and Computer Engineering M242A and Mechanical and Aerospace Engineering M270C.) Lecture, four hours; outside study, eight hours. Requisites: Electrical and Computer Engineering 240B or Mechanical and Aerospace Engineering 270A. Introduction to the theory and application of linear dynamic systems. Linear algebra concepts such as eigenvectors and eigenvalues, singular values, Cayley/Hamilton theorem, Jordan form; solution of state equations; stability, controllability, observability, reachability, and minimality. Stabilization design via state feedback and observers; separation principle. Connections with transfer function techniques. Letter grading.

M290D. Analysis and Control of Infinite Dimensional Systems. (4) Lecture, four hours; outside study, eight hours. Requisites: courses M280A, M282A. Designed for graduate students. Introduction to advanced dynamical analysis and controller synthesis methods for nonlinear infinite dimensional systems. Topics include (1) linear operator and stability theory (basic results on Banach and Hilbert spaces, semigroup theory, convergence theory in function spaces), (2) nonlinear model reduction (linear and nonlinear Galerkin method, proper orthogonal decomposition), (3) nonlinear and robust control of nonlinear hyperbolic and parabolitic partial differential equations (PDEs), (4) applications to transport-reaction processes. Letter grading.

284A. Optimization in Vector Spaces. (4) Lecture, four hours; outside study, eight hours. Requisites: courses M280A, M282A. Designed for graduate students. Introduction to advanced dynamical analysis and controller synthesis methods for nonlinear infinite dimensional systems. Topics include (1) linear operator and stability theory (basic results on Banach and Hilbert spaces, semigroup theory, convergence theory in function spaces), (2) nonlinear model reduction (linear and nonlinear Galerkin method, proper orthogonal decomposition), (3) nonlinear and robust control of nonlinear hyperbolic and parabolitic partial differential equations (PDEs), (4) applications to transport-reaction processes. Letter grading.

286. Analysis and Control of Infinite Dimensional Systems. (4) Lecture, four hours; outside study, eight hours. Requisites: courses M280A, M282A. Designed for graduate students. Introduction to advanced dynamical analysis and controller synthesis methods for nonlinear infinite dimensional systems. Topics include (1) linear operator and stability theory (basic results on Banach and Hilbert spaces, semigroup theory, convergence theory in function spaces), (2) nonlinear model reduction (linear and nonlinear Galerkin method, proper orthogonal decomposition), (3) nonlinear and robust control of nonlinear hyperbolic and parabolitic partial differential equations (PDEs), (4) applications to transport-reaction processes. Letter grading.

290. Special Topics. (2 to 4) Seminar, four hours. Requisites for each offering announced in advance by department. Advancement of one or more aspects of chemical engineering, such as chemical process dynamics and control, fuel cells and batteries, membrane transport, advanced chemical engineering analysis, polymerization, optimization in chemical process design. May be repeated for credit with topic change. Letter grading.
CHEMISTRY AND BIOCHEMISTRY

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Scope and Objectives

Chemistry is concerned with the composition, structure, and properties of substances, the transformations of these substances into others by reactions, and the kinds of energy changes that accompany these reactions. The Department of Chemistry and Biochemistry is organized in four interrelated and overlapping subdisciplines that deal primarily with the chemistry of inorganic substances (inorganic chemistry), the chemistry of carbon compounds (organic chemistry), the chemistry of living systems (biochemistry), and the physical behavior of substances in relation to their structures and chemical properties (physical chemistry). The
Chemistry/Materials Science major is designed for students who are interested in the applications of chemistry for the design, synthesis, and study of new materials.

Undergraduate Study
The department offers four majors: Chemistry (with concentrations in chemistry and physical chemistry), Biochemistry, General Chemistry, and Chemistry/Materials Science. The Chemistry and Biochemistry majors are designed to prepare students for graduate studies in each field, for entry into professional schools in the health sciences, and for careers in industries and businesses that depend on chemically and biochemically based technology. The General Chemistry major is intended for students who wish to acquire considerable chemical background in preparation for careers outside chemistry. The Chemistry/Materials Science major provides appropriate preparation for graduate studies in fields that emphasize research involving chemistry, engineering, and applied science.

Each course used to fulfill any of the requirements for any of the departmental majors must be taken for a letter grade. Seminar courses, individual study courses, and research courses (e.g., 194, 199) may not be applied toward the requirements for the majors.

Requirements for the majors are outlined below. For additional information, contact the Undergraduate Office in 4006 Young Hall.

Admission
Students entering UCLA directly from high school who declare a Chemistry, Biochemistry, or Chemistry/Materials Science major at the time of application are automatically admitted to that major.

UCLA students who wish to enter one of the majors must have a minimum grade of C- in each of the preparation for the major courses completed and a combined grade-point average of at least 2.0 in those courses. Grades in any completed courses for the major must also average at least 2.0.

Transfer Students
Transfer applicants to the departmental majors with 90 or more units must complete the following introductory courses prior to admission to UCLA: one year of general chemistry with laboratory for majors, one and one-half years of calculus, and either one year of calculus-based physics with laboratory or one year of organic chemistry for majors. Biochemistry majors must also complete courses equivalent to Life Sciences 2, 3, and 4 OR 7A, 7B, and 7C; Chemistry majors should have completed the equivalent of Mathematics 32B; Chemistry/Materials Science majors in the organic materials concentration must complete a full year of organic chemistry with laboratory in addition to the other courses listed above.

Entering transfer students who have successfully completed a year course (including laboratory) in general college chemistry intended for science and engineering students should enter course 30A. Transfer students should contact the Undergraduate Office in 4006 Young Hall for assistance with the articulation of transfer coursework.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

Advanced Placement in Chemistry
Students who have taken the Advanced Placement (AP) Chemistry Examination and obtained a score of 4 or 5 receive 8 units of chemistry credit and may petition for chemistry and biochemistry equivalency, or may take course 20A at UCLA. If students received a score of 3 on the AP Chemistry Examination, they receive 8 units of chemistry credit but no course equivalency.

Credit Limitations
Students may not take or repeat a chemistry or biochemistry course for credit if it is a requisite for a more advanced course for which they already have credit. This applies in particular to the repetition of courses (e.g., if students wish to repeat Chemistry and Biochemistry 20A, they must do so before completing course 20B).

Chemistry BS
The Chemistry major is for students who intend to pursue a career in chemistry.

Learning Outcomes
The Chemistry major has the following learning outcomes:

• Demonstrated broad mastery of fundamental chemical knowledge, in-depth problem solving, critical thinking, and analytical reasoning in analytical, inorganic, organic, and physical chemistry, and in research
• Use of computers in data acquisition and processing
• Use of software tools for exploration and investigation of chemistry principles and models
• Understanding of the role of chemistry in addressing contemporary societal and global issues
• Performance of basic laboratory techniques, description of working principles, and knowledge of how to operate modern chemical instrumentation
• Use of chemical information to search chemical safety databases
• Conduct experimental work and handle all chemicals in a safe manner following OSHA-approved regulations and procedures
• Work effectively in groups and teams of diverse peers to solve scientific problems
• Search and access current and prior research
• Communication of chemical knowledge and experimental results through written reports and oral presentations

Chemistry Concentration
Preparation for the Major

Required: Chemistry and Biochemistry 20A (or 20AH), 20B (or 20BH), 20L, 30A, 30AL, 30B, 30BL, 30C, 30CL; Mathematics 31A, 31B, 32A, 32B, 33A (33B highly recommended); Physics 1A, 1B, and 1C (or 1AH, 1BH, and 1CH), 4BL.

The Major
Required: Chemistry and Biochemistry 110A, either 110B or 111B, 113A, 114 (or 114H), either 136 or 144, 153A, 153L, 171, 172; and two other upper-division or graduate courses in the department, including at least one additional laboratory course from 136, 144, 154, 174, 184, 185.

Physical Chemistry Concentration
The physical chemistry concentration is designed primarily for students who are interested in attending graduate school in physical chemistry/physics or related areas.

Preparation for the Major
Required: Chemistry and Biochemistry 20A (or 20AH), 20B (or 20BH), 20L, 30A, 30AL, 30B, 30BL; Mathematics 31A, 31B, 32A, 32B, 33A, 33B; Physics 1A, 1B, and 1C (or 1AH, 1BH, and 1CH), 4BL.

The Major
Required: Chemistry and Biochemistry 110A, 110B, 113A, 113B, 114 (or 114H), 153A, 171, 172; one additional upper-division chemistry, electrical engineering, or physics laboratory course; and three elective upper-division or graduate courses approved by the physical chemistry adviser. Refer to the Undergraduate Office website for a list of approved electives.

By the junior year, students are strongly encouraged to join a research group within the physical chemistry division to obtain firsthand experience with state-of-the-art physical chemistry research.

Biochemistry BS
The Biochemistry major is for students preparing for careers in biochemical or related fields requiring extensive preparation in both chemistry and biology.

Learning Outcomes
The Biochemistry major has the following learning outcomes:

• Understanding of chemical structures, bonding, and conformational properties of biological molecules
• Understanding of higher-level organization of cellular components, rules of subcellular organelles, and compartmentalization
• Understanding of mechanisms and energetics of biochemical reactions and the basis for enzymatic catalysis, including the roles of organic cofactors and metals in such processes
• Understanding of ways that cellular events are energetically coupled in key processes
• Understanding of regulatory and response mechanisms that operate in biological systems to achieve homeostasis and conduct signaling within and between cells
• Understanding of the basis for molecular evolution and ways that genetic information is encoded and transmitted in biology
• Understanding of the roles of DNA and protein sequence information in inferring biological function and common ancestry
• Familiarity with laboratory methods for purifying, identifying, and characterizing biomolecules, including protein and nucleic acids
• Familiarity with assays for activity and binding
• Familiarity with basic laboratory methods for DNA manipulation
• Understanding of the roles of hypotheses and models in investigating scientific ideas
• Understanding of the critical importance of controls in interpreting experimental data

Preparation for the Major
Required: Chemistry and Biochemistry 14A (or 14AE) and 14B (or 14AE), or 20A (or 20AH) and 20B (or 20BH), 20L, 30A, 30AL, 30B, 30BL, 30C, 30CL; Life Sciences 7A; Mathematics 31A, 31B, 32A, 32A, 33A; Physics 1A, 1B, and 1C (or 1AH, 1BH, and 1CH) and 4BL, or 5A, 5B, and 5C.

Students must also complete one of two life sciences sequences—either Life Sciences 2, 3, 4, and 23L, or 7A, 7B, 7C, and 23L. They may not substitute courses in either sequence.

The Major
Required: Chemistry and Biochemistry 110A, 153A, 153B, 153C, 153L, 154, 156; one additional upper-division or graduate course in chemistry and biochemistry; and three elective upper-division or graduate courses (12 units) approved by the undergraduate adviser (Microbiology, Immunology, and Molecular Genetics 101 highly recommended). Refer to the Undergraduate Office website for a list of approved electives.

General Chemistry BS
The General Chemistry major is for students who wish to acquire considerable chemical background in preparation for careers in secondary school chemistry teaching. The major may be appropriate for some students who plan to enter other chemistry-related careers that involve teaching chemistry to nonchemists. This major cannot be taken as part of a double major or with the Science Education minor. Students must declare the major before reaching 135 units.

Learning Outcomes
The General Chemistry major has the following learning outcomes:

• Demonstrated mastery of fundamental chemical knowledge in analytical, inorganic, organic, physical chemistry, and biochemistry through in-depth problem solving, critical thinking, and analytical reasoning
• Effective communication of chemical knowledge through written materials, oral presentations, and teaching in a variety of settings
• Use of information resources for exploration and investigation of chemistry principles and models

• Understanding of the role of chemistry in addressing contemporary societal and global issues
• Ability to perform and teach basic laboratory procedures and techniques involving the synthesis of molecules
• Ability to perform and teach the measurement of chemical properties, structures, and phenomena
• Knowledge of how to handle chemicals in a safe manner following OSHA-approved regulations and procedures
• Knowledge of how to use information resources to search and access safety databases

Preparation for the Major
Required: Chemistry and Biochemistry 20A (or 20AH), 20B (or 20BH), 20L, 30A, 30AL, 30B, 30BL, 30C, 30CL; Life Sciences 7A; Mathematics 31A, 31B, 32A, 33A; Physics 1A, 1B, and 1C (or 1AH, 1BH, and 1CH), and 4BL (or 5A, 5B, and 5C).

Students must complete the preparation courses with at least a 2.0 grade-point average.

The Major
Required: Chemistry and Biochemistry 110A, 153A, 153L, 171, and 192A or 192B; three additional upper-division courses in the department (at least one must be a laboratory course); one course from Atmospheric and Oceanic Sciences 101, 102, 103, 104, Earth, Planetary, and Space Sciences 101, 113; three courses from Education M102, M108, C125, 127, 129, 130, 132, 133, 164, 166, M194A; one course from Environmental Health Sciences C152D, C164, Science Education 100SL. A 2.0 grade-point average is required in all upper-division courses in the department.

Chemistry/Materials Science BS
The Chemistry/Materials Science major is designed for students who are interested in chemistry with an emphasis on material properties and provides students the opportunity to gain expertise in both chemistry and the science and engineering in materials such as semiconductors, photonic materials, polymers, biomaterials, ceramics, and nano-scale structures. Students explore the reactivity of such materials in different environments and gain understanding of how chemical compositions affect properties. The major provides appropriate preparation for graduate studies in many fields emphasizing interdisciplinary research, including chemistry, engineering, and applied science.

Learning Outcomes
The Chemistry/Materials Science major has the following learning outcomes:

• Understanding of the foundations of materials chemistry including nanoscience, materials synthesis, and materials processing
• Understanding of different methods for materials characterization, measurement of materials properties, and general structure/function relationships
• Familiarity with laboratory methods for materials chemistry and practical laboratory experience with such methods, including X-ray diffraction, optical absorption and fluorescence spectroscopies, electrical measurements, and electron and scanning probe microscopies
• Understanding of basic operational principles for a broad range of practical devices (e.g., LEDs, photovoltaics, electrochemistry, etc.) from a fundamental materials perspective
• Safely and effectively work in a materials laboratory setting
• Knowledge of how to handle chemicals in a safe manner following OSHA-approved regulations and procedures
• Knowledge of how to use information resources to search and access safety databases

Preparation for the Major
Required: Chemistry and Biochemistry 20A (or 20AH), 20B (or 20BH), 20L, 30A, 30AL, Mathematics 31A, 31B, 32A, 32B, 33A (33B highly recommended), Physics 1A, 1B, 1C, 4BL.

The Major
Required: Chemistry and Biochemistry 110A, 113A, 117, 1172 or C180 or C181, 185, 4 units from 110B, C113B, 172, C174, C175, C176, C180, C181; Materials Science and Engineering 104, 110, 110L, 120, 121 or 150 or 160, 131, 8 units from C111, 121, 122, 132, 150, 160, 162, CM180; 7 laboratory units from Chemistry and Biochemistry 114, 184, Materials Science and Engineering 121L, 131L, 161L.

The following courses may be applied only once toward the major: Chemistry and Biochemistry 172, C180, C181, Materials Science and Engineering 121, 150, 160.

Organic Materials Concentration
Preparation for the Major
Required: Chemistry and Biochemistry 20A (or 20AH), 20B (or 20BH), 20L, 30A, 30AL, 30B, 30BL, 30C, 30CL, Mathematics 31A, 31B, 32A, 32B, 33B, Physics 1A, 1B, 1C, 4BL.

The Major
Required: Chemistry and Biochemistry 110A, 113A, 136, 171, 185, 4 units from 110B, C113B, C143A, 144, 172, C174, C175, C176, C180, C181; Materials Science and Engineering 104, 110, 110L, 120, 150, 4 units from C111, 120, 121, 122, 131, 132, 160, 162, CM180; 7 laboratory units from Chemistry and Biochemistry 114, 184, Materials Science and Engineering 121L, 131L, 161L.
Honors Program

Admission

The honors program provides exceptional Chemistry and Biochemistry Department majors with the opportunity to do research culminating in an honors thesis. Junior and senior majors who have completed all university-level coursework, including all preparation courses and requirements for the major, with an overall grade-point average of 3.5 or better and a 3.5 GPA or better in the required major courses, may apply for admission. Students must have the sponsorship of an approved faculty adviser. For additional information and application forms, students should contact the Undergraduate Advising Office, 4006 Young Hall, early in their educational planning. Completed applications must be submitted at least two weeks prior to the term in which students plan to begin the honors program.

Requirements

The core of the program consists of at least one approved undergraduate seminar course from Chemistry and Biochemistry 193A or 193B and three research courses (12 units minimum) from 196A, 196B, or 199, culminating in a thesis. To qualify for graduation with departmental honors, students must satisfactorily complete all requirements for the honors program and the major and obtain a cumulative grade-point average of 3.5 or better in coursework required for the major. On recommendation of the faculty sponsor, and with the approval of the thesis by the departmental honors committee, students are awarded no honors, honors, or highest honors. Students who have a grade-point average of 3.6 or better, both overall and in the major, and demonstrated exceptional accomplishment on the research thesis are awarded highest honors at the discretion of the departmental honors committee.

Computing Specialization

Majors in Chemistry and Biochemistry may select a specialization in Computing by (1) satisfying all the requirements for a bachelor’s degree in the specified major; (2) completing Program in Computing 10A, 10B, and one course from 10C, 15, 20A, 30, or 60, and (3) completing two computational chemistry courses from Chemistry and Biochemistry C126A, C145, CM160A. Courses need to be completed with a combined grade-point average of at least 2.0. Students must petition for admission to the program and are advised to do so after they complete Program in Computing 108 (petitions should be filed in the Undergraduate Office). Students graduate with a bachelor’s degree in their major and a specialization in Computing.

Graduate Study

Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Division website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Graduate Degrees

The Department of Chemistry and Biochemistry offers Master of Science (MS) Major and a specialization in Computing. Complete Program in Computing 10B (petitions for the program and are advised to do so after they are completed with a combined grade-point average of at least 2.0. Students must petition for admission to the program and are advised to do so after they complete Program in Computing 108 (petitions should be filed in the Undergraduate Office). Students graduate with a bachelor’s degree in their major and a specialization in Computing.

Chemistry and Biochemistry

Lower-Division Courses

3. Material World. (4) Lecture, three hours; discussion, one hour. Focus on most important advances made by humans in developing new molecules and materials, and how these discoveries affect our everyday life. These include development of paints, plastics, metals, fuels, drugs, energetic materials, radioactive substances, poisons, vaccines, and many more. Connections between interplay of science, history, art, and socioeconomic factors driving technological development. Discussion emphasizes projected future of these emerging technologies. P/NP or letter grading.

4A. Chemistry and Your Health. (2) Lecture, two hours. Recent health trends and how they are portrayed in pop culture and media. Examination of scientific explanations behind current health crazes and determination if there is validity to these claims. Discussion of chemical principles, such as basic arrow pushing mechanisms, radical oxidations, etc. Investigation of variety of topics including vitamins, health and beauty supplements, sugar alternatives, detox cleanses, and traditional medicines. Relevant for students who have taken organic chemistry classes and those who are interested in learning basic organic chemistry concepts. No college-level chemistry is required. P/NP or letter grading.

4B. What’s Cooking Chemistry in the Kitchen. (4) Lecture, three hours; discussion, two hours. What is difference between baking and cooking? Why do the same recipes call for butter, margarine, or shortening? Answers to these questions and more through dive into chemistry happening every day in your kitchen. Study of macromolecules (carbohydrates, proteins, lipids), their chemical properties (hydrophobicity, pH, melting point, degree of saturation), and how to use these properties to control texture and taste in food. Chemical concepts are learned in fun, intuitive way, while use of scientific method in improving food preparations is also learned. Opportunities to participate in scientific process through weekly at home experiments in kitchen, and creative research project. P/NP or letter grading.

7. Nanoscience and Nanotechnology Laboratory. (2) Seminar, discussion, and laboratory, 3 hours. Limited to high school students. Key concepts of nanoscience and nanotechnology, including various approaches to nanofabrication (bottom-up and top-down), fabrication of nanostructures and devices, collection of scientific data using those devices, analysis of data, and presentation of student results. Offered in summer only. P/NP grading.

8. Applications of Nanoscience. (2 to 4) Seminar, discussion, laboratory, and field trip, 30 to 60 hours. Limited to high school students. Introduction of advanced concepts of nanoscience and nanotechnology, with emphasis on applications of nanoscience and nanotechnology in other research fields and industries. Laboratories introduce students to research methods, experiment development, scientific writing, and presentation skills. Students devise and execute their own exploratory nanoscience experiments, and present them to technical audience. Offered only as part of Summer Institute. P/NP grading.

14A. General Chemistry for Life Scientists I. (4) Lecture, three hours; discussion, one hour. Preparation for high school chemistry or equivalent background and three and one half years of high school mathematics. Requisite: completion of Chemistry Diagnostic Test. Enforced corequisite: Life Sciences 30A or Mathematics 3A or 31A or score of 48 or better on Mathematics Diagnostic Test. Not open to students with credit for course 20A. Introduction to physical and general chemistry principles; atomic structure based on quantum mechanics; atomic properties; trends in periodic table; chemical bonding (Lewis structures, VSEPR theory, hybridization, and molecular orbital theory); coordination compounds; properties of inorganic and organic acids, bases, buffers. P/NP or letter grading.

14A. General Chemistry for Life Scientists II—Enhanced. (4) Lecture, three hours; discussion, two hours. Preparation: high school chemistry or equivalent background and three and one half years of high school mathematics. Enforced corequisite: Life Sciences 30A or Mathematics 3A or 31A or score of 48 or better on Mathematics Diagnostic Test. Not open to students with credit for course 20A or 30A. Chemical equilibria in gases and liquids, acid-base equilibria; phase changes; thermochemistry; first, second, and third laws of thermodynamics; free energy changes; electrochemistry and its role as energy source; chemical kinetics, including catalysis, reaction mechanisms, and enzymes; use of molecular modeling software to illustrate molecular structures and their relative energies. P/NP or letter grading.

14B. General Chemistry Laboratory A. (3) Lecture, two hours; discussion, two hours. Enforced prerequisite: course 14A and grade of C– or better. Enforced corequisite or corequisite: Life Sciences 30B or Mathematics 3B or 31B with grade of C– or better. Not open to students with credit for course 14B or 30B or 31B. Introduction of concepts in physical chemistry that are critical for understanding of molecular basis of life. Includes concepts in thermodynamics, which are required to predict what chemical reactions occur spontaneously, and concepts in kinetics, which are required to predict reaction rate. P/NP or letter grading.

14BL. General and Organic Chemistry Laboratory I. (3) Lecture, one hour; laboratory, three hours. Enforced prerequisite: course 14A or 20A or 20AH with grade of C– or better. Enforced prerequisite or corequisite: Life Sciences 30B or Mathematics 3B or 31B with grade of C– or better. Not open to students for credit for course 14B or 20A or 20AH. Introduction to volumetric, spectrophotometric, and potentiometric analysis. Use and preparation of buffers and pH meters. Synthesis and kinetics techniques using compounds of interest to students in life sciences. P/NP or letter grading.

14C. Structure of Organic Molecules. (4) Lecture, three hours; discussion, one hour. Enforced prerequisite: course 14B with grade of C– or better. Not open to students with credit for course 30A. Continuing studies in structure of organic molecules, with emphasis on biological applications. Resonance, stereochemistry, conjugation, and aromaticity: spectroscopy (NMR, IR, and mass spectrometry); introduction to effects of structure on physical and chemical properties; survey of biomolecular structure. P/NP or letter grading.
The document contains a list of course descriptions and descriptions of various laboratories and seminars in the fields of chemistry and biochemistry. The courses are organized into sections, with each section containing a brief summary of the course content, prerequisites, and grading policies. The sections include Chemical Principles, Organic Chemistry, Physical Chemistry, and more, each with detailed descriptions of the course content and requirements. The text is a mix of natural and technical language, with some technical terms and equations interspersed throughout. The document appears to be a part of a larger academic catalog or course guide, providing students with information about courses offered, prerequisites, and grading policies. The text is well-organized, making it easy for students to navigate and find the information they need.
development. Study of fundamental concepts of transition metal catalysis and how catalysis has played transformative role in synthesis of modern medicines. Particular attention throughout to discussion of case studies that emphasize broad impact of medicinal chemistry and importance of catalysis in drug discovery. Highlights how organic chemistry can impact world around us, particularly in development of pharmacueticals. P/NP or letter grading.

103. Environmental Chemistry. (4) Lecture, four hours per week; discussion, one hour. Requisites: courses 30B, 30BL, 110A, 153A (or 153AH), 153L. Chemical aspects of air and water pollution, solid waste disposal, energy, and radioactivity. Techniques of environmental actions in effect and environment of chemical processes on environment. P/NP or letter grading.

105. Introduction to Chemistry of Biology. (4) Lecture, three hours; discussion, one hour. Requisite: course 153A with grade of C– or better. Introduction to chemical biology. Topics include computational chemical biology, utility of synthesis in biochemical research, peptidomimetics, designed reagents for cellular imaging, natural product biosynthesis, protein engineering and directed evolution, cell biology of metal ions, imaging metal ions in cells, metal-containing drugs. Concurrently scheduled with course CM205A. Letter grading.

117. Orgonometallic Chemistry. (4) Lecture/discussion, three hours. Enforced requisite or corequisite: course 172. Survey of synthesis, structure, and reactivity (emphasizing mechanistic approach) of compounds containing transition metal bonded to elements selected from main group metals, metalloids, and transition metals, including olefin complexes and metal carbonyls; applications in catalysis and organic synthesis. Concurrently scheduled with course C207. P/NP or letter grading.

119A. Physical Chemistry: Chemical Thermodynamics. (4) Lecture, three hours; discussion, one hour; tutorial, one hour. Requisites: course 20B, Mathematics 1A, 1B, and 1C (may be taken concurrently), or 1AH, 1BH, and 1CH (may be taken concurrently), or 5A, 5B, and 5C (may be taken concurrently), or 6A, 6B, and 6C (may be taken concurrently). Fundamentals of thermodynamics, chemical and phase equilibria, thermodynamics of solutions, electrochemistry. P/NP or letter grading.

119B. Physical Chemistry: Introduction to Statistical Mechanics and Kinetics. (4) Lecture, three hours; discussion, one hour; tutorial, one hour. Requisites: courses 20B, Mathematics 1A, 1B, and 1C (may be taken concurrently), or 1AH, 1BH, and 1CH (may be taken concurrently), or 5A, 5B, and 5C (may be taken concurrently), or 6A, 6B, and 6C (may be taken concurrently). Fundamentals of statistical thermodynamics, equilibrium structure and free energy, relaxation and transport phenomena, macroscopic chemical kinetics, molecular-level reaction dynamics. P/NP or letter grading.

113A. Environmental Chemistry: Introduction to Quantum Mechanics. (4) Lecture, three hours; discussion, one hour. Requisites: course 20B, Mathematics 32A, 32B, 33A, Physics 1A, 1B, and 1C, or 1AH, 1BH, and 1CH, or 5A, 5B, and 5C, or (may be taken concurrently), or 6A, 6B, and 6C (may be taken concurrently). Fundamentals of thermochemistry, chemical and phase equilibria, thermodynamics of solutions, electrochemistry. P/NP or letter grading.

118. Colloidal Dynamics Laboratory. (4) Lecture, two hours; laboratory, eight hours. Requisites: courses 110A and 110B, with grades of B or better, or equivalent statistical mechanics courses from engineering, mathematics, or physics. One aspect of dispersions of microscale particles in viscous liquids is that such dispersions are described in terms of collective properties of the entire system. The course is designed to introduce the student to the fundamental aspects of the field of colloidal science and provide the necessary tools to work in the field. The course will cover the basics of colloidal science, including the properties of colloidal dispersions, the behavior of colloidal systems, and the methods used to study these systems. P/NP or letter grading.

119A. Physical Chemistry: Chemical Thermodynamics. (4) Lecture, four hours; discussion, one hour. Requisites: courses 113A, Mathematics 31A, 31B, 32A, 32B, 33A, with grades of C– or better. Recommended: knowledge of differential equations equivalent to Mathematics 134 or 135 or Physics 131 and of analytic mechanics equivalent to Physics 115A or Mathematics 115B with grade of C– or better is requisite to C115B. Students entering course C115A are normally expected to take course C115B in following term. Designing experiments that allow for serious investigation of concepts from quantum chemistry. Postulates and systematic development of nonrelativistic quantum mechanics; expansion theorems; wells; oscillators; angular momentum; hydrogen atom; matrix techniques; approximation methods; time dependent problems; atoms; spectroscopy; magnetic resonance; chemical bonding. May be concurrently scheduled with courses C215A-C215B. P/NP or letter grading.


C117. Structure, Patterns, and Polyhedra. (5) (Same as Honors Collegium M180.) Lecture, four hours; activity, two hours. Exploration of structures and their geometric underpinnings, with examples and applications to architecture (space frames, domes), biology (enzymes, viruses), chemistry (symmetry, molecular cages), design (tiling, engineering (space filling), and physics (crystal structures) to effect working knowledge of symmetry, two-dimensional patterns, and three-dimensional solids. P/NP or letter grading.

C122. Mathematical Methods for Chemistry. (4) Lecture, four hours. Enforced requisites: Mathematics 31A, 31B, 32A, 32B. Review of basic mathematics necessary to study physical chemistry at graduate level, with focus on review of vectors, linear algebra, elementary complex analysis and solution of ordinary and partial differential equations. Development of problem-solving skills through homework based on these mathematical techniques, with examples from physical chemistry. Concurrently scheduled with course C222. P/NP or letter grading.

C123A-C123B. Classical and Statistical Thermodynamics. (4–4) Lecture, four hours; discussion, one hour. Requisites: courses 110B or 156; and 113B, with grades of C– or better. Concurrently scheduled with course 113A. Rigorous presentation of fundamentals of classical thermodynamics. Principles of statistical thermodynamics: probability, ensembles, partition functions, introduction to molecules, and perfect gas. Applications of classical and statistical thermodynamics selected from diatomic and polyatomic gases, solid and fluid states, phase equilibria, electric and magnetic effects, ortho-para hydrogen, chemical equilibrium, reaction rates, imperfect gas, nonelectrolyte and electrolyte solutions, surface phenomena, high polymers, gravitation. May be concurrently scheduled with courses C223A-C223B. Concurrently scheduled with course C152.

C125. Computers in Chemistry. (4) Lecture, three hours; computer laboratory, one hour. Requisites: courses 110A and 113A, with grades of C– or better. Discussion of data acquisition and instrument control, scientific programming, and analytical structural databases and molecular modeling methods. Hands-on computer laboratory experience with wide range of open source and commercial scientific software. P/NP or letter grading.

C126A. Computational Methods for Chemists. (4) Lecture, four hours; laboratory, four hours. Preparation: programming experience in either BASIC, FORTRAN, C++, Java, or Pascal. Requisites: courses 110A, 113A. Mathematical numerical and programming tools for constructing new chemical applications, including simple force fields and resulting statistical mechanics for simple molecules, simple ab-initio methods for organic molecules and nanotubes, and classical dynamics and spectroscopy. Concurrently scheduled with course C226A. P/NP or letter grading.

C127. Synthetic Biology for Biofuels. (4) (Same as Chemical Engineering CM127.) Lecture, four hours; discussion, one hour. Requisite: course 153A. Engineering microorganisms for complex phenotype is currently a central goal of metabolic and synthetic biology. Production of advanced biofuels involves designing and constructing novel metabolic networks in cells. Such efforts require profound understanding of biological networks, protein structural and regulatory motifs, and algorithms that are aided by tools in bioinformatics, systems biology, and molecular biology. Fundamentals of metabolic biochemistry, protein structure and function, and bioinformatics. Use of systems modeling for metabolic networks to design microorganisms for energy applications. Concurrently scheduled with course CM227. Letter grading.

136. Organic Structural Methods. (5) Lecture, two hours; laboratory, eight hours per week. Requisites: courses 30C and 30CL, with grades of C– or better. Laboratory course in organic structural determination by chemical and spectroscopic methods; microtechniques. P/NP or letter grading.

C140. Bionanotechnology. (4) Lecture, three hours. Requisites: courses 30C, 110A. Basic physical, chemical, and biological principles in bionanotechnology; materials and strategies for top-down and bottom-up fabrication of biological and chemical systems; characterization and detection techniques, and biomimetic materials and applications at nanoscale. Concurrently scheduled with course C240. P/NP or letter grading.

C143A. Structure and Mechanism in Organic Chemistry. (4) Lecture, three hours; discussion, one hour. Requisites: courses 30C and 30CL (may be taken concurrently), 110B, and 113A, with grades of C– or better. Mechanics of organic reactions. Acidity and acid catalysis; linear free energy relationships; iso-
top-effects, Molecular orbital theory; photochemistry; pericyclic reactions. May be concurrently scheduled with course C243A. P/NP or letter grading.

C143B. Mechanism and Structure in Organic Chemistry. (4) Lecture; three hours; discussion; one hour. Requisites: courses 30C or 153A, with grade of C– or better. May be repeated for credit. Chemistry of organic reactions; structure and detection of reactive intermediates. May be concurrently scheduled with course C243B. P/NP or letter grading.

144. Practical and Theoretical Introductory Organic Synthesis. (5) Lecture, two hours; laboratory, eight hours. Enforced requisites: courses 30C and 30CL, with grades of C– or better. Lectures on modern synthetic methodologies, including reaction mechanisms and computer algorithms. Concurrently scheduled with course C243S. P/NP or letter grading.

C145. Theoretical and Computational Organic Chemistry. (4) Lecture, two hours; discussion, one hour; computer laboratory, one hour. Requisites: courses 30C, 113A. Applications of quantum mechanical concepts and methods to understand and predict organic structures and reactivities. Computational modeling methods, including laboratory experience with force-field and quantum mechanical computer simulations. Concurrently scheduled with course C243S. P/NP or letter grading.

147. Careers in Chemistry and Biochemistry. (2) Seminar, two hours. Exploration of employment and career opportunities. Instructor(s) to students. Different speakers give short presentations to describe their career paths in areas such as industry, government, research and development, education, law, and healthcare. Enforced requirement. Grades determined by faculty. Concurrently scheduled with course C250. Letter grading.

153A. Biochemistry: Introduction to Structure, Enzymes, and Metabolism. (4) Lecture, four hours; discussion, one hour; tutorial, one hour. Requisite: course 14D or 30B, with grade of C– or better. Recommended: Life Sciences 2, 3, 23L, or 7A. Structure of proteins, carbohydrates, and lipids; enzyme catalysis and principles of metabolism, including glycolysis, citric acid cycle, and oxidative phosphorylation. P/NP or letter grading.

153AH. Biochemistry: Introduction to Structure, Enzymes, and Metabolism (Honors). (4) Lecture, three hours; discussion, one hour; tutorial, one hour. Requisite: course 14D or 30B, with grade of C– or better. Recommended: Life Sciences 2, 3, 23L. Honors course parallel to course 153A. P/NP or letter grading.

153B. Biochemistry: DNA, RNA, and Protein Synthesis. (4) Lecture, four hours; discussion, one hour; tutorial, one hour. Requisite: course 153A or 153AH. Recommended: Life Sciences 2, 3, or 23L, or 7A and 7B. Nucleotide metabolism; DNA replication; RNA processing; transcription; DNA repair; transcription machinery; regulation of transcription; RNA structure and processing; protein synthesis and processing. P/NP or letter grading.

153BH. Biochemistry: DNA, RNA, and Protein Synthesis (Honors). (4) Lecture, three hours; discussion, one hour; tutorial, one hour. Enforced requisites: course 153A or 153AH, Life Sciences 2, 3, or 23L. Honors course parallel to course 153B. P/NP or letter grading.

153C. Biochemistry: Biosynthetic and Energy Metabolism and Its Regulation. (4) Lecture; three hours; discussion, one hour; tutorial, one hour. Requisite: course 153A or 153AH. Metabolism of carbohydrate, fatty acids, amino acids, and lipids; photosynthetic metabolism and assimilation of inorganic nutrients; regulation of these processes. P/NP or letter grading.

153CH. Biochemistry: Biosynthetic and Energy Metabolism and Its Regulation (Honors). (4) Lecture; three hours; discussion, two hours. Requisite: course 153A or 153AH. Honors course parallel to course 153C. P/NP or letter grading.

153D. Introduction to Protein Structural Biology. (4) Lecture; three hours; discussion, one hour. Requisites: courses 153A and 153B, with grades of C– or better. Introduction to proteins and macromolecules; their functions; and diverse set of macromolecules that perform critical functions within cells, ranging from enzymes that catalyze metabolic reactions to proteins that enable pathogen infection and spread. Study of pro-catheter structural biology, that seeks to understand molecular basis of protein function through visualizing atomic structures and by investigating how alterations in protein structure affects function. Students gain fundamental understanding of protein structure and its relationship to function and learn how experimental and computational methods are used to determine three-dimensional structures of proteins. Hands-on training in computer graphics programs and online tools used to visualize and analyze protein structures. Letter grading.

153L. Biochemical Methods I. (4) Lecture, two hours; laboratory, four hours. Requisites: courses 14L or 30L and 30AL, or 153A or 153AH (may be taken concurrently), with grades of C– or better. Integrate long-term project involving biofuel production in bacteria. Purify a protein for use in production of bacteria via affinity chromatography. Assessment of protein amount, purity, and activity of enzyme. Techniques include protein determination by Bradford assay, polyacrylamide gel electrophoresis, immunoblotting, and enzyme activity assays to determine enzyme activity (Km, Vmax, inhibitor studies). P/NP or letter grading.

154. Biochemical Methods II. (5) Lecture, two hours; laboratory, eight hours. Enforced requisites: courses 153A or 153AH, 153B or 153BH, and 153L, with grades of C– or better. Recommended: course 156. Two to three major laboratory projects using biochemical experimental methods to investigate contemporary problems in biochemistry. Topics include transcription activation, molecular basis of DNA-protein interactions, biophysical basis of platelet activation, and interaction of blood coagulation. Experiments entail characterizing function of proteins, nucleic acids, and lipids involved in these processes. P/NP or letter grading.

C155. Mitochondria in Medicine, Biology, and Chemistry. (1) Seminar, two hours every other week. Open to undergraduate and graduate science majors considering or currently conducting research in areas related to mitochondria. Focus on mitochondrial function impact health and disease. Physiology and biochemistry of mitochondria and its role in cellular metabolism and energy production. Consider mitochondrial function impact health and disease. Physiology and biochemistry of mitochondria and its role in cellular metabolism and energy production. Consider mitochondrial function impact health and disease. Physiology and biochemistry of mitochondria and its role in cellular metabolism and energy production.
171. Intermediate Inorganic Chemistry. (4) Lecture, three hours; discussion, one hour. Requisite: course 30B with grade of C– or better. Chemical bonding; structure and bonding of ionic solids, structure and bonding relationships, vibrational spectra of complexes, electronic structure and ligand-field theory, mechanisms of inorganic reactions, bonding and spectroscopy of organometallic compounds, transition metals in catalysis and biology. P/NP or letter grading.

172. Advanced Inorganic Chemistry. (4) Lecture, three hours; discussion, one hour. Requisite: course 171 with grade of C– or better. Systematic approach to modern inorganic chemistry, structure and bonding of nonmetals, solid-state, main group, transition metal, lanthanide and actinide compounds and reactions; catalysis, spectroscopy, special topics. P/NP or letter grading.

173. Electrochemical Systems. (4) Lecture, three hours; discussion, two hours. Requisites: course 110A, Mathematics 33B. Introduction to principles of electrochemistry, commonly applied in search of inorganic chemistry, materials sciences, and nanotechnology. With examples in recent literature and discussions of experimental practice, focus on qualitative and quantitative material of information obtained from electrochemical characterization methods. Understanding of course content helps appreciate research and technologies in catalysis, energy storage and conversion, and advanced environmental technologies. Concurrently scheduled with course C273. P/NP or letter grading.

174. Inorganic and Metallographic Laboratory Methods. (4) Lecture, two hours; laboratory, eight hours. Enforced requisites: courses 30CL and 171, with grades of C– or better. Synthesis of inorganic compounds including air-sensitive materials; Schlenck techniques; chromatographic and ion exchange; spectroscopic characterization and literature applications. Concurrently scheduled with course C274. P/NP or letter grading.

175. Inorganic Reaction Mechanisms. (4) Lecture, three hours; laboratory, eight hours. Enforced requisites: courses 30CL and 171, with grades of C– or better. Survey of inorganic reactions; mechanistic principles; electronic structure of metal ions; transition-metal coordination chemistry; inner- and outer-sphere and charge transfer complexes; substitution, isomerization, and racemization reactions; stereochemistry; oxidation/reduction, free/ radical, polymerization, and photochemical reactions of inorganic reactions; be concurrently scheduled with course C275. P/NP or letter grading.

176. Group Theory and Applications to Inorganic Chemistry. (4) Lecture, three hours; discussion, one hour. Requisites: courses 113A and 172, with grades of C– or better. Group theoretical methods; molecular orbital theory; ligand-field theory; electronic spectroscopy; vibrational spectroscopy; may be concurrently scheduled with course C276A. P/NP or letter grading.

180. Solid-State Chemistry. (4) Lecture, three hours. Requisite: course 172 with grade of C– or better. Survey of new materials and methods for their preparation and characterization, with emphasis on band theory and its relationship to chemical, optical, transport, and magnetic properties, leading to deeper understanding of these materials. Concurrently scheduled with course C280. P/NP or letter grading.

181. Polymer Chemistry. (4) Lecture, three hours; discussion, one hour. Requisites: courses 30B, 110A. Synthesis of organic and inorganic macromolecules, thermodynamic and statistical mechanical descriptions of unique properties of polymers, polymer characterization, special topics such as conductive and biomaterials and polymeric reagents in synthesis. Concurrently scheduled with course C281. P/NP or letter grading.

184. Chemical Instrumentation. (9) Lecture, two hours; laboratory, six hours. Enforced requisites: courses 30CL and 110A, with grades of C– or better. Theory and practice of instrumental techniques of chemical and structural analysis, including atomic absorption spectroscopy, gas chromatography, mass spectrometry, nuclear magnetic resonance, polarography, X-ray fluorescence, and other modern methods. P/NP or letter grading.

185. Materials Chemistry Laboratory. (5) Lecture, two hours; laboratory, eight hours. Requisites: courses 110A, 110B, 113A. Materials synthesis and physical properties of complex materials. Combines synthetic methods with fundamental physical understanding and characterization in approximately equal proportions to relate materials synthesis to materials functions. Letter grading.

186. Stochastic Processes in Biochemical Systems. (4) (Same as Computational and Systems Biology 186.) Lecture, three hours. Requisites: Life Sciences 1, 2, 3, and 4, or 7A, 7B, and 7C. Matematik 33B, Electrical and Computer Engineering 131A or Mathematics 170A or Statistics 100A. Covers random and stochastic processes in play in biochemical systems, including ion channels, cytoskeleton, cell migration and mitosis, gene expression networks, and signal transduction. Covers mathematical tools such as continuous and discrete Markov processes, first passage, time escape problems, statistical mechanics, and information theory. Letter grading.

188A. Individual Studies for USIE Facilitators. (1) Tutorial, to be arranged. Enforced corequisite: Honors Collegium 101E. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to discuss selected USIE seminar topic, conduct preparatory research, and begin preparatory research or research proposal. Individual contract with faculty mentor required. May not be repeated. Letter grading.


188C. Individual Studies for USIE Facilitators. (2) Tutorial, to be arranged. Enforced requisite: course 188B. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor while facilitating USIE course. Individual contract with faculty mentor required. May not be repeated. Letter grading.

189. Advanced Honors Seminars. (1) Seminar, three hours. Limited to juniors or seniors. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be repeated for credit for budge- dents. Honors contract noted on transcript. P/NP or letter grading.

189HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to upper-division lecture course, Ind ependent study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors contract noted on transcript. Letter grading.

190A–192B. Undergraduate Practicum in Chemistry and Biochemistry. (1–4) Lecture, one hour; laboratory, four hours; workshop, two hours. Enforced req uisites: courses 14BL and 14CL, or 20L and 30AL, or Science Education 100SL. Intended for students who are planning careers in secondary science chemistry teaching. Complements service learning California Teach science courses that involve teaching field experiences in middle school and high school classrooms. Additional activities include issues such as chemical storage and use, waste management, labora tory organization, safety, and techniques. P/NP or letter grading.

190C–192D. Undergraduate Assistant Education Practicum in Chemistry and Biochemistry. (2) Seminar, one hour; assigned setting, six hours (course 1902) or five hours (course 1902D). Limited to juniors/ seniors. Training and supervised practicum for ad

192E. Introduction to Collaborative Learning Theory and Practice: Introduction and Applications. (1) Seminar, one hour. Requisite: at least one term of prior experience in same course in which collaborative learning theory is practiced and refined under supervision of instructor. Training seminar for undergraduate students who are selected for learning assistants (LA) program. Exploration of current topics in pedagogy and education research focused on methods of learning and their practical application in small-group settings. Students practice communication skills with frequent assessment of and feedback on progress. Letter grading.

192F. Methods and Application of Collaborative Learning Theory and Practice: Introduction, Methods, and Applications. (2 to 4) Seminar, one hour; clinic, one to eight hours. Requisite: course 192E or Life Sciences 192A or 192F with grade of C– or better. With instructor guidance, students apply pedagogical principles based on current education research, assist with development of innovative instructional materials, and evaluate and analyze feedback on their progress. May be repeated for four times for credit. Letter grading.

193A. Journal Club Seminars: UC LEADS and MARC. (2) Seminar, three hours. Designed for juniors/ seniors in undergraduate research training programs such as UC LEADS and MARC or those who have strong commitment to pursue graduate studies in natural sciences, engineering, or mathematics. Weekly readings and oral presentations of research papers selected from current literature. May be repeated for credit. Letter grading.

193B. Journal Club Seminars: Chemistry and Biochemistry. (2) Seminar, three hours. Limited to undergraduate students. Discussion of readings selected from current literature in particular field. May be repeated for credit. P/NP grading.

194. Research Group Seminars: Chemistry and Biochemistry. (1) Seminar, three hours. Designed for undergraduate students who are part of research group. Advanced study and analysis of current topics in physical, organic, or inorganic chemistry or biochemistry. Discussion of current research and literature in research specialty of faculty member teaching course. May be repeated for credit. P/NP grading.

196A. Research Apprenticeship in Chemistry and Biochemistry. (2 to 4) Tutorial, three hours per week per unit. Limited to juniors/seniors. Entry-level re search apprenticeship for upper-division students under guidance of faculty mentor. Consult department for additional information regarding requirements, enrollment, and oral presentations of research proposals. May be repeated for maximum of 8 units. Individual contract required. P/NP grading.

196B. Research Apprenticeship in Chemistry and Biochemistry. (2 to 4) Tutorial, three hours per week per unit. Enforced requisite: course 196A (8 units). Limited to juniors/seniors. Research apprenticeship for upper-division students under guidance of faculty mentor. Consult department for additional information regarding requirements, enrollment, and written proposal deadlines. May be taken for maximum of 4 units. Individual contract required. P/NP or letter grading.

197. Directed Research in Chemistry and Biochemistry. (2 to 4) Tutorial, three hours per week. Enforced requisite: course 196A (8 units). Limited to juniors/seniors. Supervised individual research under guidance of faculty mentor. May be repeated for credit. Letter grading.
Graduate Courses

C200. Genomics and Computational Biology. (5) Lecture, four hours; discussion, one hour. Introduction for biochemistry students of technologies and experimental data of genomics, as well as computational tools for analyzing them. Bioinformatics and molecular biology dissected life into its component parts, one gene at a time, but lacked integrative mechanisms for putting this information back together to predict what happens in real organisms. Gains over 80 percent of drug candidates fall in clinical trials. High-throughput technologies such as sequencing, microarrays, mass-spectra, and robotics have given bioinformaticians increased capabilities to analyze complex genomes, expression patterns, functions, and interactions across whole organisms, populations, and species. Use and analysis of such datasets becomes essential daily activity for biomedical scientists. Core principles and methodologies for analyzing genomics data to answer biological and medical questions, with focus on concepts that guide data analysis rather than algorithm details. Concurrently scheduled with course C100. S/U or letter grading.

201. Scientific Proposal Writing. (2) Lecture, three hours. Designed for graduate biochemistry and molecular biology students to write successful proposals to be submitted to funding agencies. How to develop curricula vitae, put together grant proposals, and critique proposals. Letter grading.

203B. Ethics in Chemical Research. (2) Seminar, one hour. In graduate education, teaching, and chemical research, including issues such as conflicts of interest, plagiarism, intellectual property, sexual harassment, and other topics related to ethical conduct of research. S/U grading.

203C. Research Integrity and Ethics in Genetics Research. (2) Lecture, 90 minutes. Data analysis and management, statistical methods, use of commercial reagents, microscopy data analysis, figure preparation, authorship, human subject protection, animal subject protection, and conflict of interest. May be repeated for credit. S/U grading.

203D. Advanced Topics in Responsible Conduct in Cellular and Molecular Biology Research. (2) Seminar, two hours. Enforced requisites: courses 203A or 203B or 203C. Cellular and molecular biology PhD students continue to learn how to conduct research in a field to reliably advance knowledge while maintaining ethical principles. Must be taken in fourth or fifth year of PhD work where students would have already been exposed to many challenges of performing and reporting research and who are starting their careers where they are beginning to think of applying for postdoctoral fellowships and research and teaching positions. Course helps fulfill training requirement in research integrity for NIH training grants and individual NRSA awards. S/U grading.

204. Student Research Seminar. (2) Seminar, one hour. Limited to students supported by UCLA program in Cellular and Molecular Biology Predoctoral Training. Research presentations given by second- and third-year students. S/U grading.

CM205A. Introduction to Chemistry of Biology. (4) (Same as Pharmacology M205A) Lecture, three hours; discussion, one hour. Introduction to chemical biology. Topics include computational chemical biology, utility of synthesis in biochemical research, peptidomimetics, designed receptors for cellular imaging, natural product biosynthesis, protein engineering and directed evolution of metal-containing metal ions in cells, metal-containing drugs. Concurrently scheduled with course C105. Letter grading.

CM205B. Issues on Chemistry/Biology Interface. (2) (Same as Pharmacology M205B) Seminar, three hours. Enforced requisites: courses C205A or CM205A. Selected talks and papers presented by training faculty on solving problems and utilizing tools in chemistry and molecular biology on chemistry/biology interface (C3B). S/U grading.

205. Chemistry Seminar. (2) Seminar, three hours. Limited to students supported by UCLA program in Chemistry/Biology Interface Predoctoral Training. Current research topics at interface of chemistry and biology. May be repeated for credit. S/U grading.

C207. Organometallic Chemistry. (4) Lecture/discussion, three hours. Requisite or corequisite: course 172. Survey of synthesis, structure, and reactivity (emphasizing mechanistic approach) of compounds containing carbon bonded to elements selected from main group metals, metalloids, and transition metals, including olefin complexes and metal carbonyls; applications in catalysis and organic synthesis. Concurrently scheduled with course C107. S/U or letter grading.


209. Introduction to Chemistry Research. (2) Seminar, two hours. Half-hour presentations each session by three different chemistry professors to introduce their research programs. S/U grading.

210. Advanced Topics in Chemical Research. (2) Seminar, one hour. Designed for second-year graduate students to help them engage contemporary challenges in chemistry and their own research projects. Building of critical thinking skills and proposal writing skills. S/U grading.

C213B. Physical Chemistry: Molecular Spectroscopy. (4) Lecture, three hours; discussion, one hour; laboratory, one hour. Requisite: course 113A. Interaction of radiation with matter, microwave spectroscopy, infrared and Raman spectroscopy, vibrations in polyatomic molecules, electronic spectroscopy, magnetic resonance spectroscopy. Concurrently scheduled with course C113B. Independent study project required of graduate students. S/U or letter grading.

C215A-C215B. Quantum Chemistry: Methods. (4-4) Lecture, four hours. Enforced requisites: courses 113A, 31A, 31B, 32A, 32B, 33A, with grades of C- or better. Recommended: knowledge of differential equations equivalent to Mathematics 134 or 135 or Physics 131 and of analytic mechanics equivalent to Physics 105A. Course C215A or Physics 115B with grade of C- or better is requisite to C215B. Students entering course C215A are expected to have successfully completed C215B in following term. Designed for chemistry students with serious interest in quantum chemistry. Postulates and systematic development of nonrelativistic quantum mechanics; expanded concepts; oscillators; angular momentum; hydrogen atom; matrix techniques; approximation methods; time dependent problems; atoms; spectroscopy; magnetic resonance; chemical bonding. May be concurrently scheduled with courses C115A-C115B. S/U or letter grading.


221A-221Z. Advanced Topics in Physical Chemistry. (2 to 4 each) Lecture, two to four hours. Each course encompasses one recognized specialty in physical chemistry, generally taught by faculty members whose research interests embrace that specialty. S/U or letter grading.

C222. Mathematical Methods for Chemistry. (4) Lecture, four hours. Enforced requisites: Mathematics 31A, 31B, 32A, 32B, 33A, 33B, 34A, 34B, 110A, 110B, and one of Physics 55 or 11A, 11B, or 12A. Mathematics necessary to study physical chemistry at graduate level, with focus on review of vectors, linear algebra, elementary complex analysis, and solution of ordinary and partial differential equations and problem-solving skills through homework based on these mathematical techniques, with examples from physical chemistry. Concurrently scheduled with course C122. S/U or letter grading.

C223A-C223B. Classical and Statistical Thermodynamics. (4-4) Lecture, four hours; discussion, one hour. Requisite: course 110B or 156. Recommended: course 113A. Presentation of fundamentals of classical thermodynamics. Primarily applications of thermodynamics: probability, ensembles, partition functions, independent molecules, and perfect gas. Applications of classical and statistical thermodynamics selected from diatomic and polyatomic gases, solid and fluid states, phase equilibria, electric and magnetic effects, ortho-para hydrogen, chemical equilibria, reaction rates, imperfect gas, nonelectrolyte and electrolyte solutions, surface phenomena, high polymers, gravitation. May be concurrently scheduled with courses C123A-C123B. S/U or letter grading.


C226A. Computational Methods for Chemists. (4) Lecture, four hours; laboratory, four hours. Preparation: programming experience in either BASIC, FORTRAN, C, +++, Java, or Pascal. Recommended: courses 110A, 113A, Mathematics 33A. Theoretical, numerical, and programming tools for constructing new chemical applications, including simple force fields and resulting statistical mechanics for simple molecules, and development of methods for organic molecules and nanotubes, and classical dynamics and spectroscopy. Concurrently scheduled with course C126A. S/U or letter grading.

CM227. Synthetic Biology for Biofuels. (4) (Same as Chemical Engineering CM227) Lecture, four hours; discussion, one hour. Requisite: course 153A. Engineering microorganisms for complex phenotype is common goal of metabolic engineering and synthetic biology. Introduction of advanced tools and techniques that are designed to create microorganisms with novel metabolic pathways to produce fuels. S/U or letter grading.
225. Chemical Physics Seminar. (2) Seminar, two hours. Seminars presented by staff, outside speakers, postdoctoral fellows, and graduate students. May be repeated for credit. S/U or letter grading.

229. Introduction to Physical Chemistry Research. (2) Lecture, 90 minutes. Designed primarily for first-year graduate students to teach advanced problem solving using algorithmic techniques. Computational modeling methods, including laboratory experience with force-field and quantum mechanical computer calculations. Concurrently scheduled with course C145. S/U or letter grading.

247. Organic Colloquium. (2) Seminar, two hours. Seminars in organic chemistry and related areas presented by staff, outside speakers, postdoctoral fellows, and graduate students. May be repeated for credit. S/U or letter grading.

248. Organic Chemistry Student Seminar. (2) Seminar, two hours. Seminars presented by staff, outside speakers, postdoctoral fellows, and graduate students. May be repeated for credit. S/U or letter grading.

249A. Methods of Materials Chemistry: Synthesis, Characterization, Physical Properties, Applications, and Devices. (2) Seminar, two hours. Designed for first-year graduate students to teach advanced problem solving in critical thinking with focus on problems and recent literature pertaining to materials chemistry. How materials are synthesized and characterized. Discussion of important physical properties, as well as broad range of applications and behavior in devices. S/U grading.

249B. Methods of Chemical Synthesis: Organic/Inorganic/Organometallic. (2) Seminar, two hours. Designed for first-year graduate students to teach advanced problem solving in critical thinking with focus on problems and recent literature pertaining to chemical synthesis of organic, inorganic, and organometallic compounds. S/U grading.

250. Research Methods and Integrity in Cellular and Molecular Biology. (4) Lecture, two hours; discussion, two hours. Data analysis and management, statistical methods, use of antibody and kit reagents, figure preparation, authorship, mentoring, human subject protection, animal subject protection, and conflict of interest. May be repeated for credit. Concurrently scheduled with Letter grade.

255. Mitochondria in Medicine, Biology, and Chemistry. (1) (Same as Biological Chemistry M255.) Seminar, two hours every other week. Open to undergraduate and graduate students and faculty, with emphasis on current topics in the general areas of mitochondria. Large number of physiological and pathological processes involve mitochondrial function and dysfunction. Focus on understanding how mitochondrial dysfunction impacts impact health and disease. Physiology and cell biology of healthy and dysfunctional mitochondria critically assessed at subcellular, cellular, tissue, and organismal levels. Emphasis on literature review and critical evaluation of experimental design and methods of current research. May be repeated for credit. Concurrently scheduled with course C155. S/U grading.

256A-256Z. Seminars: Research in Biochemistry. (2 each) Seminar, three hours. Advanced study and analysis of current topics in biochemistry. Discussion of current research and literature in research specialty of faculty member teaching course. S/U grading.


257. Physical Chemistry of Biological Macromolecules. (4) Lecture, one hour; discussion, one hour; laboratory, four hours. Biophysics. Theory of hydrodynamic, thermodynamic, and optical techniques used to study structure and function of biological macromolecules. S/U or letter grading.

258. Advanced Topics in Biochemistry and Molecular Biology. (2) Lecture, two hours. Advanced study and analysis of experimental design and methods in biochemistry and molecular biology. In-depth analysis of literature in one or more areas of current research. May be repeated for credit. S/U or letter grading.

CM259. Mechanisms of Gene Regulation. (4) (Formerly numbered C259.) (Same as Biological Chemistry M259.) Lecture, four hours. Requisites: course 153B. RNA polymerase structures and mechanisms; pre-mRNA recognition and transcription cycle; mechanisms of activation; transcriptional poisoning and elongation control; Mediator of transcription; chromatin remodeling and modification; epigenetic regulation; co-transcriptional and transcription-coupled RNA processing; impact of transcription on mRNA processing and stability; nuclear export of mRNA. Concurrently scheduled with course C159. S/U or letter grading.

CM260B. Algorithms in Bioinformatics. (4) (Same as Bioinformatics M221, Computer Science CM221, and Human Genetics M260A.) Lecture, four hours; discussion, two hours. Requisites: Computer Science 33A, or Program in Computer Science of G- or better, and one course from Biostatistics 100A, G- or better, Civil Engineering 110, Electrical Engineering 131A, Mathematics 170A, or Statistics 100A. Prior knowledge of biology not required. Designed for engineering students as well as students from biological sciences and medical school. Introduction to bioinformatics and methodologies, with emphasis on concepts and inventing new computational and statistical techniques to analyze biological data. Focus on sequence analysis and alignment algorithms. Concurrently scheduled with course CM160A. S/U or letter grading.

CM265B. Algorithms in Biocomputing. (4) (Same as Bioinformatics M222.) Lecture, four hours; discussion, two hours. Requisites: Computer Science 32 or Program in Computing 10C with grade of G- or better, and one course from Computer Science 33A, Electrical Engineering 131A, Mathematics 170A, or Statistics 100A. Concurrently scheduled with course CM265B. Designed for engineering students as well as students from medical school and graduate students in engineering/physical sciences. Development and application of computational approaches to biological questions, with focus on formulating interdisciplinary problems as computational problems and designing and implementing solutions using algorithmic techniques. Computational techniques include those from statistics and computer science. Concurrently scheduled with course CM160B. Letter grading.
262. Biochemistry and Molecular Biology of Protein Translocation Systems. (3) Lecture, two hours; discussion, two hours. Requisites: courses 269A through 269D. Protein translocation into nucleus, mitochondrial, peroxisome, chloroplast, endoplasmic reticulum, and protein export in bacteria. Letter grading.

C264. Free Radicals in Biology and Medicine. (2 to 4) Lecture, three hours. Enforced requisites: courses 153A and either 153B or 153C, with grades of C– or better. Biochemical reactivity of dioxygen, its role in mitochondrial and neurodegenerative diseases, apoptosis, and aging. Discussion of radical reactions, how they are harnessed to activate enzyme catalysis, and how free radicals contribute to or regulate essential biological processes. These radicals are known as "run amok" under certain types of stress and can contribute to wide variety of diseases, including neurodegenerative diseases (e.g., Huntington’s, Parkinson’s, and Alzheimer’s diseases), mitochondrial diseases, atherosclerosis, and aging. Concurrently scheduled with course C164, S/U or letter grading.

C265. Metabolic Control by Protein Modification. (4) Lecture, three hours; discussion, one hour. Requisites: courses 153A and 153B, or Life Sciences 3 and 23L, with grades of C– or better. Survey of new materials and methods for their preparation and characterization, with emphasis on band theory and its relationship to chemical, optical, transport, and magnetic properties, leading to deeper understanding of these materials. Concurrently scheduled with course C180, S/U or letter grading.

C290. Solid-State Chemistry. (4) Lecture, three hours. Requisite: course 172 with grade of C– or better. Survey of organic and inorganic macromolecules, thermodynamic and statistical mechanical descriptions of unique properties of polymers, polymer characterization methods, and special topics relating to conductive and biomedical polymers and polymeric agents in synthesis. Concurrently scheduled with course C181, S/U or letter grading.

271. Advanced Topics in Inorganic Chemistry. (2 to 4) Lecture, two to four hours. Each offering encompasses one recognized specialty in inorganic chemistry, generally taught by faculty members whose research interests embrace that specialty, S/U or letter grading.

272A-272N. Seminars: Research in Inorganic Chemistry. (2) Seminar, two hours; laboratory, eight hours. Concurrently scheduled with course C181. S/U or letter grading.

272C. Inorganic Reaction Mechanisms. (2) Lecture, two hours; laboratory, eight hours. Requisite: course C181. S/U or letter grading.

272L. Molecular Materials. (2) Lecture, 90 minutes. Discussion of current research and literature in research specialty of faculty member teaching course. S/U or letter grading.

272N. Chemical Synthesis of Complex Molecules. (2) Lecture, three hours. Enforced requisites: courses 153A, 153B, 153C, 156. Three-dimensional structure of proteins. For the student interested in solving problems in chemistry, the chemistry of synthetic organic and inorganic compounds and processes. May be concurrently studied with course C173. S/U or letter grading.


273. Inorganic Chemistry Student Seminar. (2) Seminar, three hours. Open to entering graduate inorganic chemistry students. S/U or letter grading.

274. Inorganic and Metallorganic Laboratory Methods. (5) Lecture, laboratory, eight hours. Requisite: course 272C, with grades of C– or better. Survey of inorganic compounds, including air-sensitive materials; Schlenck techniques; chromatographic and ion exchange methods; spectroscopic characterization and literature applications. Concurrently scheduled with course C174. S/U or letter grading.

275. Inorganic Reaction Mechanisms. (4) Lecture, three hours. Enforced requisites: courses 269C, 110B, 110T, 113A, and 113B, with grades of C– or better. Survey of inorganic reactions; mechanistic principles; electronic structure of metal ions; transition-metal coordination chemistry; inner- and outer-sphere and chelate complex formation; substitution, isomerization, and racemization reactions; stereochemistry; oxidation/reduction, free-radical, polymerization, and photochemical reactions of inorganic species. May be concurrently studied with course C175. S/U or letter grading.

276A. Theory and Applications of spectroscopic techniques, including magnetic resonance and vibrational and surface science methods, to inorganic compounds and molecular structures. Letter grading.

277. Crystal Structure Analysis. (4) Lecture, three hours. Theory and practice of modern crystallography, with emphasis on practical experience in structure determination. Topics include crystallographic symmetry, scattering theory, data collection, Fourier analysis, heavy atom techniques, direct methods, isomorphous replacement, crystallographic refinement, error analysis, and common pitfalls. S/U or letter grading.


289G. Group Theory and Applications to Inorganic Chemistry. (4) Lecture, four hours; discussion, one hour. Requisites: courses 113A and 172, with grades of C– or better. Group theoretical methods; molecular orbital theory; ligand-field theory; electronic spectroscopy; chemical bonding. May be concurrently scheduled with course C176, S/U or letter grading.

289H. Physical Methods in Inorganic Chemistry. (4) Lecture, three hours. Requisite: course C276A. Theory and applications of spectroscopic techniques, including magnetic resonance and vibrational and surface science methods, to inorganic compounds and molecular structures. Letter grading.
tive learning, laboratory safety, ethical issues, field experiences, and professional development. S/U or letter grading.

375. Teaching Apprentice Practicum. (1 to 4) Seminar, to be arranged. Preparation: apprentice personnel employment as teaching assistant, associate, or fellow. Teaching apprenticeship under active guidance and supervision of regular faculty member responsible for curriculum and instruction at UCLA. May be repeated for credit. S/U grading.

400. Safety in Chemical and Biochemical Research. (2) Lecture, two hours. Survey of safe laboratory practices for experimental research in organic, inorganic, and physical chemistry and biochemistry. Topics include laser safety, cryogenic hazards, high- and low-pressure experimentation, gas and carcinogen handling, chemical spills, fire extinguishing, and chemical disposal. S/U grading.

495. Teaching College Chemistry. (2) Seminar, two hours; discussion, two hours; 20 hours training during week prior to Fall Quarter. Course for teaching assistants designed to deal with problems and techniques of teaching college chemistry. S/U grading.

599. Research for and Preparation of PhD Dissertation or PhD Qualifying Examinations. (2 to 4) Tutorial, to be arranged. May be taken for maximum of 8 units. S/U grading.

597. Preparation for MS Comprehensive Examinations or PhD Qualifying Examinations. (2 to 4) Tutorial, to be arranged. May be taken for maximum of 8 units. S/U grading.

598. Research for and Preparation of MS Thesis. (2 to 16) Tutorial, to be arranged. Each faculty member supervises research of MS students and holds research group meetings, seminars, and discussions with students. May be repeated for credit. S/U or letter grading.

599. Research for and Preparation of PhD Dissertation. (2 to 16) Tutorial, to be arranged. Each faculty member supervises research of PhD students and holds research group meetings, seminars, and discussions with students. May be repeated for credit. S/U or letter grading.

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Chicana and Chicano Studies BA

Scope and Objectives
The mission of the UCLA César E. Chávez Department of Chicana and Chicano Studies is to train a new generation of scholars to research and analyze the life, history, and culture of Mexican-origin people within the U.S., as well as of other Latina/Latino and indigenous populations in the Americas.

Addressing local, national, and transnational contexts, the Chicana and Chicano Studies curriculum at UCLA explores race, class, gender, and sexuality paradigms as they have shaped the history of the field; as well as new directions in the study of Chicanas/Chicanos and Latinas/Latinos, including border and transnational studies; expressive arts; history, literature, and language of Americas; and labor, law, and policy studies.

Departmental faculty members, situated in one of the most diverse cities in the world, utilize Los Angeles as a laboratory for studying the social transformations taking place in California, the Southwest, and the U.S. The department provides students with the interdisciplinary research tools necessary to advance knowledge in the field, provide academic leadership, and serve community needs with academic resources.

Undergraduate Study
The Chicana and Chicano Studies Department offers a designated capstone program for undergraduate majors. Students have options for completing a senior honors thesis, individual research, or senior project under the direction of a faculty member. Alternatively, students may elect to complete an upper-division course that includes additional coursework culminating in completion of a capstone paper or creative project. Through their capstone work, students are expected to demonstrate working knowledge of the major's findings and methods of the disciplines from which they have drawn their Chicana and Chicano studies coursework; show their capacities for conceiving and executing a research or creative project on a self-selected topic as well as identifying and evaluating relevant documentation pertaining to that project, demonstrate appropriate levels of scholarly discourse on their selected topic, and develop greater capacity to be of lifelong service to the Chicana/Chicana and Latina/Latina community and to global society in the tradition of César Chávez and scholar activist exemplars.

Preparation for the Major
Required: Chicana and Chicano Studies 10A, 10B, Spanish 5 or equivalent.

Transfer Students
Transfer applicants to the Chicana and Chicano Studies major with 90 or more units must complete as many of the following introductory courses as possible prior to admission to UCLA: one interdisciplinary Chicana/Chicana history and culture course, one interdisciplinary Chicana/Chicana social structure and contemporary conditions course, and five quarter terms of Spanish.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

The Major
Required: A total of 11 upper-division courses, including Chicana and Chicano Studies 101; one ser-
vice learning course from 100SL or M170SL or from the approved list available in the department office each term; two related study courses from the approved list of courses outside the department (related study includes courses that provide a comparative perspective to Chicana and Chicano studies and/or a contextualization of Chicana and Chicano communities in the world); one advanced seminar course from 191 or another course by petition to the department chair; and a concentration of four courses in one area listed below and two courses in a second area:

**Border and Transnational Studies:** Chicana and Chicano Studies CM100, 120, M124, M125, M126, M132, 143, M144, CM147, 151, 152, 153A, M154, M155A, M156A, 163, 176, 184, 191


**Labor, Law, and Policy Studies:** Chicana and Chicano Studies M102, CM106, M119, 120, M121, M122, 123, M127, M128, M130, M148, 149, 150, 151, 152, M156A, M156B, 165, 166, 174A, M174B, CM177, 178, C179, 191

No more than 8 units of 188, 191, and 199 courses may be applied toward the major; enrollment in the courses must be approved in writing by the department chair.

Each major course must be taken for a letter grade, and students must have an overall grade-point average of 2.0 or better.

### Honors Program

The Chicana and Chicano Studies honors program provides the opportunity for motivated and dedicated students to undertake a year-long research or creative project with the guidance and supervision of a faculty member. The program is open to all juniors and seniors who have a 3.5 grade-point average in the major, a cumulative GPA of 3.0 or better, and completed 90 or more total units, including Chicana and Chicano Studies 10A, 10B, 10C, and one course from 89, 89H, 89I, 89J, or 89K.

The application for admission must be submitted in spring quarter of the year prior to admission to the program, with the advice and consent of a faculty sponsor. The proposal, research, data collection, analysis, and writing of the thesis (or the creative equivalent to this process) take place in Chicana and Chicano Studies 198A, 198B, and 198C, which may not be applied toward the major requirements. An honors Thesis of at least 30 pages or a significant creative project is required.

Students who are currently undertaking the optional multidisciplinary senior thesis and who are eligible for the honors program may opt to switch to the honors program (provided it does not delay their progress toward the degree) with the approval of the department.

### Optional Multidisciplinary Senior Thesis

Chicana and Chicano Studies majors have the option during their senior year to enroll in two 199 courses with the intention of producing an undergraduate thesis. The first term includes thesis conception and formulation, along with preliminary data collection for the thesis. The second term entails completion of the data collection, analysis of the data, and writing of the thesis. Enrollment in the two 199 courses is with the advice and consent of a faculty member.

### Chicana and Chicano Studies Minor

The Chicana and Chicano Studies minor complements study in another traditional field. Students participating in the minor are required to complete both a departmental major in another discipline and the Chicana and Chicano Studies minor.

To enter the minor, students must have an overall grade-point average of 2.0 or better, have completed 45 units, and file a petition with the student adviser in 7351 Bunche Hall.

**Required Lower-Division Courses (10 units):** Chicana and Chicano Studies 10A, 10B.

**Required Upper-Division Courses (20 units minimum):** Chicana and Chicano Studies 101 and four elective courses (20 units minimum) selected from the approved list (available in the department office each term).

A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor. Each minor course must be taken for a letter grade, and students must have an overall grade-point average of 2.0 or better in the minor. Successful completion of the minor is indicated on the transcript and diploma.

### Graduate Study

Official, specific degree requirements are detailed in *program requirements for UCLA graduate degrees*, available at the Graduate Division website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

### Graduate Degrees

The César E. Chávez Department of Chicana and Chicano Studies offers Master of Arts (MA) and Doctor of Philosophy (PhD) degrees in Chicana and Chicano Studies.

### Chicana and Chicano Studies

#### Lower-Division Courses

- **M5A-M5B-M5C.** Elementary Nahautli. (4–4–4) (Same as Indigenous Languages of the Americas M5A-M5B-M5C and International and Area Studies M5A-M5B-M5C) Lecture, five hours. Course M5A is enforced requisite to M5B, which is enforced requisite to M5C. Introduction to Aztec language of central Mexico. Coverage of basic Nahautli grammar, with equal emphasis on reading, writing, conversation, and comprehension. P/NP or letter grading.
- **10A. Introduction to Chicana/Chicano Studies: History and Culture.** (5) Lecture, three hours; discussion, one hour. Interdisciplinary survey of diverse historical experiences, cultural factors, and ethnic/racial paradigms, including indigenousness, gender, sexuality, language, and borders, that help shape Chicana/Chicano identities. Emphasis on critical reading and writing skills. Letter grading.
- **M15A-M15B-M15C. Intermediate Nahautli.** (4–4–4) (Same as Indigenous Languages of the Americas M15A-M15B-M15C and International and Area Studies M15A-M15B-M15C) Lecture, four hours. Enforced requisite: courses M5A, 5B, 5C. Course M15A is enforced requisite to M15B, which is enforced requisite to M15C. Taught primarily in Nahautli. Examination of Nahautli (Aztec) language of central Mexico at intermediate level. Coverage of Nahautli grammar, with equal emphasis on reading, writing, conversation, and comprehension. P/NP or letter grading.
- **M18. Leadership and Student-Initiated Retention.** (2) Same as African American Studies M18, American Indian Studies M18, and Asian American Studies M18. Seminar, two hours. Limited to freshmen/sophomores/first-year transfer students. Not open for credit to students with credit for course M18. Exploration of issues in retention at UCLA through lens of student-initiated and student-run programs, efforts, activities, and services. Focus on populations with historically low graduation rates targeted by Campus Retention Committee. May not be applied toward departmental major or minor elective requirements. May be repeated once for credit. Letter grading.
- **19. Fiat Lux Freshman Seminars.** (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.
- **88. Sophomore Seminars: Chicana and Chicano Studies.** (2) Seminar, two hours. Limited to lower-division students. Readings and discussions designed to introduce students to current research in Chicana/Chicana studies. Culminating project may be required.
May not be applied to departmental major or minor requirements. May be repeated for credit with topic change. P/NP or letter grading.

89. Honors Seminars. (1 Seminar, three hours. Limited to 20 students. Designed as adjunct to lower-division lecture course. Exploration of topics in greater depth through essays, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/ NP or letter grading.

89HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to lower-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

97. Variable Topics in Chicana and Chicano Studies. (2 Seminar, two hours. Requisite: course 10A or 10B. Current topics and particular research methods in Chicana and Chicano studies through readings and other assignments. May be repeated for credit. P/ NP or letter grading.

98. Professional Schools Seminars. (2 Seminar, two hours. Limited to 20 students. Introduction to issues of professional (nonacademic) settings and careers through readings and other assignments. P/ NP or letter grading.

99. Student Research Program. (1 to 2 Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/ NP grading.

Upper-Division Courses

100SL. Barrio Organization and Service Learning. (5) Seminar, two hours; discussion, two hours; field placement, six hours. Limited to juniors/seniors. Service-learning placement in community-based organization, labor union, or service-oriented nonprofit organization. Study of role that these organizations play in improving the lives of Chicana/Chicano communities. Students meet on regular basis with instructors and provide periodic reports of their experience. Letter grading.


M102. Mexican Americans and Schools. (4) Same as Education M102.) Seminar, two hours; discussion, two hours. Theoretical and empirical overview of Chicana/Chicano educational issues in U.S., with special emphasis on disentangling effects of race, gender, class, and immigrant status on Chicana/Chicano educational attainment and achievement. Examination of how historical, social, political, and economic forces impact Chicana/Chicano educational experience. P/ NP or letter grading.

M103C. Origins and Evolution of Chicano Theater. (5) (Same as Theater M103C.) Lecture, three hours. Designed for juniors/seniors. Exploration of development of Chicano theater from its beginnings in border towns and rituals of ancient Mexico to work of Luis Valdez (late 1960s), P/ NP or letter grading.

M103D. Contemporary Chicano Theater: Beginning of Chicano Theater Movement. (5) (Same as Theater M103D.) Lecture, three hours. Analysis and discussion of historical and political events from 1965 to 1980, as well as theatrical traditions that led to emergence of Chicano theater. Letter grading.


104. Comedy and Culture: Your Humorous Life. (4) Lecture, four hours. How to mine unique humorous life adventures from students’ cultural identities and turn those distinct experiences into humorous literature. Students incorporate their own stories into a text, with emphasis on comedy in their pieces through art of storytelling and performance. P/ NP or letter grading.

104A. Art of Performance. (4) Seminar, four hours. Examination of seminal works of Latina/o/x theater artists with particular focus on creating and embodying personal histories in performance. Features dramatic plays, autobiographical texts, and ensemble devised works that reflect changing nature of Latina/o/x cultural landscape. Introduction to basic elements of acting, including collaborative group performance, physical storytelling, and voice/speech exercises designed to free creative voice. Examination of performance of cultural expression, political tool, and personal identity. P/ NP or letter grading.

M105A. Early Chicana/Chicano Literature, 1400 to 1910. (Same as English M105A.) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisite: English Composition 3 or 3H. Survey of Chicana/Chicano literature from poetry of Triple Alliance and Aztec/Mayan civilizations to Revolution of 1910, including oral and written forms (poetry, corridos, testimonios, folklore, novels, short stories, and drama) by writers such as Nézahualcóyotl (Huizenga), Joséfa de Zavala, María Amparo Ruiz de Burton, Eusebio Chacón, Daniel Venegas, and Lorena Villegas de Magón. P/ NP or letter grading.

M105B. Chicana/Chicano Literature from Mexican Revolution to el Movimiento, 1920 to 1970s. (5) (Same as English M105B.) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisite: English Composition 3 or 3H. Survey of Chicana/Chicano literature since 1920s through Great Depression and World War II, ending with Chicana/Chicano civil rights movement. Oral and written narratives by writers including Conrado Espinosa, Jovita González, Olefas Jara-millo, Angelica Chacón, Oscar Acosta, and Evangelina Vigi. P/ NP or letter grading.

M105C. Chicana/Chicano Literature since el Movimiento, 1970s to Present. (5) (Same as English M105C.) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisite: English Composition 3 or 3H. Survey of Chicana/Chicano literature since 1970s, with particular emphasis on how queer and feminist activism as well as Central and South American migration have shaped 21st-century chicanidad. Oral, written, and graphic fiction, poetry, and drama by writers including John Rechy, Gloria Anzaldúa, Los Bros Hernández, Ana Castillo, and Dagoberto Gilb guide exploration of queer and feminist studies, Reagener generation, immigration debates, and emerging Latina/Latino major. P/ NP or letter grading.

M105D. Introduction to Latino/Latina Literature. (5) (Same as English M105D.) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisite: English Composition 3 or 3H. Survey of Latino/Latina literature and introduction to its major critical trends, with emphasis on groups of Caribbean, Mexican, South American, and Central American origin. Representative works read in relation to such topics as relation between Latinas/Latinos and U.S.; political movements and cultural production. P/ NP or letter grading.

M105E. Studies in Chicana/Chicano and/or Latina/Latina Literature. (5) (Same as English M105E.) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisite: English Composition 3 or 3H. Variable topics course to give students broad introduction to issues and themes in Chicana/Chicano and/or Latina/Latina literature. Topics include border, immigration, literature, language, gender, sexuality, and diaspora, among others. May be repeated for credit with topic or instructor change. P/ NP or letter grading.

105F. Gender, Fiction, and Social Change. (4) Lecture, four hours. Requisite: English Composition 3. Study of essays, novels, poetry, narrative art, and plays written by Chicanas/Latinas. Required readings repre- sent writers with focus on themes of identity, ethnicity, gender, and cross-border experiences leading to so- cial change. Critical reading of works, searching for strengths and flaws, to point out unique contribution of each work to greater body of U.S. litera- ture. P/ NP or letter grading.

M105SL. Seminar: Chicana and/or Latina/Latina Literature—Service Learning. (5) (Same as English M105SL) Seminar, three or four hours; field placement, three or four hours. Enforced requisite: En- glish Composition 3 or Specialized studies in Chi- cana/Chicana and/or Latina/Latina literature. In-depth study of various topics related to Chicana/Latina communities in Southern California, including Chicanas/ Chicanos visions of Los Angeles; immigration, migra- tion, and exile; autobiography and historical change; Chicanas/Chicanos journalism, and and/or Latina/Latina community and selected by instructor. P/ NP or letter grading.

CM106. Health in Chicano/Latino Population. (4) (Same as Public Health M106.) Lecture, four hours; discussion, one hour. Description of Chicana/Latino health status through life expectancy, causes of death, reportable diseases, services utilization, provider supply, and risk behaviors within community and immigration contexts. Biometric and Personal health effects in U.S. and Mexico. Concur- rently scheduled with course C276. Letter grading.

M106B. Diversity in Aging: Roles of Gender and Ethnicity. (4) (Same as Gender and Sexuality M104C, Gerontology M104C, Public Affairs M131, and Social Wel- fare M104C.) Lecture, four hours. Exploration of complexity of variables related to diversity of aging popula- tion and variability in aging process. Examination of gender and ethnicity within context of both physical and social aging, in multidisciplinary perspective uti- lizing faculty from variety of fields to address issues of diversity. Letter grading.

CM108B. Latina/Latino Families in U.S. (4) (Same as Education M108B.) Lecture, four hours; discussion, one hour (when scheduled). Study of how intersections of race, class, and gender help shape experiences of Latina/Latino families in U.S. so- cial life and how these intersections also help shape in- dividual experiences within families. Examination of family, race, class, and gender as sociological con- cepts. Readings about family experiences of Mexican and Central American groups in U.S. with special em- phasis on immigrants, and analysis of how race, class, and gender together play important roles in shaping these experiences. Discussion of roles of structure and space for agency in each context. Concurrently scheduled with course C212. P/ NP or letter grading.

M108A. Music of Latin America: Mexico, Central America, and Caribbean Islands. (5) (Same as Ethno- musicology M108A.) Lecture, four hours; discussion, one hour. Survey of traditional and contemporary musical culture. P/ NP or letter grading.

109. Chicanas/Chicanos Folklore. (4) Lecture, four hours. Examination of roots of Chicanas/Chicanos folklore in Mexico and their development in mid-19th century and development of Chicanas/Chicanos folklore to present day. P/ NP or letter grading.

CM110. Chicanas Feminism. (4) (Same as Gender Studies CM132A, CM104C.) Lecture, four hours. Enforced requisite: English Composition 3 or Gender Studies 10. Examination of theories and practices of women who identify as Chi- canas feminist. Analysis of writings of Chicanas who do not identify as feminist but whose practices attend to gender inequities faced by Chicanas both within Chi- cana/Chicano community and dominant society. At- tention to Anglo-European and Third World women. Concurrently scheduled with course CM214. P/ NP or letter grading.
111. Chicana/Chicana and Latina/Latina Intellectual Traditions. (5) Lecture, five hours. General view of philosophical, cultural, and social thought as well as intellectual traditions in Americas. Roles of writers as intellectuals and cultural/political strategists, and as definers of national identity and cultural identity and struggle for liberation. Letter grading.


118. Student-Initiated Retention and Outreach Issues in Higher Education. (5) (Same as African American Studies M118, American Indian Studies M118, and Asian American Studies M168.) Lecture, four hours. Exploration of issues in outreach and retention of students in higher education, especially through student-initiated programs, efforts, activities, and services, with focus on UCLA as case. May be repeated twice for credit. Letter grading.

M119. Chicano/Latino Community Formation: Critical Perspectives and Oral Histories. (4) (Same as Labor Studies M123.) Lecture, four hours. Analysis of historical development, formation, and demographic characteristics of Chicano/Latino communities in 20th century, with focus on labor, immigration, economic structures, electoral politics, and international dimensions. Letter grading.

M121. Issues in Latina/Latina Poverty: Mexican and Central American Voices from Los Angeles. (4) (Same as Labor Studies M121 and Urban Planning M140.) Lecture, four hours. Examination of key issues (work, housing, and neighborhoods) in urban poverty, with particular focus on Mexican and Central American immigrant communities in Los Angeles. Exploration of major theoretical models that explain urban poverty and application of them in comparative context while exploring differences between Mexican and Central American immigrant communities in Los Angeles and forces that help us understand lives of poor people in comparative context while looking at differences between two major Latino-origin populations in Los Angeles. Letter grading.

M122. Planning Issues in Latina/Latina Communities: Preserving and Strengthening Community Assets in Mexico and Salvadoran Los Angeles. (4) (Same as Labor Studies M122 and Urban Planning M171.) Lecture, four hours. How community and economic development interact, role of assets in community development, and unique synergies and pitfalls that enable or discourage communities from developing to their potential. How to strengthen and how to preserve community resources in Pico-Union neighborhood in Los Angeles. Research entails historical analysis, reviews, interviews, electronic asset mapping, web-based data processing and analysis, oral and written reports, and cyber-based research. Letter grading.

123. Applied Research Methods in Latina/Latina Communities. (4) (Same as Chicana and Chicano Studies M121.) Lecture, three hours. Through combination of lectures, key readings, and several experiments, introduction to several advanced research methods that are highly effective in producing sound and methodologically rigorous data for Latino communities, including important data that can be used for critical analysis and policy recommendations. Letter grading.

M124. Latino Immigration History and Politics. (4) (Same as Honors College M143.) Lecture, four hours. Overview of Mexican, Central American, and Latina/Latina immigration to U.S., examining social, political, and economic contexts out of which different waves of Latin American immigration have occurred. P/NP or letter grading.

M125. U.S./Mexico Relations. (4) (Same as Labor Studies M125.) Lecture, four hours. Examination of complex dynamics in relationship between Mexico and U.S., using political economy approach to study of asymmetrical integration between advanced industrial economies and developing countries. P/NP or letter grading.


129. Field Research Methods in Labor and Work- place Studies. (5) Lecture, four hours; field studies, two hours. Designed to introduce students to principles of roles of union and nonunion worker organizations in society and in improvement of quality of life for Latina/ Latino communities. Review and application of field research methods to labor organizations and workplace sites, especially participant observation, interview techniques, and grounded theory and other methods of data analysis. Letter grading.

M130. Worker Center Movement: Next Wave Organizing. (4) Lecture, two hours; course designed by students and faculty to examine and analyze the political economy of worker centers in California and their relationships to globalizing labor movements. Letter grading.

131. Barrio Popular Culture. (4) Lecture, three hours. (Course required by students who wish to organize study of Chicana/Chicana popular culture by focusing on Chicana as metaphor for community. Examination of beliefs, myths, and values of Chicana/Chicana culture and representations in iconography, heroes, legends, stereotypes, and popular narratives through literature, film, video, music, mass media, and oral history. Letter grading.

M132. Border Consciousness. (4) (Same as Lesbian, Gay, Bisexual, Transgender, and Queer Studies M132.) Lecture, three hours; discussion, one hour (when scheduled). Investigation through history, popular culture, and mass media of bilingual and bicultural identities produced by geographical and cultural landscape between Mexico and U.S. Special attention to border consciousness as site of conflict and resistance. Letter grading.

M133. Chicana Lesbian Literature. (4) (Same as Gender Studies M133 and Lesbian, Gay, Bisexual, Transgender, and Queer Studies M133.) Lecture, four hours. Exploration of intersection of radical First and Third World feminist politics, lesbian sexuality and its representation in Chicana lesbian literature, meaning of familia in Chicana lesbian lives, and impact of Chicana lesbian theory on Chicana/chicana studies. Letter grading.

M134SL. Engaging Immigrants and Their Families. (5) (Same as Community Engagement and Social Change M134SL and Labor Studies M134SL.) Lecture, two hours; discussion, two hours; field placement, two hours. Survey of immigrant landscape in Los Angeles—truly global city acting in part to buffer, settle, and incorporate immigrants in daily life. Focus on civil society to explore multiple layers of interventions and place in multiple communities across Los Angeles basin. Service learning partnerships focus on organizations addressing immigration concerns. Letter grading.

CM135. Bilingual Writing Workshop. (Formerly known as Chicana and Chicano Studies M135.) (5) Lecture, two hours; seminar, two hours. Limited to juniors/seniors. Writing sample required; access to course webpage mandatory; need not be bilingual to enroll. Technical instruction, analysis, and theoretical discussion of bilingual creative expression through genre of short fiction. Bilingualism as both politics and aesthetics to be central theme. Discussion and analysis of Chicana/Chicana and Chicano/Latina short story collections. Peer critique of weekly writing assignments. Emphasis on narrative
to Conquest, with particular emphasis on history and course 27. Study of art of selected Maya-speaking History CM139A.) Lecture, three hours. Requisite: and transgression. How space has shaped racial for- settler colonialism, critical cartography, boundaries, borders. Themes include introduction to spatial theory, and their import for study of race and ethnicity in the M139. Topics in Chicana/Chicano and/or Latina/138B. Barrio Suburbanism. (4)

169B. Chicana@ Indigeneity. (4) Seminar, four hours. Limited to juniors/seniors. Research seminar organized around readings and engaged discussion of critical topics, including Chicana@ in the Americas. Theoretical and practical implications for communities. Addresses Chicana@ indigeneity. Exploration of historical and contemporary indigenous presence in the Americas, with emphasis on Mesoamerican indigenous peoples and their presence in the Americas, and pan-Indigenous analysis of what it means to be Indigenous, Indian mestiza/o, relationship to and between cultural and linguistic memories, continuity and change, colonization, and resistance. P/NP or letter grading.

171. Humor as Social Control. (4) Lecture, four hours. Strongly recommended for non-majors. Introduction to different forms of representation of indigenous peoples and their presence in the Americas, with emphasis on Mesoamerican indigenous peoples and their presence in the Americas, and an analysis of how humor helps students in partner schools to develop peer mediation programs to be sustained by future UCLA students. Work at partner school sites and demonstration of group-based conflict resolution through weekly reflective journals, discussion through biweekly meetings, and final journal entry. Application of critical thinking, review of literature from earlier courses, and reliance on dominant discourses to understand understanding of violence, and its causes, and what schools can do to mitigate it. Letter grading.

175. Chicana Art and Artists. (4) (Same as Art M134 and World Arts and Cultures M128.) Lecture, four hours. Exploration of Chicana aesthetic. Chicana artists have developed unique experience and identity as artists and Chicanas. Letter grading.

181. History of Chicana/Chicano Los Angeles, 20th Century. (4) (Same as History M151C.) Lecture, four hours. History of Chicana/Chicano Los Angeles, 20th Century. Concentration on some aspect of human and political circumstances affecting ability of Latinos to participate in Los Angeles; theorization, as well as practical implications for American society. Readings and discussions trace evolution of white identity and explore its significance to historical construction of race class in American history. Currently scheduled with course C256. Letter grading.

183. History of Los Angeles. (4) (Same as History M155.) Lecture, three hours, one hour (when scheduled). Recommended for juniors/seniors. Social, economic, cultural, and political development of Los Angeles and its environs from its founding to present. Focus on race, class, and ethnicity. seaside urban setting. P/NP or letter grading.

184. History of U.S./Mexican Borderlands. (4) Lecture, four hours. Overview of Chicana@ Indigeneity. Exploration of historical and contemporary indigenous presence in the Americas, and Pan-Indigenous analysis of what it means to be Indigenous, Mesoamerican indigenous peoples and their presence in the Americas, and an analysis of how humor helps students in partner schools to develop peer mediation programs to be sustained by future UCLA students. Work at partner school sites and demonstration of group-based conflict resolution through weekly reflective journals, discussion through biweekly meetings, and final journal entry. Application of critical thinking, review of literature from earlier courses, and reliance on dominant discourses to understand understanding of violence, and its causes, and what schools can do to mitigate it. Letter grading.

185. Whose Monument Where: Course on Public Art. (4) (Same as Art M185 and World Arts and Cultures M126.) Lecture, four hours. Recommended corequisite: course M186A, M186B, or M186C. Examination of how historical, social, and political forces have impacted Chicana@/Chicano educational experiences. P/NP or letter grading.

196A. Beyond Mexican Mural: Beginning Muralism and Community Development. (4) (Same as Art M186A and World Arts and Cultures M125A.) Studio/lecture, four hours. Corequisite: course M186AL. Investigation of muralism as method of community education, development, and empowerment. Exploration of issues through development of large-scale collaborative digitally created image and/or painting for public space, community and student research, design, and work with community participants. P/NP or letter grading.

188SC. Individual Studies for USIE Facilitators. (2) Tutorial, to be arranged. Enforced requisite: course 188SB. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor while facilitating USIE BBS course. Individual study in regularly scheduled meetings with faculty mentor required. May not be repeated. Letter grading.

188AH. Beyond Mexican Mural: Intermediate Murals and Community Development. (4) Same as Art M186B and World Arts and Cultures M125B.) Studio/lecture, six hours. Requisites: courses M186B, M186B. Corequisite: course M186CL. Continuation of investigation of muralism as method of community education, development, and empowerment. Exploration of issues through development of large-scale collaborative digitally created image and/or painting for placement in community. Students research, design, and work with community participants. Continuation of project, group in-studio, documentation, and dedication, with work on more advanced independent projects. P/NP or letter grading.

188CL. Beyond Mexican Mural: Advanced Muralism and Community Development. (4) Same as Art M186C and World Arts and Cultures M125C.) Studio/lecture, six hours. Requisites: courses M186B, M186B, M186CL. Corequisite: course M186CL. Continuation of investigation of muralism as method of community education, development, and empowerment. Exploration of issues through development of large-scale collaborative digitally created image and/or painting for placement in community. Students research, design, and work with community participants. Continuation of project, group in-studio, documentation, and dedication, with work on more advanced independent projects. P/NP or letter grading.


187B. Colonial Latin American Art. (4) Same as Art History CM141.) Lecture, three hours; discussion, one hour (when scheduled). Art and architecture of colonial Americas from 16th to 18th century. P/NP or letter grading.

187C. Aztec Art. (4) Lecture, four hours. Introduction to Aztecs through analysis of art in different media including sculpture, featherworks, polychrome pottery, manuscripts, and architecture. Readings in ethnohistoric sources compiled in early colonial period by indigenous scribes and Spanish officials (friars, soldiers, chroniclers, and administrators). Study of Aztecs, their art, and major topics discussed in existing, scholarship, including calendar, foundational and creation myths, stories of migration, human sacrifice, rulership, warfare, gender, religion, philosophy, family, art and architecture. Assessment of validity of scholarly assumptions about Aztecs, their art, and society in light of available sources. P/NP or letter grading.

188. Special Courses in Chicana and Chicano Studies. (4) Seminar, three hours. Some sections may require prior coursework. Departmentally sponsored experimental or temporary courses, such as those taught by visiting faculty members. May be repeated for credit. P/NP grading.

188SA. Individual Studies for USIE Facilitators. (1) Tutorial, to be arranged. Enforced corequisite: Honors Colliegium 101E. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to discuss selected USIE seminar topic, conduct preparatory research, and begin preparation of syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.

188SB. Individual Studies for USIE Facilitators. (1) Tutorial, to be arranged. Enforced requisite: course 188SA. Enforced corequisite: Honors Colliegium 101E. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to discuss selected USIE seminar topic, conduct preparatory research, and begin preparation of syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.

188SC. Individual Studies for USIE Facilitators. (2) Tutorial, to be arranged. Enforced requisite: course 188SB. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to discuss selected USIE seminar topic, conduct preparatory research, and begin preparation of syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.

189. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to upper-division lecture course. Exploration of topics in greater depth through reading, papers, oral presentations, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

189HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to upper-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

190. Research Colloquia in Chicana and Chicano Studies. (2) Seminar, two hours. Limited to bringing together students undertaking supervised tutorial research. Seminar with one or more faculty members to present reports, discuss research methodologies, share findings, and provide feedback on each other's work. Culminates in public symposium of Chicana Chicano research. Students expected to present polished position papers on their research. May be repeated for credit. P/NP grading.

191. Variable Topics Research Seminars: Chicana and Chicano Studies. (4) Seminar, three hours. Limited to juniors/senior. Research seminar organized around readings and engaged discussion of critical topic of interest in field. Exploration of issue, its theoretical implications for field, and practical implications for communities. Final research paper required. May be repeated for credit. P/NP or letter grading.

192A. Undergraduate Practicum in Chicana and Chicano Studies. (4) Seminar, three hours. Limited to juniors/seniors. Training and supervised practicum for advanced undergraduate students who assist in preparation of materials and/or development of innovative programs or courses of study under guidance of faculty member. Students are expected to present polished position papers on their research. May be repeated for credit. P/NP grading.

192C. Aztec Art. (4) Lecture, four hours. Introduction to Aztecs through analysis of art in different media including sculpture, featherworks, polychrome pottery, manuscripts, and architecture. Readings in ethnohistoric sources compiled in early colonial period by indigenous scribes and Spanish officials (friars, soldiers, chroniclers, and administrators). Study of Aztecs, their art, and major topics discussed in existing scholarship, including calendar, foundational and creation myths, stories of migration, human sacrifice, rulership, warfare, gender, religion, philosophy, family, art and architecture. Assessment of validity of scholarly assumptions about Aztecs, their art, and society in light of available sources. P/NP or letter grading.

193. Readings/Speaker Series Seminars: Chicana and Chicano Studies. (4) Lecture, two hours. Limited to undergraduate Colloquia Series students. Reading of journal articles associated with speaker topics to enlivens postcolloquia discussions. May not be applied toward departmental major or minor elective requirements. May be repeated for credit. P/NP or letter grading.

194. Research Group Seminars: Chicana and Chicano Studies. (4) Seminar, one hour. Designed for undergraduate students who are part of research group. Discussion of current literature in field or of research of faculty members or students. Use of specific research method on selected topic. May be repeated for credit with topic change. P/NP grading.

195. Community Internships in Chicana and Chicano Studies. (4) Tutorial, two hours. Field placement, eight hours. Limited to juniors/seniors. Internship in supervised setting in community agency or business. Students meet on regular basis with instructor and provide periodic reports of their experience. May be repeated for credit. Individual contract with supervising faculty member required. P/NP or letter grading.

196. Community Internships in Chicana and Chicano Studies. (4) Tutorial, two hours. Field placement, eight hours. Limited to juniors/seniors. Internship in supervised setting in community agency or business. Students meet on regular basis with instructor and provide periodic reports of their experience. May be repeated for credit. Individual contract with supervising faculty member required. P/NP or letter grading.


198A-198B-198C. Honors Research in Chicana and Chicano Studies. (2 each) Tutorial, one hour. Limited to junior/senior honors program students. May be repeated for credit. Individual contract required. Letter grading.

198A. Thesis Conceptualization. Requisites: courses 10A, 10B, 101, and 89 or 189. Conceptualization and formulation of project in Fall Quarter under direction of independent research. Students begin data collection on topic and production of proposal for thesis required. 198B. Annotated Bibliography/Literature Review. Requisite: course 198A. Development of research skills in Winter Quarter through intensive annotated bibliography or literature review on topic. Weekly meetings with faculty member to discuss research and develop outline, argument, and structure of thesis. 198C. Writing, revision, and completion of honors thesis. Requisite: course 198B. Writing, revision, and completion of independent honors thesis in Spring Quarter to specification and satisfaction of thesis committee. Public presentation and defense of thesis required.

199. Directed Research or Senior Project in Chicana and Chicano Studies. (2 to 4) Tutorial, four hours. Requires: courses 10A, 10B. Limited to juniors/seniors. Individual intensive study, with scheduled meetings to be arranged between faculty mentor and student. As expected reading and tangible evidence of mastery of subject matter required. May be repeated for maximum of 8 units. Individual contract required. P/NP or letter grading.

Graduate Courses

200. Theoretical Paradigms in Chicana and Chicano Studies. (4) Seminar, three hours. Limited to graduate students. Examination of several approaches and important theoretical frameworks in field of Chicana and Chicano studies. Exploration of changes that have taken place around four key theoretical areas—colonialism, race, gender, and the impacts of immigration on insiders and outsiders. S/U or letter grading.

201. Activist Scholarship and Intersectional Methodologies Seminar. (4) Seminar, three hours. Limited to graduate students. Exploration of four critical epistemologies, or schools of thought, that employ intersectional methodologies as basis for social action re-
202. Qualitative Methods in Study of Chican@/Chicano and Latin@/Latin American, (4) Seminar, three hours. Limited to graduate students. Methods course that takes a qualitative, empirical, and historical approach to understanding research questions and the process of inquiry. Students will engage with qualitative methods through periodic readings and empirical case studies. Limited to graduate students. Methodological perspectives of qualitative research, beyond the qualitative and quantitative dualism. Focus on the role of the researcher in shaping and interpreting data. Through a variety of research designs, students have the opportunity to develop their own research questions and methods.

203. Geographic Geographies, (4) Seminar, three hours. Interdisciplinary examination of the spatial dimensions of social, cultural, and political phenomena. Using methods and theories from geography, history, ethnic studies, and Latin American and Caribbean studies, students examine the interaction between humans and environments, and the processes of social and cultural change.

210. Queer of Color Genealogies, (4) Seminar, three hours. Art of community-making by those multiply marginalized by categories of race, gender, class, citizenship, and sexuality. This course explores the ways in which queer and trans people have historically been involved in community-building, and how these communities have been formed and sustained.

220. Service Learning: Theory and Practice, (4) Seminar, three hours. Limited to graduate students. Examination of theories and approaches that underpin service learning and exploration of ways in which service learning can be utilized in academic disciplines (second and foreign language instruction, education, ethnic studies, Latin@ studies, women’s studies, public health, literature, public art, political science, etc.). Creation of research proposal for use of service learning in one course (real or hypothetical) in academic discipline of student’s choice. S/U or letter grading.

230. Queer Color Genealogies, (4) Seminar, three hours. History of detention and deportation in U.S. as it affects Mexican and other Latin@/Latinos. Consolidation of this legal authority and its deployment across 20th century detention and deportation policy in U.S. as it affects Latin@/Latinos and Latin American, (4) Seminar, three hours. Limited to graduate students. Examination of historical and contemporary populations of Asian-Latin@ in Latin America and U.S. Analysis of contemporary populations of Asian-Latin@ in Latin America and U.S. View of Asian-Latin@ in Latin America and U.S. and its deployment across 20th century detention and deportation policy in U.S. as it affects Latin@/Latinos.

231. Chicana and Chicano Studies / 273 Seminar, three hours. Limited to graduate students. Critical reading and discussion of selected research and theoretical writings that shape Chicana and Chicano Studies. Students will develop a research project in consultation with the instructor. S/U or letter grading.

232. Chican@ Feminism, (4) Same as Gender Studies CM232A. Lecture, four hours. Enforced requisites: one semester of coursework within existing social science literature. To answer research questions, students select from theoretical frameworks discussed in readings. S/U or letter grading.

235. Transnational Women’s Organizing in Americas, (4) Lecture, four hours. Four-semester seminar to study the transformative nature of participation in social movements and other transnational organizing. Exploration of how questions of race and gender influence global economic and political struggles. S/U or letter grading.

236. Historical and Cultural Responses to Globalization, (4) Seminar, three hours. Emphasis on understanding the ways in which globalization has affected Latin@/Latin American and Asian-Latin@ communities. Students will be required to engage with theoretical frameworks, historical events, and contemporary issues related to globalization.

237. Chicana/Latina Feminist Theory, (4) Seminar, three hours. Limited to graduate students. Analysis of the theoretical and methodological foundations of Chicana/Latina feminist theory. Students will engage with readings from Chicana/Latina feminist scholars and critical theorists.

240. Migration and Globalization, (4) Seminar, three hours. Limited to graduate students. Critical analysis of the historical and contemporary processes of global migration. Students will engage with theoretical frameworks, empirical evidence, and case studies to understand the implications of globalization on migration.

241. Understanding Whiteness in American History and Culture, (4) Lecture, four hours. Limited to graduate students. Critical analysis of the historical and contemporary construction of race in American history. Students will engage with readings and primary sources to understand the role of whiteness in shaping American society.

242. Contemporary Latin@ American History, (4) Seminar, three hours. Limited to graduate students. Exploration of key events and developments in Latin@ American history. Students will engage with primary source materials and secondary literature to understand the historical context and contemporary implications of Latin@ American history.

243. Contemporary Latin@ American Literature, (4) Seminar, three hours. Limited to graduate students. Critical analysis of key works of contemporary Latin@ American literature. Students will engage with theoretical frameworks and scholarly debates to understand the role of literature in shaping Latin@ American identity and culture.

244. Contemporary Latin@ American Politics, (4) Seminar, three hours. Limited to graduate students. Critical analysis of key political developments in Latin@ American countries. Students will engage with theoretical frameworks and primary source materials to understand the role of politics in shaping Latin@ American societies.

245. Contemporary Latin@ American Economics, (4) Seminar, three hours. Limited to graduate students. Critical analysis of key economic developments in Latin@ American countries. Students will engage with theoretical frameworks and primary source materials to understand the role of economics in shaping Latin@ American societies.

246. Contemporary Latin@ American Social Movements, (4) Seminar, three hours. Limited to graduate students. Critical analysis of key social movements in Latin@ American countries. Students will engage with theoretical frameworks and primary source materials to understand the role of social movements in shaping Latin@ American societies.

247. Contemporary Latin@ American Art, (4) Seminar, three hours. Limited to graduate students. Critical analysis of key works of contemporary Latin@ American art. Students will engage with theoretical frameworks and scholarly debates to understand the role of art in shaping Latin@ American identity and culture.

248. Contemporary Latin@ American Music, (4) Seminar, three hours. Limited to graduate students. Critical analysis of key works of contemporary Latin@ American music. Students will engage with theoretical frameworks and scholarly debates to understand the role of music in shaping Latin@ American identity and culture.

249. Contemporary Latin@ American Film, (4) Seminar, three hours. Limited to graduate students. Critical analysis of key works of contemporary Latin@ American film. Students will engage with theoretical frameworks and scholarly debates to understand the role of film in shaping Latin@ American identity and culture.

250. Contemporary Latin@ American Literature and Film, (4) Seminar, three hours. Limited to graduate students. Critical analysis of key works of contemporary Latin@ American literature and film. Students will engage with theoretical frameworks and scholarly debates to understand the role of literature and film in shaping Latin@ American identity and culture.


252. Cultural Representations in Americas, (4) Seminar, three hours. Analysis of Latin@/Latin American or fictional narratives and films, with emphasis on gender issues, diasporas, and globalizations. Students will engage with theoretical frameworks and formal analytical perspectives and several conceptual frameworks—cultural studies, postcolonial studies, neoliberalism, intersectionality, and feminist theories. Study of these cultural productions as expression of intersectionalities and differences among Latin@/Latin American and Latina/Latino cultural workers, as well as among diverse populations and changing experiences their works refer to. S/U or letter grading.

253. forked Paths of Chicana Theory, (4) Seminar, three hours. Limited to graduate students. Theoretical and methodological foundations of Chicana feminist theory in its multiple and historical manifestations, beginning in 17th century with early proto-feminist work of Sor Juana Inés de la Cruz, to the contemporary Latin@ world with feminist theories such as Anzaldúa’s foundational concepts of muxe, mestizaje, and borderlands. Limited to graduate students. Letter grading.


255. Mass Media Research Methods, (4) Seminar, three hours. Limited to five students. Survey of range of qualitative and quantitative communication methods and findings regarding Chicana/Chicano and Latina/Latino topics for all media types in both English and Spanish. Critical evaluation of research findings across this expansive field and design of complex research problems. S/U or letter grading.

256. Understanding Whiteness in American History and Culture, (4) Lecture, three hours; discussion, one hour (when scheduled). Limited to graduate students. Survey of range of qualitative and quantitative communication methods and findings regarding Chicana/Chicano and Latina/Latino topics for all media types in both English and Spanish. Critical evaluation of research findings across this expansive field and design of complex research problems. S/U or letter grading.
299. Critical Discourse: Analytic Methods. (4) Seminar, three hours. Limited to departmental graduate students. Two critical discourse analytic (CDA) methods taught to document language of public figures. Students learn one method (conceptual metaphor theory, or discourse historical approach) to analyze actual public official’s own discourse surrounding one controversial issue. Empirical study of discourses that are based on independently developed research enterprises can be valuable tool for variety of graduate student research. S/U or letter grading.

C274. Language Politics and Policies in U.S.: Comparative Perspectives. (4) Lecture, four hours. Historical overview of national and institutional language policies, especially schooling, in U.S. as context to understanding social, legal, and political constraints on bi-lingualism. Definitions and development of language policy and planning, history of general and educational language policies in U.S., demographic profile of language diversity, and current language and educational policy issues in U.S. Comparisons with selected international cases. Concurrently scheduled with course C179. S/U or letter grading.

C276. Health in Chicano/Latino Population. (4) Lecture, four hours; discussion, one hour. Designed for graduate students. Examination of Chicano/Latino health status through life expectancy, causes of death, reportable diseases, services utilization, provider supply, and risk behaviors within demographic/immigration categories. Biomedical view of health effects in U.S. and Mexico. Concurrently scheduled with course CM106. Letter grading.

C277. Latino Social Policy. (4) Lecture, three hours; discussion, one hour (when scheduled). Examination of social welfare of Latinos (Chicanos, Puerto Ricans, and Cubans) in U.S. through assessment and critical analysis of social policy issues affecting them. Survey and critical assessment of landmark legislation and key appellate decisions that have impacted social, legal, and political constraints on bilingualism. Definitions and development of language policy and planning, history of general and educational language policies in U.S., demographic profile of language diversity, and current language and educational policy issues in U.S. Comparisons with selected international cases. Concurrently scheduled with course CM106. Letter grading.

279. Globalization and Transnationalism. (4) Seminar, three hours. Interdisciplinary seminar that integrates political-economic, historical-sociological, and anthropological-cultural perspectives to help students develop critical political-economic analysis of interplay between globalization (of flows of people, material goods, information, and political-cultural influences) and localized transnational dynamics that together give meaning and construct new social identities and strategies for struggle throughout world. S/U or letter grading.

280. Urban Social Inequality. (4) Seminar, three hours. Examination of several key social and urban inequalities in U.S. Survey of three key contemporary issues of inequality primarily from sociology and urban planning/studies: income distribution (poverty), work and employment (labor), and neighborhoods (space/ geography). Through wide range of methods, approaches, and theoretical frameworks examined, exposure to key research on inequality. S/U or letter grading.

281. Central American Migration and Integration. (4) Seminar, three hours. Through empirical research cycle and informed with relevant theoretical frameworks, students develop research questions based on migration and integration experiences of Central American immigrants in greater Los Angeles area. Students conduct qualitative research, analyze original data, and write final papers that contextualize findings within existing social scientific literature. S/U or letter grading.

282. Chicana/Chicana Legal History. (4) Seminar, three hours. Legal history of Chicanas/Chicanos in U.S. from mid-19th century to present, with emphasis on critical race theory. Examination of landmark legislation and key appellate decisions that have impacted Chicano/Latino community. Topics include critical race theory, Treaty of Guadalupe-Hidalgo, legal construction of Mexican American racial identity, historic educational policies, contemporary educational issues, jury rights, Chicano movement, and undocumented immigration. S/U or letter grading.

M289. Studies in Chicana/Chicana Literature. (4) (Same as English M261) Seminar, three hours. Intensive research and study of major themes, authors, and issues in Chicana/Chicana literature and culture. Examination of political, aesthetic, economic, and cultural context that emerges in Chicana/Chicana discourse; limits of investigation set by individual instructor. May be repeated for credit. S/U or letter grading.

291. Variable Topics Research Seminars: Chicana and Chicano Studies. (4) Seminar, three hours. Limited to graduate students. Research seminar organized around readings and engaged discussion of critical topic of interest in field. Exploration of issue, its theoretical implication for field, and practical implications for communities. Topics vary according to participating faculty members. Final research project required. May be repeated for credit with consent of director of graduate studies. S/U or letter grading.

375. Teaching Apprentice Practicum. (1 to 4) Seminar, to be arranged. Preparation: apprentice personnel employment as teaching assistant, associate, or fellow. Teaching apprenticeship under active guidance and supervision of regular faculty member responsible for curriculum and instruction at UCLA. May be repeated for credit. S/U grading.

495. Learner-Centered Teaching in Chicana/Chicana Studies. (4) Seminar, four hours. Designed for graduate students and required of all new department teaching apprentices. Interactive forum for discussing learner-centered teaching in Chicana/Chicana studies. Exploration of diverse classroom strategies and pedagogical techniques specific to interdisciplinary field. Topics include preparing for discussion sections, motivating discussion among students, using class websites, office hours, grading, and campus resources. May be repeated once for credit. S/U grading.

595. Research and Preparation for MA Thesis. (4 to 12) (Formerly numbered 598.) Tutorial, to be arranged. Limited to departmental graduate students who have completed all MA coursework requirements. Research and preparation for MA thesis under direction of thesis committee chair. May not be applied toward MA degree requirements. May be repeated for maximum of 12 units. S/U grading.

596. Directed Individual Study or Research. (4 to 12) Tutorial, to be arranged. Directed individual research and study in area related to Chicana/Chicana studies or subjects not offered as regular courses, arranged individually by student and instructor. May be repeated for maximum of 12 units. S/U or letter grading.

597. Preparation for PhD Qualifying Examinations. (2 to 12) Tutorial, to be arranged. Limited to departmental graduate students. Reading and preparation for PhD qualifying examinations. Mandatory and supplemental reading lists prepared by student advisory committees. May be repeated for maximum of 12 units. S/U grading.

599. Research for PhD Dissertation. (4 to 12) Tutorial, to be arranged. Limited to PhD students who have passed qualifying examinations. Research and preparation of PhD dissertation under direction of dissertation committee chair. May not be applied toward PhD degree requirements. May be repeated for maximum of 8 units. S/U grading.
The undergraduate curriculum leads to a BS in Civil Engineering, a broad-based education in environmental engineering, geotechnical engineering, hydrology and water resources engineering, and structural engineering and mechanics. This program is an excellent foundation for entry into professional practice in civil engineering or for more advanced study. The department also offers the undergraduate Environmental Engineering minor.

At the graduate level, MS and PhD degree programs are offered in the areas of civil engineering materials, environmental engineering, geotechnical engineering, hydrology and water resources engineering, and structures (including structural/earthquake engineering and structural mechanics). In these areas, research is being done on a variety of problems ranging from basic physics and mechanics problems to critical problems in earthquake engineering and in the development of new technologies for pollution control and water distribution and treatment.

**Undergraduate Study**

The civil engineering program is accredited by the Engineering Accreditation Commission of ABET. The Civil Engineering major is a designated capstone major. In each of the major field design courses, students work individually and in groups to complete design projects. To do so, they draw on their prior coursework, research the needed materials and possible approaches to creating their device or system, and come up with creative solutions. This process enables them to integrate many of the principles they have learned previously and apply them to real systems. In completing their projects, students are also expected to demonstrate effective oral and written communication skills, as well as their ability to work productively with others as part of a team.

**Civil Engineering BS**

**Capstone Major**

**Learning Outcomes**

The Civil Engineering major has the following learning outcomes:

- Understanding of, and ability to apply, basic mathematical and scientific concepts that underlie the field
- Ability to contribute meaningfully to design projects
- Critical thinking skills, problem-solving abilities, and familiarity with computational procedures essential to the field
- Ability to work productively as a member of a team
- Effective oral and written communication skills

**Preparation for the Major**

Required: Chemistry and Biochemistry 20A, 20B, 20L; Civil and Environmental Engineering 1, M20 (or Computer Science 31); Mathematics 31A, 31B, 32A, 32B, 33A, 33B (or Mechanical and Aerospace Engineering 82); Physics 1A, 1B, 1C, 4AL; one natural science course selected from Civil and Environmental Engineering SBSL, Earth, Planetary, and Space Sciences 3, 15, 16, 17, 20, Environment 12, Life Sciences 1, 2, 7A, Microbiology, Immunology, and Molecular Genetics 5, 6, or Neuroscience 10.

**The Major**

Required: Chemical Engineering 102A or Mechanical and Aerospace Engineering 105A, Civil and Environmental Engineering 91 (or Mechanical and Aerospace Engineering 101), 102, 103, C104 (or Materials Science and Engineering 104), 108, 110, 120, 135A, 150, 153, 190, Mechanical and Aerospace Engineering 103; three technical breadth courses (12 units) selected from an approved list available in the Office of Academic and Student Affairs; and at least eight major field elective courses (32 units) from the lists below with at least two design courses, one of which must be a capstone design course and two of which must be laboratory courses. The laboratory courses must be taken from two distinct areas. Courses applied toward the required course requirement may not also be applied toward the major field elective requirement.

**Civil Engineering Materials:** Civil and Environmental Engineering C104, C105, C182; laboratory course: 108L.

**Environmental Engineering:** Civil and Environmental Engineering 154, 155, 164, 165, 166; laboratory courses: 156A, 156B; capstone design courses: 157B, 157C.

**Geotechnical Engineering:** Civil and Environmental Engineering 125; laboratory courses: 128L, 129L; design courses: 121, 123 (capstone).

**Hydrology and Water Resources Engineering:** Civil and Environmental Engineering 157A; laboratory course: 157L; design courses: 151, 152 (capstone).

**Structural Engineering and Mechanics:** Civil and Environmental Engineering 125, 130, 135A, 135B, 135C, 137; laboratory courses: 108L, 135L, 140L; design courses: 141, 143, 144 (capstone), 147 (capstone).

**Transportation Engineering:** Civil and Environmental Engineering 180, 181, C182.

**Additional Elective Options:** Courses selected from an approved list available in the Office of Academic and Student Affairs. Note: both 128L and 129L may be taken to satisfy the two-laboratory course requirement.

For information on UC, school, and general education requirements, see the College and Schools chapter.

**Environmental Engineering Minor**

The Environmental Engineering minor is designed for students who wish to augment their major program of study with an exposure to engineering methods applied to key environmental problems facing modem society in developed and developing countries. The minor also offers students a brief experience and understanding of the roles that environmental engineering methods play in solving environmental problems.

To enter the minor, students must be in good academic standing (2.0 grade-point average or better) and file a petition in the Office of Academic and Student Affairs, 6426 Boelter Hall.

**Required Lower-Division Course (4 units):** Mathematics 3C or 32A.

**Required Upper-Division Courses (24 units minimum):** Civil and Environmental Engineering 133 and five courses from Civil and Environmental Engineering 110, 150, 151, 152, 154, 155, 164A, 165A, 157A, 157B, 157C, 157L, 159, 164, M165, M166, Chemical Engineering 102A, Mechanical and Aerospace Engineering 103, 105A.

Credit for Chemical Engineering 102A and Mechanical and Aerospace Engineering 105A is not allowed.

A minimum of 20 upper-division units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor, and at least 16 units applied toward the minor must be taken in residence at UCLA. Transfer credit for any of the above is subject to departmental approval; consult with the undergraduate counselors before enrolling in any courses for the minor.

Each minor course must be taken for a letter grade, and students must have a minimum grade of C (2.0) in each and an overall grade-point average of 2.0 or better in the minor. Successful completion of the minor is indicated on the transcript and diploma.

**Graduate Study**

Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Division website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

**Graduate Degrees**

The Department of Civil and Environmental Engineering offers Master of Science (MS) and Doctor of Philosophy (PhD) degrees in Civil Engineering.

**Civil and Environmental Engineering**

**Lower-Division Courses**

1. Civil Engineering and Infrastructure. (2) Lecture, two hours; outside study, four hours. Examples of infrastructure, its importance, and manner by which it is designed and constructed. Role of civil engineers in infrastructure development and preservation. P/NP grading.

Distributed forces, determinate and indeterminate equilibrium, internal loads and equilibrium in trusses, resultant forces and moments. Free-body diagrams and Newtonian mechanics, vector representation, and hours. Requisites: Mathematics 31A, 31B, Physics 1A. Four hours; discussion, two hours; outside study, six hours. Collection, processing, and analysis of geospatial data, Ellipsoid and geoid models of shape of Earth, height and geodetic control. Elements of geodesy, and usage of topographic data and maps. Advanced global positioning systems (GPS) for high-precision mapping. Advanced laser-based light detection and ranging (LiDAR). Qualitative terrain analysis and change detection. Hydrogeometrics: seafloor mapping. Letter grading.

Upper-Division Courses

102. Dynamics of Particles and Bodies. (2) Lecture, two hours; discussion, two hours; outside study, two hours. Requisites: course 91, Physics 1B. Introduction to fundamentals of dynamics of single particles, system of particles, and rigid bodies. Topics include kinematics of particles, work and energy, impulse and momentum, multiparticle systems, kinematics and kinetics of rigid bodies in two- and three-dimensional motions. Letter grading.

103. Applied Numerical Computing and Modeling in Civil and Environmental Engineering. (4) Lecture, four hours; discussion, two hours; outside study, six hours. Requisites: course M20 (or Computer Science 31), Mathematics 31A, 31B, 32B, Physics 1A, 1B, 1C. Corequisite: course 108. Discussion of aspects of cement and concrete materials, including manufacture of cement and production of concrete. Aspects of cement composition and reactions, microstructural properties of plastic and hardened concrete, chemical admixtures, and quality control and acceptance testing. Development and testing of fundamentals for complete understanding of overall response of all civil engineering materials. By end of term, successful utilization of fundamental materials science concepts to understand, explain, analyze, and describe engineering performance of civil engineering materials. Concurrently scheduled with course C204. Letter grading.


120. Principles of Soil Mechanics. (4) Lecture, four hours; discussion, two hours; outside study, six hours. Requisite: course 108. Soil as foundation for struc- tures and as material of construction. Soil formation, classification, physical and mechanical properties, soil compaction, earth pressures, consolidation, and shear strength. Letter grading.


122. Advanced Geotechnical Design. (4) Lecture, four hours; discussion, two hours; outside study, six hours. Requisites: courses 121, 190. Analysis and de- sign of earth dams, including seepage, piping, and slope stability analyses. Case history studies involving landslides, failures, and slope stability problems, and design of repair methodologies for those prob- lems. Within context of above technical problems, em- phasis on preparation of professional engineering documents such as proposals, work warrants, figures, plans, and reports. Letter grading.


137L. Structural Dynamics Laboratory. (4) Lecture, two hours; laboratory, six hours; outside study, four hours. Requisite or corequisite: course 137. Calibration of instrumentation for dynamic measurements.

140L. Structural Components and Systems Testing Laboratory. (4) Lecture, two hours; laboratory, six hours; discussion, two hours; outside study, six hours. Enforced requisite: course 142. Comparison of experimental results with analytical results and code requirements to assess accuracies and limitations of calculation procedures used in design of reinforced concrete structures. Tests include quasi-static tests of structural elements (beams, columns) and systems (slab-column, beam-column) and dynamic tests of systems. Quasi-static tests focus on assessment of element or subsystem stiffness, strength, and deformation capacity, whereas dynamic tests focus on assessment of periods, mode shapes, and capacities. Students develop experiment skills through preparation of laboratory reports and oral presentations. Letter grading.


142. Design of Reinforced Concrete Structures. (4) Lecture, four hours; discussion, two hours; outside study, six hours. Enforced requisite: course 135A. Beams, columns, slabs, and slabs and slabs for flexure, shear, anchorage of reinforcement, and deflection. Design of columns for axial force, bending, and shear. Ultimate strength design methods. Letter grading.

142L. Reinforced Concrete Structural Laboratory. (4) Lecture, two hours; laboratory, six hours; outside study, four hours. Requisite: courses 135B, 142. Limited experimentations for design of reinforced concrete beams, columns, slabs, and slabs evaluated using analysis and experiments. Links between theory, building codes, and experimental results. Students demonstrate accuracies and limitations of calculation procedures used in design of reinforced concrete structures. Development of skills for written and oral presentations. Letter grading.

143. Design and Contraction of Reinforced Concrete Buildings. (4) Lecture, four hours; discussion, two hours; outside study, six hours. Enforced requisite: courses 135A, 142. Equivalent loads and allowable flexural stresses in determined by code systems. Fundamental of shear strength design, including secondary effects in indeterminate systems. Design of indeterminate post-tensioned beam using both hand calculations and computer program. Discussion of external post-tensioning, one- and two-way slab systems. Letter grading.

144. Structural Systems Design. (4) Lecture, four hours; discussion, two hours; outside study, six hours. Requisites: courses 141 or 142, and 190. Design course for civil engineering students, with focus on design and performance of complete building structural systems. International Building Code (IBC) and ASCE 7 code considerations used in design of reinforced concrete and steel structural buildings. Computer modeling, analysis, and performance assessment of buildings. Letter grading.


150. Introduction to Hydrology. (4) Lecture, four hours; discussion, two hours; outside study, six hours. Enforced requisite: course 150 or 151. Hydrologic cycle and water resources. Letter grading.

151. Introduction to Water Resources Engineering. (4) Lecture, four hours; discussion, two hours; outside study, six hours. Enforced requisite: course 150, Mechanical and Aerospace Engineering 103. Study of hydrologic cycle and relevant atmospheric processes, water and energy balance, radiation, precipitation, evapotranspiration, groundwater flow, and return flows. Letter grading.

152. Hydraulic and Hydrologic Design. (4) Lecture, four hours; discussion, two hours; outside study, six hours. Enforced requisite: courses 150, 151, 190. Analysis and design of hydraulic and hydrologic systems, including stormwater management systems, potable and recycled water distribution systems, wastewater collection systems, and constructed wetlands. Emphasis on practical design components, including assessment of system designs and documents, environmental impact reports, permits, agency coordination, and engineering ethics. Project-based course includes analysis of alternative designs, use of engineering economics, and preparation of written engineering reports. Letter grading.

153. Introduction to Environmental Engineering Science. (4) Lecture, four hours; discussion, one hour (when scheduled); outside study, seven hours. Recommended prerequisite: Mechanical and Aerospace Engineering 103. Water, air, and soil pollution: sources, transformations, effects, and processes for removal of contaminants. Water quality, water contaminants, wastewater treatment, water disposal, air pollution, global environmental problems. Field trip. Letter grading.

154. Chemical Fate and Transport in Aquatic Environments. (4) Lecture, four hours; discussion, two hours; outside study, six hours. Required prerequisite: course 153. Fundamental physical, chemical, and biological principles governing movement and fate of chemicals in surface waters and groundwater. Topics include chemical fate in aquatic environments, air-water exchange, acid-base equilibria, oxidation-reduction chemistry, chemical sorption, bio- degradation, and bioaccumulation. Practical quantitative techniques and mathematical concepts are related to both reaction and transport of chemicals in environment. Letter grading.

155. Unit Operations and Processes for Water and Wastewater Treatment. (4) Lecture, four hours; discussion, two hours; outside study, six hours. Requisites: courses 155, 190. Process design of wastewater treatment plants, including primary and secondary treatment, detailed design review of existing plants, process control, and economics. Letter grading.

157L. Hydrologic Analysis. (4) Lecture, two hours; laboratory, five hours; discussion, one hour. Requisite: course 150. Collection, compilation, and interpretation of data for component of hydrometric cycle, including precipitation, evaporation, infiltration, and runoff. Use of tables and parameters for development, construction, and application of analytical models for selected problems in hydrologic and water resources analysis. Letter grading.

159. Green Infrastructure. (4) Lecture, four hours; discussion, two hours; outside study, six hours. Required prerequisite: courses 155, 190. Overview of environmental systems, and (3) use of nanotechnology to environmental systems, and (3) use of nanotechnology to wastewater treatment, waste disposal, air pollution, global environmental problems. Field trip. Letter grading.

164. Sustainable Waste Management. (4) Lecture, four hours; discussion, two hours; outside study, six hours. Required prerequisite: course 153. Introduction to environmental science and engineering. Management of solid wastes, some of which are hazardous, is integral part of infrastructures, and it is required to achieve environmental sustainability. Study of all aspects of hazardous and non-hazardous solid wastes. Letter grading.

M155. Environmental Nanotechnology: Implications and Applications. (4) (Same as Engineering M103.) Lecture, four hours; discussion, two hours; outside study, six hours. Enforced requisite: course 151. Introduction to potential impurities of nanotechnology to environmental systems as well as potential application of nanotechnology to environmental remediation. Topics covered include three multidisciplinary areas: (1) physical, chemical, and biological properties of nanomaterials, (2) transport, reactivity, and toxicity of nanoscale materials in natural environment, and (3) application of nanotechnology for energy and water treatment, plus environmental protection, monitoring, and remediation. Letter grading.

M156. Environmental Microbiology. (4) (Same as Environmental Health and Safety Sciences M156.) Lecture, four hours; discussion, two hours; outside study, six hours. Required prerequisite: courses 155, 190. Fundamentals of microorganisms, their role in the environment, and their interaction with the human society. Letter grading.
Recommended requisites: course 153. Microbial cell and its metabolic capabilities, microbial genetics and its potentials, growth of microbes and kinetics of growth, microbial ecology and diversity, microbiology of wastewater treatment, probing of microbes, public health microbiology. Letter grading.

M166L. Environmental Microbiology and Biotechnology Laboratory. (1) [Same as Environmental Health Sciences M166L] Laboratory, two hours; outside study, two hours. Corequisite: course M166. General laboratory in environmental microbiology, sampling of environmental samples, classical and modern molecular techniques for enumeration of microbes in the environment, environmental microbiology, techniques for determination of microbial activity, environmental samples, laboratory setups for studying environmental biotechnology. Letter grading.

170. Introduction to Construction Management. (4) Lecture, four hours; discussion, two hours; outside study, six hours. Introduction to construction engineering theory, management, and techniques. Implementation of exercises from academic texts and real project case studies. Discussion of building systems, building components, project delivery methods, document control, critical path method scheduling, labor management, quality management, estimating, sustainability, and life-cycle cost analysis. Letter grading.

180. Introduction to Transportation Engineering. (4) Lecture, four hours; discussion, two hours; outside study, six hours. Designed for juniors/senior Civil Engineering students and Public Affairs graduate students. General characteristics of transportation systems, including streets and highways, rail, transit, air, and water. Capacity considerations, including planning, design, and operations. Components of roadway design, including streets and highways, transit, cyclists, and pedestrians. Students analyze local roadway and present recommended improvements to public agency officials. Letter grading.

181. Traffic Engineering Systems: Operations and Control. (4) Lecture, four hours; discussion, two hours; outside study, six hours. Designed for juniors/senior Civil Engineering students and Public Affairs graduate students. Topics include traffic analysis, traffic signal design and timing, Intelligent Transportation Systems concepts, and traffic interface with railroads, urban transit, bicyclists, and pedestrians. Students analyze local roadway and present recommended improvements to public agency officials. Letter grading.

C182. Rigid and Flexible Pavements: Design, Materials, and Serviceability. (4) Lecture, four hours; discussion, two hours; outside study, six hours. Recommended requisites: courses C104, 106, 120, Materials Science and Engineering, and Mathematics 20A, 20B, 20C, 20E. Focus on practical aspects of pavement design, including materials selection and traffic and loading volume. Special attention is given to aspects of pavement distress/serviceability and factoring of pavement properties into metrics of pavement systems, including streets and highways, rail, transit, air, and water. Course description includes planning, design, and operations. Components of roadway design, including streets and highways, transit, cyclists, and pedestrians. Students analyze local roadway and present recommended improvements to public agency officials. Letter grading.

194. Research Group Seminars: Civil and Environmental Engineering. (2 to 8) Seminar, two to eight hours; outside study, four to 16 hours. Designed for undergraduate students who are part of research group. Discussion of research methods and current literature. Offered by consent of faculty members or by students. May be repeated for credit. Letter grading.

199. Directed Research in Civil and Environmental Engineering. (2 to 8) Tutorial, to be arranged. Limited to juniors/seniors. Supervised individual research or investigation under guidance of faculty mentor. Culminating paper or project required. May be repeated for credit with school approval. Individual contract required; enrollment petitions available in Office of Academic and Student Affairs. Letter grading.

Graduate Courses

200. Civil and Environmental Engineering Graduate Seminar. (2) Seminar, four hours; outside study, two hours. Various topics in civil and environmental engineering that may include earthquake engineering, environmental engineering, geotechnical engineering, hydrology and water resources engineering, materials engineering, structural engineering, and serviceability. May be repeated for credit. S/U grading.

C204. Structure, Processing, and Properties of Civil Engineering Materials. (4) Lecture, four hours; discussion, two hours; outside study, six hours. Discussion of aspects of cement and concrete materials, including manufacture of cement and production of concrete. Aspects of cement composition and basic chemical reactions, properties of plastic and hardened concrete, chemical admixtures, and quality control and acceptance testing. Development and testing of fundamentals for complete understanding of overall response of all civil engineering materials. By end of term, successful utilization of fundamental materials science concepts to understand, explain, analyze, and describe engineering performance of civil engineering materials. Concurrently scheduled with course C104. Letter grading.


206. Modeling and Simulation of Civil Engineering Materials. (4) Lecture, four hours; discussion, two hours; outside study, six hours. Enforced requisites: Chemistry 20A, 20B, Mathematics 31A, 31B, 32B, Physics 1A, 1B, 1C. Fundamental examination of modeling and numerical simulations for civil engineering materials, with focus on practical examples and applications so students can independently run simulations at scale relevant to targeted problems. Letter grading.


222. Introduction to Soil Dynamics. (4) Lecture, four hours; outside study, eight hours. Requisite: course 120. Review of engineering problems involving soil dynamics. Fundamentals of theoretical soil dynamics; response of sliding block-on-plane to cyclic earthquake loads, application of theories of single degree-of-freedom (DOF) system, multiple DOF system and one-dimensional wave propagation. Fundamentals of cyclic soil behavior: stress-strain-pore water pressure behavior; shear moduli and damping, cyclic settlement and concept of volumetric cyclic threshold shear strain, introduction to modeling of cyclic soil behavior. Letter grading.

223. Slope Stability and Earth Retention Systems. (4) Lecture, four hours; outside study, eight hours. Requisite: courses 120, 121, 220. Basic concepts of soil mechanics, structure, weight, earth pressure, Lüders, limit equilibrium, limit analysis, stability charts, limit equilibrium analysis, seepage analysis, staged construction, and rapid drawdown. Theory of earth pressure on retaining structures, with special application to design of retaining walls, sheet piles, mechanically stabilized earth, soil nails, and anchored and braced excavation. Letter grading.


225. Geotechnical Earthquake Engineering. (4) Lecture, four hours; outside study, eight hours. Requisite: courses 220, 245 (may be taken concurrently). Analysis of earthquake-induced ground failure, including soil liquefaction, cyclic softening of clays, seismic compression, surface fault rupture, and seismic slope stability. Ground response effects on earthquake ground motions. Soil-structure interaction, including inertial and kinematic effects of foundation deformations under seismic loading. Letter grading.

226. Geoenvironmental Engineering. (4) Lecture, four hours; outside study, eight hours. Requisite: course 120. Field of geoenvironmental engineering involves application of geotechnical principles to environmental problems. Topics include environmental regulations, waste characterization, geosynthetics, solid waste landfills, subsurface barrier walls, and disposal of high water content materials. Letter grading.

227. Numerical Methods in Geotechnical Engineering. (4) Lecture, four hours; outside study, eight hours. Requisite: course 220. Introduction to concepts of computer modeling of soils using finite element method, and to constitutive modeling based on elasticity and plasticity theories. Special emphasis on numerical techniques that may include soil and rock units. Relationships developed between landforms, active, past, and ancient geologic processes, ground and surface water, and properties of soil and rock. Landform changes occur in response to dynamic processes, including changes in climate, slope formation, fluvial (river) dynamics, coastal dynamics, and deep-seated processes like volcanism, seismicity, and tectonics. Evaluation and analysis of effects of human activities and tectonics to predict their potential effect on land use, development, public health, and public safety. Letter grading.

M230A. Linear Elasticity. (4) Same as Mechanical and Aerospace Engineering M230A. Lecture, four hours; outside study, eight hours. Requisite: Mechanical and Aerospace Engineering 156A or 166A. Linear elastostatics. Cartesian tensors; infinitesimal strain tensors; Cauchy stress tensor; equilibrium; and nonuniqueness of solutions. Letter grading.
232. Theory of Plates and Shells. (4) Lecture, four hours; outside study, eight hours. Requisite: course 130. Small and large deformation theories of thin plates and shells; energy methods; free vibrations; membrane theory of shells; axisymmetric deformations of cylindrical and spherical shells, including bending. Letter grading.


234A. Advanced Structural Analysis. (4) Lecture, four hours; discussion, two hours; outside study, six hours. Requisite: course 135A. Recommended: course 135B. Review of matrix force and displacement methods of structural analysis; virtual work theorem, virtual forces, and displacements; theorems on stationary value of total and complementary potential energy, minimum total potential energy, Maxwell/Betti theorem. Statics and deformations, introduction to finite element analysis. Letter grading.

235B. Finite Element Analysis of Structures. (4) Lecture, four hours; discussion, two hours; outside study, six hours. Requisites: courses 130, 235A. Direct energy methods: formulation of conformable systems; solution methods for linear equations; analysis of structural systems with one-dimensional elements; introduction to variational calculus; discrete element displacement, force, and mixed methods for membrane, plate, shell structures; instability effects. Letter grading.

235C. Nonlinear Structural Analysis. (4) Lecture, four hours; outside study, eight hours. Requisite: course 235B. Classification of nonlinear effects; material nonlinearities; conservative, nonconservative material behavior; geometric nonlinearities, Lagrangian description of motion; finite element methods in geometrically nonlinear problems; postbuckling behavior of structures; solution of nonlinear equations; incremental, iterative, programming methods. Letter grading.


239. Elementary Structural Dynamics. (4) Lecture, four hours; discussion, two hours; outside study, six hours. Recommended requisite: course 135B. Basic structural dynamics course for civil engineering students. Elastic free and forced vibrations of single degree of freedom systems, introduction to response history and response spectrum analysis approaches for single and multidegree of freedom systems. Axial, bending, and torsional vibration of beams. Concurrently scheduled with course C137. Letter grading.


243A. Behavior and Design of Reinforced Concrete Structural Elements. (4) Lecture, four hours; discussion, two hours; outside study, six hours. Requisite: course 142. Advanced topics on design of reinforced concrete structures, including stress-strain relationships for plain and confined concrete, moment-curvature analysis of sections, and design for shear. Design of slabs and beams, design for shear of beam-column joints. Introduction to displacement-based design and applications of strut-and-tie models. Letter grading.

243B. Response and Design of Reinforced Concrete Structural Systems. (4) Lecture, four hours; discussion, two hours; outside study, six hours. Requisites: courses 243A, 246. Information on response and behavior of reinforced and prestressed earth- quake ground motions. Topics include use of elastic and inelastic response spectra, role of strength, stiffness, and ductility in design, use of prescriptive versus performance-based approaches, and application of elastic and inelastic analysis techniques for new and existing construction. Letter grading.

244. Structural Reliability. (4) Lecture, four hours; discussion, two hours; outside study, six hours. Intro- duction. Concepts and organization of structural re- liability. Topics include computing first- and second- order estimates of failure probabilities of engineered systems, computing sensitivities of failure probabilities to assumed parameter values, measuring relative impor- tance of random variables associated with systems, identifying relative advantages and disadvan- tages of various analytical reliability methods, using reliability of reinforcement coded building codes, and performing reliability calculations related to perfor- mance-based engineering. Letter grading.

245. Earthquake Ground Motion Characterization. (4) Lecture, four hours; discussion, two hours; outside study, six hours. Corequisite: course C137 or 246. Earthquake fundamentals, including plate tectonics, fault types, seismic waves, and magnitude scales. Characterization of earthquakes, including magnitude range and rate of future earthquakes. Ground motion prediction equations and site effects on ground motion. Seismic hazard analysis. Ground mo- tion selection and modification for response history analysis. Letter grading.

246. Structural Response to Ground Motions. (4) Lecture, four hours; discussion, two hours; outside study, six hours. Requisites: courses C137, 141, 142, 225A. Spectral analysis of ground motions; response, time, and Fourier spectra. Response of structures to ground motions due to earthquakes. Computational methods to evaluate structural response. Response analysis, including evaluation of contemporary design standards. Limitations due to idealizations. Letter grading.

247. Earthquake Hazard Mitigation. (4) Lecture, four hours; discussion, two hours; outside study, six hours. Requisites: courses 130, and M237A or 246. Concept of seismic isolation, linear theory of base isolation, visco-elastic and hysteretic behavior, elasto-plastic behavior for automobile compressors, bending, buckling of bearings, sliding bearings, passive energy dissipation devices, response of structures with isolation and pass- sive energy dissipation devices, static and dynamic analysis procedures, and design methods for seismically isolated structures. Letter grading.

250A. Surface Water Hydrology. (4) Lecture, four hours; discussion, two hours; outside study, six hours. Requisite: course 150. In-depth study of surface water hydrology, including discussion and interrelationship of major topics such as rainfall and evaporation, soils and infiltration processes, runoff and snowmelt pro- cesses. Introduction to rainfall-runoff modeling, floods, and policy issues involved in water resource engineering and management. Letter grading.

250B. Groundwater Hydrology. (4) Lecture, four hours; discussion, two hours; outside study, six hours. Requisite: course 250A. In-depth study of hydrogeological processes. Role of hydrology in climate system, precipitation and evaporation processes, atmospheric radiation, exchange of mass, heat, and momentum between soil and vegetation surface and overlying atmosphere, flux and transport in turbulent boundary layer, basic remote sensing techniques. Letter grading.

250D. Water Resources Systems Engineering. (4) Lecture, four hours; outside study, eight hours. Requi- site: course 151. Application of mathematical pro- gramming techniques to water resources systems. Topics include water resources management and operation, optimal timing, scheduling and sizing of water re- sources projects; and multiobjective planning and conjunctive use of surface water and groundwater. Emphasis on management of water quantity. Letter grading.

251A. Rainfall-Runoff Modeling. (4) Lecture, four hours; outside study, eight hours. Requisites: courses 250A, 251B. Introduction to hydrologic modeling con- cepts, including rainfall-runoff analysis, input data, un- certainty analysis, lumped and distributed modeling, parameter estimation and sensitivity analysis, and application of models for flood forecasting and predic- tion of streamflows in water resource applications. Letter grading.

251B. Contaminant Transport in Groundwater. (4) Lecture, four hours; outside study, eight hours. Requi- site: course 250B. Introduction to mathematical and mecha- nisms of hydrodynamic dispersion, governing equa- tions of mass transport in porous media, various ana- lytical and numerical solutions, determination of dispersion parameters by laboratory and field experi- ments, biological and reactive transport in multiphase flow, remediation design, software packages and ap- plications. Letter grading.

251C. Remote Sensing with Hydrologic Applica- tions. (4) Lecture, four hours; outside study, eight hours. Requisites: courses 250A, 250C. Introduction to basic physical concepts of remote sensing as they relate to surface and atmospheric hydrologic pro- cesses. Applications include radiative transfer mod- elling and retrieval of hydrologically relevant parameters such as topography, soil moisture, snow properties, vegetation, and precipitation. Letter grading.
251D. Hydrologic Data Assimilation. (4) Lecture, four hours; outside study, eight hours. Requisite: course 250A, 250C. Introduction to basic concepts of classical and Bayesian estimation theory for purposes of hydrologic data assimilation. Applications geared toward disparate disciplines and to dynamic models of hydrologic systems. Letter grading.

252. Engineering Economic Analysis of Water and Environmental Planning. (4) Lecture, four hours; discussion, two hours; outside study, six hours. Enforced requisites: 110, one or more courses from Economics 1, 2, 11, 101. Economic theory and applications in analysis and management of water and environmental problems; application of price theory to water resource management and renewable resources; benefit-cost analysis with applications to water resources and environmental planning. Letter grading.


254A. Environmental Aquatic Inorganic Chemistry. (4) Lecture, four hours; discussion, two hours; outside study, six hours. Requisites: Chemistry 20B, Mathematics 31A, 31B, Physics 1A, 1B. Equilibrium and kinetic descriptions of chemical behavior of metals and inorganic ions in natural fresh/marine surface waters and in water treatment. Processes include acid-base chemistry and alkalinity (carbonate system), complexation, precipitation/dissolution, absorption oxidation/reduction, and photochemistry. Letter grading.

255A. Physical and Chemical Processes for Water and Wastewater Treatment. (4) Lecture, four hours; discussion, two hours; outside study, six hours. Requisites: courses 155, 254A. Review of momentum and mass transfer, chemical reaction engineering, coagulation and flocculation, granular filtration, sedimentation, carbon adsorption, gas transfer, disinfection, oxidation, and membrane processes. Letter grading.

255B. Biological Processes for Water and Wastewater Treatment. (4) Lecture, four hours; discussion, two hours; outside study, six hours. Requisites: courses 254A, 255A. Fundamentals of environmental engineering microbiology; kinetics of microbial growth and biological oxidation; applications for activated sludge, gas transfer, fixed-film processes, aerobic and anaerobic digestion, immobilization, bioreactor design, and biological nutrient removal. Letter grading.

258A. Membrane Separations in Aquatic Systems. (4) Lecture, four hours; outside study, eight hours. Requisite: course 254A. Applications of membrane separations to desalination, water reclamation, brine disposal, and ultrapure water systems. Discussion of reverse osmosis, ultrafiltration, electrodialysis, and ion exchange technologies from both practical and theoretical standpoints.

C259. Green Infrastructure. (4) Lecture, four hours; discussion, two hours; outside study, six hours. Requisites: courses 150, 153. Overview of fundamental science, ecological, and engineering principles to design green infrastructure for stormwater management. Students design green infrastructure based on current practices, perform engineering calculations to calculate performance, and develop critical thinking skills needed to design innovative or futuristic green infrastructures that would not only mitigate adverse impact of climate change, but also remain resilient under extreme weather conditions expected during climate change. Concurrently scheduled with course C159. Letter grading.

260. Advanced Topics in Hydrology and Water Resources. (4) Lecture, four hours; outside study, eight hours. Requisites: Elective 250B, 250D. Current research topics in inverse problem of parameter estimation, experimental design, conjunctive use of surface and groundwater, multiobjective water resources planning, and optimization of water resource systems. Topics may vary from term to term. Letter grading.

261. Colloidal Phenomena in Aquatic Systems. (4) Lecture, four hours; outside study, eight hours. Requisites: courses 254A, 255A. Colloidal stability, colloidal hydrodynamics, surface chemistry, adsorption of pollutants on colloidal surfaces, transport of colloids in porous media, coagulation and flocculation deposition, Considerations of applications to colloidal processes in aquatic environments. Letter grading.

261B. Advanced Biological Processes for Water and Wastewater Treatment. (4) Lecture, four hours; outside study, eight hours. Requisite: course 255B. In-depth treatment of selected topics related to biological treatment of waters and wastewaters, such as biodegradation of xenobiotics, pharmaceuticals, emerging pollutants, toxicity, and nutrients. Discussion of theoretical aspects, experimental observations, and recent literature. Application to important and emerging environmental problems. Letter grading.

M262A. Introduction to Atmospheric Chemistry. (4) Same as Atmospheric and Oceanic Sciences M203A. Lecture, three hours. Requisite for undergraduate courses: Chemistry 20B. Principles of chemical kinetics, thermodynamics, and photochemistry; chemical composition and history of Earth's atmosphere; biogeochemical cycles of key atmospheric constituents; basic photochemistry of tropospheric and stratospheric chemistry; chemical transport and chemical processes; air pollution; chemistry and climate. S/U or U letter grading.

M262B. Atmospheric Diffusion and Air Pollution. (4) Same as Atmospheric and Oceanic Sciences M254B. Lecture, three hours. Nature and sources of atmospheric pollution; diffusion from point, line, and area sources; pollution dispersion in urban complexes; meteorological factors and air pollution potential; meteorological aspects of air pollution. S/U or letter grading.

263A. Physics of Environmental Transport. (4) Lecture, four hours; outside study, eight hours. Designed for graduate students. Transport processes in surface water, groundwater, and atmosphere. Emphasis on exchanges across phase boundaries: sediment/water interface; air/water gas exchange; particles, droplets, and aerosols; transport and mixing; effects of reactions on transport; transport of atmospheric pollutants on physical, chemical, and biological processes. Letter grading.

263B. Advanced Topics in Transport at Environmental Interfaces. (4) Lecture, four hours; outside study, eight hours. Requisite: course 263A. In-depth treatment of selected topics involving transport phenomena at environmental interfaces between solid, fluid, and gas phases, such as aquatic sediments, porous aggregates, and vegetative canopies. Discussion of theoretical models and experimental observations. Application to important environmental engineering problems. Letter grading.


267. Environmental Applications of Geochemical Modeling. (4) Lecture, four hours; outside study, eight hours. Requisite: course 254A. Geochemical modeling is important tool for predicting environmental impacts of contamination. Hands-on experience in modeling using geochemical software packages commonly found in environmental consulting industry to gain better understanding of governing geochemical principles pertaining to movement and transformation of contaminants. Types of modeling include speciation, mineral solubility, surface complexation, reaction path, inverse mass balance, reactive transport modeling. Case studies involve acid mine drainage, nuclear waste disposal, biodegradation and risk assessment,typing and mining waste, deep well injection, landfill leachate, and microbial respiration. Research/modeling project required. Letter grading.

C282. Rigid and Flexible Pavements: Design, Materials, and Serviceability. (4) Lecture, four hours; discussion, two hours; outside study, six hours. Correlation, analysis, and metrization of aspects of pavement design, including materials selection and traffic loading and volume. Special attention to aspects of pavement distress/serviceability and factoring of these into metrics of pavement performance. Discussion of potential choices of pavement materials (i.e., asphalt and concrete) and their specific strengths and weaknesses in paving applications. Unification and correlation of different variables that influence pavement performance and highlight their relevance in pavement design. Concurrently scheduled with course C182. Letter grading.

296. Advanced Topics in Civil Engineering. (2 to 4) Seminar, to be arranged. Discussion of current research and literature in research specialty of faculty member teaching course. S/U grading.

298. Seminar: Engineering. (2 to 4) Seminar, to be arranged. Limited to graduate civil engineering students. Seminars may be organized in advanced technical fields. If appropriate, field trips may be arranged. May be repeated with topic change. Letter grading.

375. Teaching Apprentice Practicum. (1 to 4) Seminar, to be arranged. Preparation: apprentice personnel employment as teaching assistant, associate, or fellow. Teaching apprenticeship under active guidance and supervision of regular faculty member responsible for curriculum and instruction at UCLA. May be repeated for credit. S/U grading.

495. Teaching Assistant Training Seminar. (2) Seminar, two hours. Preparation: appointment as a teaching assistant in Civil and Environmental Engineering Department. Seminar on communication of civil engineering principles, concepts, and methods; teaching assistant preparation, organization, and presentation of material, including use of visual aids; grading, advising, and rapport with students. S/U grading.

596. Directed Individual or Tutorial Studies. (2 to 8) Tutorial, to be arranged. Limited to graduate civil engineering students. Petition forms to request enrollment may be obtained from assistant dean, Graduate Studies. Supervised investigation of advanced technical problems. S/U grading.

597A. Preparation for MS Comprehensive Examination. (2 to 12) Tutorial, to be arranged. Limited to graduate civil engineering students. Reading and preparation for MS comprehensive examination. S/U grading.

597B. Preparation for PhD Preliminary Examinations. (2 to 16) Tutorial, to be arranged. Limited to graduate civil engineering students. S/U grading.

597C. Preparation for PhD Oral Qualifying Examination. (2 to 16) Tutorial, to be arranged. Limited to graduate civil engineering students. Preparation for oral qualifying examination, including preliminary research on dissertation. S/U grading.

598. Research for and Preparation of MS Thesis. (2 to 12) Tutorial, to be arranged. Limited to graduate civil engineering students. Supervised independent research for MS candidates, including thesis prospectus. S/U grading.

599. Research for and Preparation of PhD Dissertation. (2 to 16) Tutorial, to be arranged. Limited to graduate civil engineering students. Supervised research on dissertation and literature in research specialty of faculty member teaching course. S/U grading.
Classics

College of Letters and Science
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Classics
310-825-4171

Kathryn A. Morgan, PhD, Chair

Professors
David L. Blank, PhD
Kathryn A. Morgan, PhD
Sarah P. Morris, PhD (Steinmetz Professor of Classical Archaeology and Material Culture)
John K. Papadopoulos, PhD
Alex C. Purves, PhD
Amy E. Richlin, PhD
Giulia Sissa, PhD
Brent H. Vine, PhD (A. Richard Diebold, Jr., Endowed Professor of Indo-European Studies)

Professors Emeriti
Sander M. Goldberg, PhD
Robert A. Gurval, PhD
Michael W. Haslam, PhD
Steven Lattimore, PhD
Jaan Puhvel, PhD

Associate Professors
Chris J. Johanson, PhD
Francesca K. Martell, DHPhil

Assistant Professors
Sarah E. Beckmann, PhD
Bryant Kirkland, PhD
Lydia M. Spielberg, PhD
Adriana M. Vazquez, PhD

Adjunct Associate Professor
Catherine Atherton, PhD

Scope and Objectives

The civilizations of ancient Greece and Rome are the focus of research and teaching in the Department of Classics. These areas of study are important in their own right and for their contributions to the political, cultural, intellectual, and artistic development of the Western world. To this end, the department offers a wide variety of interdisciplinary courses in classical civilization (multiple-listed in the Art History, Philosophy, and Political Science departments), as well as elementary and advanced courses in ancient Greek and Latin language, literature, and linguistics. Classical civilization courses include such topics as Greek and Latin literature in translation (genres of epic, comedy, tragedy, biography), classical mythology, religion, law, gender and sexuality, politics, philosophy, art and archaeology, and the reception of the ancient world in modern cultures (cinema and classics).

The department offers Bachelor of Arts degrees in Classical Civilization, in Greek, in Latin, and in Greek and Latin and the PhD degree in Classics. Students can earn a Master of Arts degree in Classics (Greek and Latin), in Greek, or in Latin only after they have been admitted to the PhD program.

Undergraduate Study

Students considering a major in the department should consult with the adviser as soon as possible in their UCLA career, but in no case later than the point at which they are about to take upper-division courses.

The majors offered in the Classics Department are designated capstone majors. Undergraduate students take a capstone seminar in which they use the skills and expertise acquired in earlier coursework to research, analyze, and complete a written paper or project. They identify and analyze ancient classical documents, material evidence, or other forms of primary sources and demonstrate their critical skills by engaging in presentations and weekly discourse with their peers.

Note: Students in the Greek, Latin, and Greek and Latin majors are permitted to take Greek 200A, 200B, 200C and Latin 200A, 200B, 200C with consent of the instructor.

Classical Civilization BA

Capstone Major

The civilizations of ancient Greece and Rome have made important contributions to the political, social, artistic, and intellectual development of the Western world. The purpose of the Classical Civilization major is to provide students with a formal and balanced introduction to the historical and cultural experiences of the ancient Greeks and Romans. The program of study is structured, yet not rigid. Lower-division survey courses and requirements in elementary language study, ancient history, and classical art establish an essential background of knowledge, while electives encourage individual and specialized interests. The program offers a broad range of courses in the fields of language, literature, history, mythology, religion, philosophy, art, and archaeology. The major serves as excellent and rewarding preparation for a professional career in medicine, law, business, journalism, communication, or the arts.

Learning Outcomes

The Classical Civilization major has the following learning outcomes:

- Demonstrated specific skills and expertise, including research, analysis, and writing
- Identification and analysis of appropriate ancient sources, material evidence, and other primary documents appropriate to the field
- Engagement with peers through presentation, discussion, and critique of student work
- Conception and execution of a project that identifies and engages with a specialized topic
- Working knowledge of scholarly discourse relative to a specialized topic

Preparation for the Major

Required: Classics 10, 20, or Latin 3 or 16, and one course from 30, 40W, 41W, 42, 51A, 51B, 60, 88GE.

Transfer Students

Transfer applicants to the Classical Civilization major with 90 or more units must complete as many of the following introductory courses as possible prior to admission to UCLA: one classical Greek culture course, one Roman civilization course, and one course in Greek or Roman literature in translation, classical mythology, or classical archaeology.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

The Major

Required: (1) Seven upper-division Greek courses, including course 110; Greek 197 and 199 may be applied only by petition; (2) three upper-division courses in classical civilization and/or ancient history (History 112A through M112E, 113A, 113B, 114A, 114B, 114C, 115). Courses in related fields not offered
Greek and Latin BA

Learning Outcomes
The Greek and Latin major has the following learning outcomes:

- Demonstrated specific skills and expertise, including research, analysis, and writing
- Identification and analysis of appropriate ancient sources, material evidence, and other primary documents appropriate to the field
- Engagement with peers through presentation, discussion, and critique of student work
- Conception and execution of a project that identifies and engages with a specialized topic
- Working knowledge of scholarly discourse relative to a specialized topic

Preparation for the Major

Required: Classics 10, 20; Greek 1, 2, 3, 20 and Latin 1, 2, 3, 20, or equivalent. Greek 16 may be substituted for Greek 1, 2, 3.

Transfer Students
Transfer applicants to the Greek and Latin major with 90 or more units must complete as many of the following introductory courses as possible prior to admission to UCLA: one year of Greek and of Latin and related courses in civilization, culture, history, linguistics, literature, and closely related languages. Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

The Major

Required: (1) Eight upper-division Greek and Latin courses (of which at least four must be in each language), including Greek 110 or Latin 110; Greek and/or Latin 197 and 199 may be applied only by petition; (2) three upper-division courses in classical civilization and/or ancient history (History 112A through M112E, 113A, 113B, 114A, 114B, 114C, 115). Courses in related fields not offered by the department may be substituted by petition and with approval of the faculty undergraduate adviser; (3) one capstone seminar (Classics 191).

Honors Program

Admission

The honors program is open to all departmental majors with a cumulative grade-point average of 3.5 or better in departmental courses and an overall GPA of 3.25 or better. Students with lower GPAs may petition for admission to the program, but these grade-point averages must be achieved before graduation in order to qualify for honors.

Requirements

All honors students are required to take Classics 191 (or an equivalent undergraduate seminar) in their junior year before beginning work on the honors thesis. Students must then enroll in Classics 198A and 198B in consecutive terms, in which they write the thesis under the direct supervision of a faculty member. They may take courses 198A and 198B concurrently or be exempt from course 198A only with approval of the faculty undergraduate adviser. In course 198A students submit an annotated bibliography and preliminary outline of their thesis. In course 198B, they submit at least one initial draft and the final revised version of the thesis. Only course 198B may be applied toward the upper-division classical civilization requirement for departmental majors.

To qualify for graduation with departmental honors, students must (1) have a cumulative grade-point average of 3.5 or better in departmental courses and an overall GPA of 3.25 or better and (2) complete Classics 198A and 198B with grades of A– or better.

Latin BA

Capstone Major

Learning Outcomes
The Latin major has the following learning outcomes:

- Demonstrated specific skills and expertise, including research, analysis, and writing
- Identification and analysis of appropriate ancient sources, material evidence, and other primary documents appropriate to the field
- Engagement with peers through presentation, discussion, and critique of student work
- Conception and execution of a project that identifies and engages with a specialized topic
- Working knowledge of scholarly discourse relative to a specialized topic

Preparation for the Major

Required: Classics 10, 20; Greek 1, 2, 3, 20 and Latin 1, 2, 3, 20, or equivalent. Latin 16 may be substituted for Latin 1, 2, 3.

Transfer Students
Transfer applicants to the Latin major with 90 or more units must complete as many of the following introductory courses as possible prior to admission to UCLA: one year of Latin and related courses in civilization, culture, history, linguistics, literature, and closely related languages. Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

The Major

Required: (1) Seven upper-division Latin courses, including course 110; Latin 197 and 199 may be applied only by petition; (2) three upper-division courses in classical civilization and/or ancient history (History 112A through M112E, 113A, 113B, 114A, 114B, 114C, 115). Courses in related fields not offered by the department may be substituted by petition and with approval of the faculty undergraduate adviser; (3) one capstone seminar (Classics 191).

Honors Program

Admission

The honors program is open to all departmental majors with a cumulative grade-point average of 3.5 or better in departmental courses and an overall GPA of 3.25 or better. Students with lower GPAs may petition for admission to the program, but these grade-point averages must be achieved before graduation in order to qualify for honors.

Requirements

All honors students are required to take Classics 191 (or an equivalent undergraduate seminar) in their junior year before beginning work on the honors thesis. Students must then enroll in Classics 198A and 198B in consecutive terms, in which they write the thesis under the direct supervision of a faculty member. They may take courses 198A and 198B concurrently or be exempt from course 198A only with approval of the faculty undergraduate adviser. In course 198A students submit an annotated bibliography and preliminary outline of their thesis. In course 198B, they submit at least one initial draft and the final revised version of the thesis. Only course 198B may be applied toward the upper-division classical civilization requirement for departmental majors.

To qualify for graduation with departmental honors, students must (1) have a cumulative grade-point average of 3.5 or better in departmental courses and an overall GPA of 3.25 or better and (2) complete Classics 198A and 198B with grades of A– or better.

Classical Civilization Minor

The Classical Civilization minor is designed to recognize a serious commitment to the study of the cultures and civilizations of ancient Greece and Rome. Lower-division survey courses in historical studies, classical literature, mythology, and film provide an essential introduction to the imagination and power of the ancient world. Students may fulfill upper-division requirements from a variety of courses in classical civilization and related fields, including political and social history, literature, art and archaeology, religion, mythology, philosophy, and cultural studies of ethnicity, gender, and sexuality in antiquity.

To enter the minor, students must have an overall grade-point average of 2.0 or better.

Required Lower-Division Courses (15 units): Classics 10, 20, and one course from 30, 40W, 41W, 42, 51A, 51B, 60.

Required Upper-Division Courses (20 units): Five upper-division courses in classical civilization offered by the department. One course in a related field may be substituted with approval of the faculty undergraduate adviser. Classics 191 may be applied, but all other courses in the 190 series may be substituted only by petition.

A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor.

Each minor course must be taken for a letter grade, and students must have an overall grade-point average of 2.0 or better in the minor. Successful completion of the minor is indicated on the transcript and diploma.

Greek Minor

The Greek minor is designed to recognize a serious commitment to the study of the Greek language. After a year of elementary Greek (Greek 1, 2, 3) or its equivalent, students select departmental upper-division reading courses in ancient Greek prose and poetry that provide close analysis of individual texts, with attention to their historical, literary, and cultural context. Subjects of study include Homeric epic, lyric poetry, tragedy and comedy, history, rhetoric, philosophy, and the New Testament.

To enter the minor, students must have an overall grade-point average of 2.0 or better.

Required Lower-Division Courses (14 units): Greek 2, 3, 20, or equivalent. Greek 16 may be substituted for Greek 2 and 3.

Required Upper-Division Courses (20 units): Five courses selected from Greek 100 through 133.

A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor.

Each minor course must be taken for a letter grade, and students must have an overall grade-point average of 2.0 or better in the minor. Successful completion of the minor is indicated on the transcript and diploma.
Latin Minor

The Latin minor is designed to recognize a serious commitment to the study of the Latin language. For a year of elementary Latin (Latin 1, 2, 3) or its equivalent, students select departmental upper-di- vision reading courses in classical (and/or late an- tiquity and medieval) Latin prose and poetry that provide close analysis of individual texts, with attention to their historical, literary, and cultural context. Subjects of study include Roman comedy, epic, lyric, elegy, satire, history, rhetoric, philosophy, epistolography, and the novel.

To enter the minor, students must have an overall grade-point average of 2.0 or better.

Required Lower-Division Courses (14 units): Latin 2, 3, 20, or equivalent. Latin 16 may be substituted for Latin 2 and 3.

Required Upper-Division Courses (20 units): Five courses selected from Latin 100 through 133.

A minimum of 20 units applied toward the minor re- quirements must be in addition to units applied to- ward major requirements or another minor.

Each minor course must be taken for a letter grade, and students must have an overall grade-point av- erage of 2.0 or better in the minor. Successful com- petition of the minor is indicated on the transcript and diploma.

Graduate Study

Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Division website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Graduate Degrees

The Department of Classics offers the Master of Arts (MA) degree in Greek, Master of Arts (MA) degree in Latin, and Master of Arts (MA), Candidate in Phi- losophy (CPhil), and Doctor of Philosophy (PhD) de- grees in Classics. MA degrees can be earned only af- ter students have been admitted to the PhD program.

Classics

Lower-Division Courses

10. Discovering Greeks. (5) Lecture, three hours; dis- cussion, one hour. Knowledge of Greek is not required. Study of Greek life and culture from age of Homer to Roman conquest. Readings focus on selections from works of ancient authors in translation. Lectures illus- trated with images of art, architecture, and material culture. P/NP or letter grading.

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

20. Discovering Romans. (5) Lecture, three hours; dis- cussion, one hour. Knowledge of Latin is not required. Study of Roman life and culture from time of city’s leg- endary foundations to end of classical antiquity. Read- ings focus on selections from works of ancient authors in translation. Lectures illustrated with images of art, architecture, and material culture. P/NP or letter grading.

40. Classical Mythology. (5) Lecture, three hours; dis- cussion, one hour. Introduction to myths and leg- ends of ancient Greece and/or Rome, role of those stories in their own times. Letter grade or pass/fail grading.

40W. Reading Greek Literature: Writing-Intensive. (5) Lecture, two hours; discussion, two hours. Requi- site: English Composition 3. Exploration in detail and from variety of critical perspectives of carefully se- lected literary texts characteristic of ancient Greece and significant in Western literary tradition. Satisfies Writing II requirement. Letter grading.

41W. Reading Roman Literature: Writing-Intensive. (5) Lecture, two hours; discussion, two hours. Requisite: English Composition 3. Exploration in detail and from variety of critical perspectives of carefully se- lected literary texts characteristic of ancient Rome and significant in Western literary tradition. Satisfies Writing II requirement. Letter grading.

42. Cinema and Ancient World. (5) Lecture/screen-ings: five hours; discussion, one hour. Use of popular culture and cinema to introduce students to ancient Greek and/or Roman culture; focus at discretion of in- structor. P/NP or letter grading.

47. Medical Terminology: Origins, Nature, and Practice. (5) Lecture, three hours. Survey of specialized vocabulary of health sciences, which is rooted in Greek and Roman languages and in those two cultures from which much of history of modern medicine is derived. Students gain working knowl- edge of fundamental terminology used in medicine and health sciences as well as how this terminology has been composed. Development of ability to inter- pret and pronounce words. Students apply linguistic rules and how they operate in English and field-spe- cific vocabulary to understand new terminology in var- ious health science fields. Study of etymological ori- gins of fundamental medical concepts and how these terms are used in medical practice. P/NP or letter grading.

48. Ancient Greek and Roman Medicine. (5) Lecture, three hours; discussion, one hour. Introduction to Greek and Roman medicine in its intellectual and cul- tural context. Examination of construction of concepts such as health, disease, physician, man, woman, cause, and difference. Readings from Greek literature and healing in cult of Asclepius. Readings of texts from Hippocratic collection, thought to be close to practice of Hippocrates in 5th-century BC Greece. Reading of Greek physician, relating them to medical practice, competition for students and patients, intellectual display, developing scientific methods, ethnography, and Greek philos- ophy. Discussion of plagues as attempts to view such outbreaks as social phenomena. Examination of how Hippocratic understanding of—how—or whether—we can know about what happens inside body was devel- oped and challenged in 3rd-century BCE Alexandria. Study of Prince of Physicians, Galen, champion of Hippocratic medicine, influential into 18th century. P/ NP or letter grading.

51A. Art and Archaeology of Ancient Greece. (5) Lecture, three hours; discussion, one hour. Survey of major period, theme, or medium of Greek art and ar- chaeology at discretion of instructor. P/NP or letter grading.

51B. Art and Archaeology of Ancient Rome. (5) Lecture, three hours; discussion, one hour. Survey of major period, theme, or medium of Roman art and ar- chaeology at discretion of instructor. P/NP or letter grading.

60. Fantastic Journey: Antiquity and Beyond. (5) Lecture, two and one half hours; discussion, one hour. Investigation of phenomenon of fantastic or imaginary journey, from Homer's Odyssey to Stanley Kubrick's 2001: A Space Odyssey. Examination of ways in which travel to strange or new worlds is presented through number of texts (and occasionally films) across dif- ferent cultures and periods, with focus primarily on an- tiquity but also looking at how important motifs from ancient Greek and Roman travel narrative have en- countered to present day. Issues include cultural rela- tivism, what makes space either familiar or alien, re- building of home in fantastic territories, methods of travel (both fantastic and mundane), methods of meas- uring time and distance, modern clas- sifications of fantasy and science fiction, and to what extent these terms are applicable to ancient world. P/ NP or letter grading.

86A-88Z. Lower-Division Seminars. (4 each) Sem- inars one hour each; variable topics; consult Schedule of Classes or department for topics to be offered in spe- cific term. P/NP or letter grading.

88GE. General Education Seminar Sequences. (5) Seminar, three hours. P/NP or letter grading.

88GE. General Education Seminar Sequences. (5) Seminar, three hours. Limited to 20 students. Designed as adjunct to lower-di- vision lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible stu- dents. Honors content noted on transcript. P/NP or letter grading.

89. Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to lower-di- vision lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible stu- dents. Honors content noted on transcript. Letter grading.

89HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. De- signed as adjunct to lower-division lecture course. In- dividual study with lecture course instructor to explore topics in greater depth through supplemental read- ings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract re- quired. Honors content noted on transcript. Letter grading.

99. Student Research Program. (1 to 2) Tutorial (su- pervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-di- vision students under guidance of faculty mentor. Stu- dents must be in good academic standing and en- rolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Courses

M114A. History of Ancient Mediterranean World. (4) Same as History MA 114A. Lecture, three hours. In- tensive on-site study of history and culture of ancient Rome from founding of city to conversion of Christi- anity. Part of UCLA Summer Travel Program. P/NP or letter grading.

M114B. History and Monuments of Rome: Field Studies. (4) (Same as History MA 114B) Fieldwork, five hours. Enforced corequisite: course M114A. Examination of history, art, and monuments of ancient Rome through daily lectures and field walks to museums and archaeological sites. Field trips outside Rome to Pompei, Hadrian’s Villa, and ancient Ostia. Reception and ruins of Roman antiquity in medieval, Renaissance, and modern eras explored in their historical context. Part of UCLA Summer Travel Program. P/NP or letter grading.

M121. Ancient and Medieval Political Theory. (4) (Same as Political Science MA 121A) Lecture, three or four hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Exposition and critical analysis of major thinkers such as Plato, Aristotle, Thomas Aquinas, St. Augustine, Machiavelli, and More and questions such as forms of government, cit- izenship, justice, happiness, rhetoric, religion, emo- tion. P/NP or letter grading.

M124. Modern Receptions of Ancient Political Thought. (4) (Same as Political Science MA 124A) Lecture, three hours. Designed for juniors/seniors. Study of how Western culture has conceived and reinter- preted political thought of ancient Greeks and Ro-
M145A. Ancient Greek and Roman Philosophy. (4) (Same as Philosophy M103A.) Lecture, three hours. Study of some major Greek and Roman philosophical texts, including those of pre-Socratics, Plato, Aristotle, and Hellenistic philosophers, with emphasis on historical and cultural context of their literary form, contemporary critical developments, and contribution to discussion of basic philosophical issues. P/NP or letter grading.

M145B. Later Ancient Greek Philosophy. (4) (Same as Philosophy M103B.) Lecture, three hours. Requisite: course M145A. Philosophy 1, 100A, 101B, or M102. Study of some major texts in Greek philosophy of Hellenistic and Roman periods. Readings vary and include works by Stoics, skeptics, philosophers of science, Neoplatonists, etc. P/NP or letter grading.

M146A. Plato—Earlier Dialogues. (4) (Same as Philosophy M101A.) Lecture, three hours; discussion, one hour. Preparation: one philosophy course. Study of selected topics in early and middle dialogues of Plato. P/NP or letter grading.

M146B. Plato—Later Dialogues. (4) (Same as Philosophy M101B.) Lecture, three hours; discussion, one hour. Preparation: one philosophy course. Study of selected topics in middle and later dialogues of Plato. P/NP or letter grading.

M147. Aristotle. (4) (Same as Philosophy M102.) Lecture, three hours; discussion, one hour. Preparation: one philosophy course. Study of selected works of Aristotle. P/NP or letter grading.


M149. Bodies in Antiquity. (4) (Same as Disability Studies M122.) Lecture, three hours. Investigation of individuals and groups that compose ancient Greek and Roman societies and relationships they have with larger social body, with particular focus on marginalized or minority groups such as women, noncitizens (resident aliens and provincials), slaves, children, elderly, and disabled. Examination of ways these groups contribute to or detract from our understanding of ancient society as whole. May be repeated for credit with topic change. P/NP or letter grading.

150A. Female in Greek Literature and Culture. (4) Lecture, three hours. Requisite: course 10. Interdisciplinary study of concept of female in Greek literature and culture. P/NP or letter grading.

150B. Female in Roman Literature and Culture. (4) Lecture, three hours; discussion, one hour. Requisite: course 20. Interdisciplinary study of concept of female in Roman literature and culture. P/NP or letter grading.

C151E. Archaeological Field Techniques. (12) Off-campus field archaeology, 36 hours. Preparation: at least one classical archaeology course. Training in techniques of archaeological research in field, including topographic and area survey, mapping and recording artifacts, excavation and data analysis. Conducted in Mediterranean area. Concurrently scheduled with course C251E. P/NP or letter grading.

152A. Ancient City: Greek World. (4) Lecture, three hours. Enforced requisites: course 10 or 51A or Art History 20 or History 101A. Range of interdisciplinary approaches to study of Athens and/or cities of Greek world, including Asia Minor, south Italy, and Sicily. Approaches, themes, and periods (both ancient city and receptions of city from classical antiquity to modern era) vary depending on individual instructor and topic. May be repeated for credit with topic change. P/NP or letter grading.

152B. Ancient City: Roman World. (4) Lecture, three hours. Enforced requisites: course 20 or 51B or Art History 20 or History 101A. Range of interdisciplinary approaches to study of Rome and/or cities of Italy and Roman Empire. Approaches, themes, and periods (both ancient city and receptions of city from classical antiquity to modern era) vary depending on individual instructor and topic. May be repeated for credit with topic change. P/NP or letter grading.
medieval, Renaissance, and modern initiators, from Aulepus to Shakespeare to Picasso and beyond. P/ NP or letter grading.


165. Ancient Athletics. (4) Lecture, three hours. Requ- isite: course 10 or 164A. Study of ancient Greek and Roman athletics and their connections with reli- gion, politics, literature, and art. P/NP or letter grading.

166A. Greek Religion. (4) Lecture, three hours. Requ- isite: course 10 or 30. Study of religion of ancient Greeks. P/NP or letter grading.


167. Magic in Ancient World. (4) Same as Ancient Near East M167.) Lecture, three hours; discussion, one hour (when scheduled). Requisite: course 10 or 20. Exploration of art of influencing natural course of events by occult means as practiced in ancient world at large. Topics include beliefs in supernatural forces aimed at controlling these forces effectively, and character and social roles of ritual experts in various cultures of ancient world. Source material includes types of texts and literary works about magic and magicians, and artifacts such as amulets and ritual im- plements. P/NP or letter grading.

168. Comparative Mythology. (4) Lecture, three hours. Requisites: course 30, or GE Clusters 30A, 30B, and 166A, 166B, and 166D. Study of myths and mythological and historical traditions of ancient Greece and Rome compared with each other and with other traditions worldwide. P/NP or letter grading.

169. Sex in Ancient World. (4) Lecture, three hours. Requisite: course 10 or 20 or History 1A. Examination of sex and gender systems of Greek and Roman cul- tures in ancient Mediterranean world. What Greek and Roman sex/gender systems were, how they changed over time, and differences make. Readings include both modern theories about sex and history as found- dation for course and broad range of ancient texts in translation. P/NP or letter grading.

170GC. Power and Imagination in Byzantium. (4) (Same as History M116C) Lecture, three hours; discussion, one hour (when scheduled). Requisites: History 116A, 116B. Designed for juniors/seniors. Study of relations between church and state in highly centralized Byzantine Empire. Topics include criticism of emperor, iconoclasm, intellectual freedom, attempts at reform. Letter, Reforming.

175. Classics in Central and South America. (4) Lecture, three parts. Introduction to topics in classical reception through investigation of influence of Greco-Roman poetry on poetry of Central and South America of colonial period and beyond. From Homer to Vergil, poets of classical antiquity established robust tradition of epic with well-established literary tropes and na- tionalistic aims, cultural voice contributing to development of unified sense of national identity. Classical definitions of epic genre and sense of epic as vehicle for affirming and questioning national identity per- sisted well beyond antiquity. Investigation of one such area by examining epic traditions of Central and South America, (mediated through European models preceded and helped shape these) and their conscious engagement with classical tradition, through examples of both neo-Latin productions and vernacular poetry in Spanish and Portuguese. P/NP or letter grading.

180. Introduction to Classical Linguistics. (4) Lecture, three hours. Requisite: Greek 3 or Latin 3. Lin- guistic approach to Greek and Latin, including Indo- European background, etymology, pronunciation, al- phabets, and sociolinguistics (dialects, bilingualism), and applications to classical literature. P/NP or letter grading.

185. Origins and Nature of English Vocabulary. (5) Lecture, four hours. Introduction to the origins and nature of English vocabulary, from Proto-Indo-European prehistory to current slang. Topics include Greek and Latin component in English (including technical terminology), alphabet and English spelling, semantic change and word for- mation, vocabulary in literature and film. P/NP or letter grading.

189. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible stu- dents. Honors content noted on transcript. P/NP or letter grading.

189HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. De- signed as adjunct to upper-division lecture course. In- dividual study with course lecture instructor explores topics in greater depth through supplemental read- ings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract re- quired. Honors content noted on transcript. Letter grading.

190. Research Colloquia in Classics. (1) Seminar, one hour. Limited to juniors/seniors. Designed to bring together students undertaking supervised tutorial research in seminar setting with one or more faculty members to discuss their own work or related work in discipline. Led by one supervising faculty member. May be repeated for credit. P/NP grading.

191. Capstone Seminar: Classics. (3) Seminar, three hours. Requires History 120B, and 189A. At least four upper-division major courses. Limited to declared junior/se- nior departmental majors; minors may be admitted with consent of instructor. Topical research seminar on important themes, periods, genres of ancient Greek and Roman world. Intended to provide students with opportunity for serious engagement with research in discipline under close faculty supervision. Readings, discussions, oral presentations, and final research paper or project. May be repeated for credit. Letter grading.

193. Journal Club Seminars: Classics. (1) Seminar, one hour. Limited to seniors/juniors. Independent in- tensive study, with scheduled meetings to be arranged between faculty member and student. Assigned reading and tangible evidence of mastery of subject matter required for credit. Individual contract required. P/NP or letter grading.


199C. Directed Research in Classics. (2-4) Tut- orial, two hours. Limited to juniors/seniors. Supervised individual research or investigation under guidance of faculty mentor. Cullinating paper or project required. May be repeated for credit. Individual contract re- quired. P/NP or letter grading.

Graduate Courses


201. Topics in Ancient History: Roman World. (2 or 4) Seminar, three hours. Introduction to basic methods and approaches to study of Roman history by intensive examination of selected topics, including readings of ancient texts and modern scholarship. S/U or letter grading.

M218. Paleography of Latin and Vernacular Manu- scripts, 900 to 1500. (4) (Same as English M215, French M210, and History M218.) Lecture, three hours; discussion, two hours. Introduction to history of Latin and vernacular manuscript book from 900 to 1500; to (1) train students to make informed judgments with regard to place and date of origin, (2) provide training in accurate reading and transcription of later medieval scripts, and (3) examine manuscript book as witness to changing society that produced it. Focus on relationship between Latin manuscripts and ver- nacular manuscripts with regard to their respective presentation of written texts. S/U or letter grading.

202A. Interfaces: Transmission of Roman Litera- ture. (2 or 4) Seminar, three hours. Examination of transmission of Latin classical literature in late antio- quity, Middle Ages, and Renaissance to understand processes by which Latin literature has been pre- served. S/U (2-unit course) or letter (4-unit course) grading.

244. Textual Criticism: Studies in Preparation of Critical Edition of Greek and/or Latin Texts. (2 or 4) Seminar, three hours. Different steps required in preparation of critical edition of ancient text: localizing manuscripts; collation; establishing stemmas; selecting right reading on basis of knowledge of context, of lan- guage of author, and of sources; emendations; formula- tion of apparatus criticus and apparatus (4-unit course) grading.

246. Greek and Latin Meter. (2 or 4) Seminar, three hours. Comprehensive study of meter as it functions in classical poetry. S/U (2-unit course) or letter (4-unit course) grading.

250. Topics in Greek and Roman Culture and Liter- ature. (2 or 4) Seminar, three hours. Interdisciplinary study on topics of ancient Greek and Roman culture and literature. May be repeated for credit with topic change. S/U or letter grading.

251A. Seminar: Classical Archaeology—Aegean Bronze Age. (2 or 4) Seminar, three hours. S/U or letter grading.

251B. Seminar: Classical Archaeology—Greco-Ro- man Architecture. (2 or 4) Seminar, three hours. Studies in style and iconography of various periods of Aegean, Greek, and Roman architecture. S/U (2-unit course) or letter (4-unit course) grading.

251C. Seminar: Classical Archaeology—Greco-Ro- man Sculpture. (2 or 4) Seminar, three hours. Studies in style and iconography of various periods of Aegean, Greek, and Roman sculpture. S/U (2-unit course) or letter (4-unit course) grading.

251D. Seminar: Classical Archaeology—Aegean, Greco-Roman Architecture. (2 or 4) Seminar, three hours. Studies in style and iconography of various periods of Aegean, Greek, and Roman architecture. S/U (2-unit course) or letter (4-unit course) grading.

251E. Seminar: Classical Archaeology—Aegean, Greco-Roman Architecture. (2 or 4) Seminar, three hours. Studies in style and iconography of various periods of Aegean, Greek, and Roman architecture. S/U (2-unit course) or letter (4-unit course) grading.

251F. Seminar: Classical Archaeology—Aegean, Greco-Roman Architecture. (2 or 4) Seminar, three hours. Studies in style and iconography of various periods of Aegean, Greek, and Roman architecture. S/U (2-unit course) or letter (4-unit course) grading.

252. Topography and Ancient Athens. (2 or 4) Lecture, two or four hours. Detailed studies in top- ography and monuments of Athens, combining evi- dence of literature, inscriptions, and actual remains. S/ U or letter grading.

253. Topography and Monuments of Rome. (2 or 4) Lecture, two or four hours. Detailed studies in topog- raphy and monuments of ancient Rome, combining evidence of literature, inscriptions, and actual remains. S/ U or letter grading.

254. Topography and Monuments of Rome. (2 or 4) Lecture, two or four hours. Detailed studies in topog- raphy and monuments of ancient Rome, combining evi- dence of literature, inscriptions, and actual remains. S/ U or letter grading.

255. Graduate Colloquium in Classical Literature. (2) Seminar, three hours. Survey of basic methods and approaches to classical scholarship, including textual criticism, literary interpretation and theory, hermeneutics, interdisciplinary studies, and computer
applications to classics. Emphasis varies from year to year, depending on instructor(s). May be repeated for credit with topic change. S/U grading.

288. Literary Theory. (2 or 4) Discussion, three hours. Designed for graduate students. Introduction to chief texts in literary theory and criticism for readers of classical literature, with application to classical texts. S/U or letter grading.

375. Teaching Apprentice Practicum. (1 to 4) Seminar, to be arranged. Preparation: apprentice Personnel employment as a teaching assistant, associate, or fellow. Teaching apprenticeship under active guidance and supervision of regular faculty member responsible for curriculum and instruction at UCLA. May be repeated for credit. S/U grading.

495. Teaching Classics. (2) Seminar, two hours. Normally to be taken by all graduate students in term before or during their first assignments as teaching assistants. Seminar/workshop in various pedagogical issues and strategies in preparation for teaching classical civilization, Greek, and/or Latin undergraduate courses. Readings and group discussions in topics related to teaching in field of classics. May not be applied toward MA or PhD course requirements. S/U grading.

501. Cooperative Program. (2 to 8) Tutorial, to be arranged. Preparation: consent of UCLA adviser and graduate dean, and host campus instructor, department chair, and graduate dean. Used to record enrollment of UCLA students in courses taken under cooperative arrangements with USC. S/U grading.

596. Directed Individual Study or Research. (2 to 8) Tutorial, to be arranged. S/U grading.

597. Study for MA Comprehensive Examination or PhD Qualifying Examinations. (2 to 8) Tutorial, to be arranged. S/U grading.


Greek

Lower-Division Courses

1. Elementary Greek. (5) Lecture, three hours; discussion, two hours. P/NP or letter grading.

2. Elementary Greek. (5) Lecture, three hours; discussion, two hours. Enforced requisite: course 1. P/NP or letter grading.

3. Elementary Greek. (5) Lecture, three hours; discussion, two hours. Enforced requisite: course 2. P/NP or letter grading.

8A-8B-8C. Elementary Modern Greek. (4-4-4) Lecture, three hours. Enforced requisite to 8B, which is enforced requisite to 8C. Introductory modern Greek sequence, with emphasis on spoken modern Greek. P/NP or letter grading.

8G. Reading Scholarly Modern Greek. (4) Lecture, two and one half hours. Designed for students who want to develop literary competence in order to read modern Greek scholarly texts. No prior knowledge of modern Greek is required. Covers grammatical concepts and forms necessary to comprehend written academic Greek. Students gain familiarity with various academic genres in Greek (among others, articles, chapters, reviews, lecture transcriptions). Emphasis on grammar and reading strategies that enable location, selection, and comprehension of texts central to research needs. Students are familiarized with major stylistic features of contemporary academic modern Greek, and consolidate their competence through reading, translating, and writing activities. Familiarization with basic aspects of modern Greek life and culture. P/NP or letter grading.

8A-8B-9C. Intermediate Modern Greek. (4-4-4) Lecture, three hours. Enforced requisite: course 8C. Course 9A is enforced requisite to 9B, which is enforced requisite to 9C. Intermediate-level program in modern Greek language study from communicative and task-based approach. Continued development of student understanding and use of Greek syntax and morphology through oral and written activities, reading, and listening. Students master basic communicative skills, communicate in everyday real-life situations, comprehend simple passages, announcements, and advertisements, master basic rules of modern Greek grammar and syntax, read fluently, and write accurately. P/NP or letter grading.

15. Elementary Modern Greek. (6) Lecture, 18 to 19 hours. Enforced requisite. Introduction to principles of speaking, reading, and writing modern (deictic) Greek. Offered in summer only. P/NP or letter grading.

16. Intensive First-Year Greek. (12) Lecture, 19 hours. Eight-week intensive introduction to Greek language equivalent to courses 1, 2, and 3. Offered in summer only. P/NP or letter grading.

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of timing and cultural context of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP or letter grading.

20. Intermediate Greek. (4) Lecture, three hours; discussion, one hour (when scheduled). Requisite: course 3 or 16. Formal review of Greek grammar and syntax and development of skills in reading original texts of Greek prose. Readings selected to introduce literature and culture of ancient Greece. P/NP or letter grading.

89. Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to lower-division lecture course in selected topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

89HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to lower-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholar work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

100. Readings in Greek Prose and Poetry. (4) Lecture, three hours. Requisite: course 100. Reading and discussion of original Greek prose and poetry texts, in attention to literary and cultural background. Course is normally requisite to other courses in Greek 100 series. May be repeated for credit with change of assigned readings and with consent of instructor. P/NP or letter grading.


103. Aeschylus. (4) Lecture, three hours. Requisite: course 100. P/NP or letter grading.

104. sophocles. (4) Lecture, three hours. Requisite: course 100. P/NP or letter grading.


110. herodotus. (4) Lecture, three hours. Requisite: course 100. P/NP or letter grading.

111. Thucydides. (4) Lecture, three hours. Requisite: course 100. P/NP or letter grading.

112. Thucydides. (4) Lecture, three hours. Requisite: course 100. P/NP or letter grading.


121. Plato. (4) Lecture, three hours. Requisite: course 100. P/NP or letter grading.


131. Readings in Later Greek. (4) Lecture, three hours. Requisite: course 100. Topics vary from year to year and include "Longinus," On Sublime; Marcus Aurelius; Second Sophistic; Plutarch; later epic; epigram; epistolographi Graeci. P/NP or letter grading.


133. Readings in Byzantine Literature. (4) Lecture, three hours. Requisite: course 132. Topics vary from year to year and include Procopius, Agathias, Michael Psellus, Alexiad of Anna Comnena, and Digenis Akritas. P/NP or letter grading.

189. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

199HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to upper-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

197. Individual Studies in Greek. (2 to 4) Tutorial, two hours. Limited to juniors/seniors. Individual intensive study, with scheduled meetings to be arranged between faculty member and student. Assigned reading and tangible evidence of mastery of subject matter required. May be repeated for credit. Individual contract required. P/NP or letter grading.

198. Directed Research in Greek. (2 to 4) Tutorial, two hours. Limited to juniors/seniors. Individual intensive study, with scheduled meetings to be arranged between faculty member and student. Assigned reading and tangible evidence of mastery of subject matter required. May be repeated for credit. Individual contract required. P/NP or letter grading.

Graduate Courses

200A-200B-200C. History of Greek Literature. (4-4-4) Lecture, three hours. Lectures on history of Greek literature, supplemented by reading of Greek texts in original language. Each course may be taken independently for credit. S/U or letter grading.
201A-201B. Homer: Iliad. (2 or 4 each) Lecture, three hours. Course 201A is requisite to 201B. S/U (2-unit course) or letter (4-unit course) grading.

202A-202B. Homer: Odyssey and Epic Cycle. (2 or 4 each) Lecture, three hours. Course 202A is requisite to 202B. S/U (2-unit course) or letter (4-unit course) grading.

203. Hesiod. (2 or 4) Seminar, three hours. S/U (2-unit course) or letter (4-unit course) grading.

204. Homeric Hymns. (2 or 4) Seminar, three hours. S/U (2-unit course) or letter (4-unit course) grading.

205. Aeschylus. (2 or 4) Seminar, three hours. S/U (2-unit course) or letter (4-unit course) grading.

206A-206B. Sophocles. (2 or 4) Lecture, three hours. Course 206A is requisite to 206B. S/U (2-unit course) or letter (4-unit course) grading.

207A-207B. Euripides. (2 or 4) Lecture, three hours. Course 207A is requisite to 207B. S/U (2-unit course) or letter (4-unit course) grading.

208A-208B. Aristophanes. (2 or 4) Lecture, three hours. Course 208A is requisite to 208B. S/U (2-unit course) or letter (4-unit course) grading.

209A-209B. Seminars: Hellenistic Poetry. (2 or 4 each) Seminar, three hours. S/U (2-unit course) or letter (4-unit course) grading.


211A-211B. Herodotus. (2 or 4) Lecture, three hours. Course 211A is requisite to 211B. S/U (2-unit course) or letter (4-unit course) grading.

212A-212B. Thucydides. (2 or 4) Lecture, three hours. Course 212A is requisite to 212B. S/U (2-unit course) or letter (4-unit course) grading.

213. Greek Historiography. (2 or 4) Seminar, three hours. S/U (2-unit course) or letter (4-unit course) grading.

214. Demosthenes. (2 or 4) Lecture, three hours. S/U (2-unit course) or letter (4-unit course) grading.

215. Early Greek Orators. (2 or 4) Seminar, three hours. Studies in works of Antiphanes, Andocides, and Lysias. S/U (2-unit course) or letter (4-unit course) grading.

216. Menander. (2 or 4) Seminar, three hours. S/U (2-unit course) or letter (4-unit course) grading.

217A-217B. Greek Lyric Poetry, (2 or 4 each) Seminar, three hours. Each course may be taken independently for credit. S/U (2-unit course) or letter (4-unit course) grading.


221. Pre-Socratic Philosophers. (2 or 4) Seminar, three hours. S/U (2-unit course) or letter (4-unit course) grading.

222A-222B. Plato. (2 or 4 each) Lecture, three hours. Course 222A is requisite to 222B. S/U (2-unit course) or letter (4-unit course) grading.

223A-223B. Aristotle. (2 or 4 each) Lecture, three hours. Course 223A is requisite to 223B. S/U (2-unit course) or letter (4-unit course) grading.

224. Post-Aristotelian Philosophy. (2 or 4) Seminar, three hours. S/U (2-unit course) or letter (4-unit course) grading.

229. SIGHT Translation. (2) Seminar, three hours. Preparation: graduate-level knowledge of Greek. Practice in translating previously unseen texts from variety of Greek authors and genres. Topics include peculiarities of style and vocabulary of distinct genres, literary versus scholarly translation, semantic properties of particular words and constructions. May be repeated with topic change. S/U grading.

231. Imperial Greek Literature. (2 or 4) Seminar, three hours. Study of Greek literature of Roman Empire with attention to various authors, genres, and themes. S/U or letter grading.


241. Greek Epigraphy. (2 or 4) Seminar, three hours. Survey of Greek historical inscriptions, chiefly Attic. S/U (2-unit course) or letter (4-unit course) grading.


243. Mycenaean Greek. (2 or 4) Seminar, three hours. Script, language, and grammar of Linear B inscriptions; their relevance to ancient Greek linguistic and cultural history. S/U or letter grading.

244. Greek Papyrology. (2 or 4) Seminar, three hours. Preparation: reading knowledge of Greek. Introduction to Greek papyri, considered both as historical documents and as carriers of literature. S/U (2-unit course) or letter (4-unit course) grading.

245. Greek Palaeography. (2 or 4) Seminar, three hours. Studies in development of book hand in Greek manuscripts earlier than invention of printing. S/U (2-unit course) or letter (4-unit course) grading.

246. Topical Studies of Ancient Greece. (2 or 4) Lecture, three hours. Advanced study of some aspect of ancient Greek language, literature, and/or culture. May be repeated for credit with topic change. S/U (2-unit course) or letter (4-unit course) grading.


Latin

Lower-Division Courses

1. Elementary Latin. (3) Lecture, three hours; discussion, one hour. Requisite: course 100. P/NP or letter grading.


1G. Elementary Latin for Graduate Students. (No credit) Lecture, three hours. Concurrently scheduled with course 101. S/U grading.

3. Elementary Latin. (5) Lecture, three hours; discussion, one hour. Requisite: course 100. P/NP or letter grading.


105A. Beginning Vergil: Selections from Aeneid I-VI. (4) Lecture, three hours. Requisite: course 100. Reading of one or more books from first half of Aeneid, especially designed for students with only limited exposure in reading Latin. May be repeated for credit with change in readings and consent of instructor. P/NP or letter grading.

105B. Advanced Vergil. (4) Lecture, three hours. Requisite: course 100A. Reading and discussion of Vergil’s Eclogues, Georgics, and/or second half of Aeneid. May be repeated for credit with change in readings. P/NP or letter grading.


109. Roman Satire. (4) Lecture, three hours. Requisite: course 100. Readings from author(s) of Roman satire, including Horace, Persius, and Juvenal, or related satiric texts. May be repeated for credit with change in readings and consent of instructor. P/NP or letter grading.


111. Livy. (4) Lecture, three hours. Requisite: course 100. P/NP or letter grading.

112. Tacitus. (4) Lecture, three hours. Requisite: course 100. P/NP or letter grading.


88. Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to lower-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be repeated with change in readings and consent of instructor. Honors content noted on transcript. P/NP or letter grading.

89HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to lower-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Courses
Graduate Courses

200A-200B-200C. History of Latin Literature (4-4-4). Lecture, three hours. Lectures on history of Latin literature, supplemented by reading of Latin texts in original language. Each course may be taken independently for credit change. S/U (2-unit course) or letter (4-unit course) grading.

210. Roman Epic Tradition. (2 or 4) Seminar, three hours. Close study of one epic poet other than Vergil (e.g., Ennius, Lucan, Valerius Flaccus, Statius, Silius Italicus), with attention to literary tradition of epic. May be repeated for credit with topic change. S/U (2-unit course) or letter (4-unit course) grading.

210M. Seminar: Catullus. (2 or 4) Seminar, three hours. Detailed consideration of entire Catullian corpus. S/U (2-unit course) or letter (4-unit course) grading.

210A. elegiac Poetry. (2 or 4) Lecture, three hours. S/U (2-unit course) or letter (4-unit course) grading.

210B. Propertius. (2 or 4) Lecture, three hours. Course 210A is not requisite to 210B. S/U (2-unit course) or letter (4-unit course) grading.

210C. Vergil's Bucolics. (2 or 4) Seminar, three hours. S/U (2-unit course) or letter (4-unit course) grading.

210D. Vergil's Georgics. (2 or 4) Seminar, three hours. Close study of Vergil's text; careful evaluation of influential criticism on poem, much of it recent; examination of work's place within tradition of rural poetry. S/U (2-unit course) or letter (4-unit course) grading.

210E. Horace. (2 or 4) Lecture, three hours. S/U (2-unit course) or letter (4-unit course) grading.

210F. Roman Comedy. (2 or 4) Seminar, three hours. Survey of history of Roman comedy. S/U (2-unit course) or letter (4-unit course) grading.

210G. Ovid. (2 or 4) Seminar, three hours. S/U (2-unit course) or letter (4-unit course) grading.

210H. Roman Satire. (2 or 4) Seminar, three hours. Detailed study of one individual satirist, with attention to his position in development of satirical genre in Roman literature. Choice of author varies from year to year. Close study of text, of characteristics of writer as social critic and artist, and of contemporary literary and social environment. S/U (2-unit course) or letter (4-unit course) grading.

211A-211B-211C. Seminars: Roman Historians. (2 or 4 each) Seminar, three hours. Study of consider- able portions of writings of following historians. Each course may be taken independently for credit. S/U (2-unit course) or letter (4-unit course) grading. 211A. Sallust; 211B. Livy; 211C. Tacitus.

212. Ancient Biography: Roman Lives. (2 or 4) Seminar, three hours. Study of biography in ancient Rome. Literary survey or focused readings on lives of Cornelius Nepos, Suetonius, Tacitus, or Imperial chronicles of 4th century CE. S/U (2-unit course) or letter (4-unit course) grading.

212A. Roman Rhetoric. (2 or 4) Seminar, three hours. Close study of one or more rhetorical texts in Latin. May be repeated for credit with topic change. S/U (2-unit course) or letter (4-unit course) grading.

212B. Roman Orations. (2 or 4) Seminar, three hours. S/U (2-unit course) or letter (4-unit course) grading.

212C. Cicero's Philosophical Works. (2 or 4) Lecture, three hours. S/U (2-unit course) or letter (4-unit course) grading.

221D. Cicero: De Natura Deorum. (2 or 4) Lecture, three hours. Course 221A is not requisite to 221B. S/U (2-unit course) or letter (4-unit course) grading.

222. Seminar: Roman Stoicism. (2 or 4) Seminar, three hours. S/U (2-unit course) or letter (4-unit course) grading.

223. Lucullus. (2 or 4) Lecture, three hours. S/U (2-unit course) or letter (4-unit course) grading.

224. Seneca. (2 or 4) Seminar, three hours. Detailed study of one work of prose or poetry by younger Seneca. May be repeated for credit with topic change. S/U (2-unit course) or letter (4-unit course) grading.

229. Sight Translation. (2, 3) Seminar, three hours. Preparation: graduate-level knowledge of Latin. Practi- ce in translation of previously unseen texts from vari- ety of Latin authors and genres. Topics include pecu- liarities of style and vocabulary of distinct genres, liter- ary versus scholarly translation, semantic properties of particular words and constructions. May be repeated for credit with topic change. S/U (2-unit course) or letter (4-unit course) grading.

231A-231B. Seminar: Medieval Latin (2 or 4 each) Seminar, three hours. Preparation: at least one upper- division Latin course. Course 231A is not requisite to 231B. Studies in various areas of language and litera- ture of medieval Latin. May be repeated for credit with consent of instructor. S/U (2-unit course) or letter (4- unit course) grading.

232. vulgar Latin. (2 or 4) Lecture, three hours. His- tory and characteristics of popular Latin; its develop- ment into early forms of Romance languages. S/U or letter grading.

235. Late Latin Poetry. (2 or 4) Seminar, three hours. Close study, with attention to literary and historical background, of work of one or several poets who flourished between death of Ovid and fall of Roman Empire. May be repeated for credit with change in au- thor. S/U or letter grading.

236. Late Latin Prose. (2 or 4) Seminar, three hours. Close study, with attention to literary and historical background, of work of one or several prose authors who flourished between death of Tacitus and fall of Roman Empire. May be repeated for credit with change in author. S/U or letter grading.

239. Latin Literature. (2 or 4) Lecture, three hours. Development of Latin from earliest monu- ments until its emergence in Romance languages. S/U or letter grading.


243. Seminar: Latin Palaeography. (2 or 4) Seminar, three hours. Study of handwriting. Study of old Latin inscriptions in Latin manuscripts earlier than invention of printing. S/ U (2-unit course) or letter (4-unit course) grading.

245. Neo-Latin. (2 or 4) Seminar, three hours. Prepa- ration: at least two upper-division Latin courses. Re- quisite: course 100. Survey of texts by one or more au- thors from Renaissance to present, written on related topics. S/U or letter grading.

250. Topical Studies of Ancient Rome. (2 or 4) Seminar, three hours. Advanced study of one aspect of Latin language or literature or Roman culture. May be repeated for credit with topic change. S/U (2-unit course) or letter (4-unit course) grading.


495. Directed Individual Study or Research. (2 to 8) Tutorial, to be arranged. S/U grading.

597. Study for MA Comprehensive Examination or PhD Qualifying Examinations. (2 to 8) Tutorial, to be arranged. S/U grading.

Scope and Objectives
Cluster courses are an option for satisfying both general education and Writing II requirements. Clusters are yearlong, collaboratively taught, interdisciplinary courses that focus on a topic of timely importance, such as the global environment or inter-racial dynamics. The courses are taught by some of the most distinguished UCLA faculty members and seasoned graduate students. During fall and winter quarters, students attend lecture courses and small discussion sections and/or laboratories. In spring quarter, the same students enroll in one of a number of satellite seminars dealing with topics related to the cluster theme.

Freshman clusters are designed to strengthen the writing, quantitative reasoning, critical thinking, and information literacy skills that students need to excel at UCLA. At the conclusion of the entire year-long cluster, students complete 40 to 50 percent of their general education course requirements and fulfill the Writing II requirement. Cluster students are eligible for three terms of honors credit, with their general education course requirements and Writing, quantitative reasoning, critical thinking, and English Composition 3 or 3H or English as a Second Language 3.

Lower-Division Courses
M1A-M1B-M1CW. Food: Lens for Environment and Sustainability. (6–6–6) (Formerly numbered General Education Clusters M1A-M1B-M1CW) Course M1A is an enforced requisite to M1B, which is an enforced requisite to M1CW. Limited to first-year freshmen. Letter grading. M1A-M1B. Lecture, three hours; discussion, two hours. Food as lens for local and global environmental and sustainability issues. Integration of environmental, social, economic, and technological solutions for fair, sustainable, and healthy food production, food security, and access. Focus on human impacts on Earth's biological and physical systems, including how food production and consumption contributes to, and is impacted by, global problems, including climate change, pollution, and overpopulation. Laboratory exercises included in discussions. M1CW. Special Topics. Seminar, three hours. enforced requisite: course M1B. Examination of specialized environmental and sustainability topics as they relate to food, including air, water, biodiversity, climate change, food access, food security, and health. Required for: 20A-20B-20CW. Intermultidisciplinary Dynamics in American Culture and Society. (6–6–6) (Formerly numbered General Education Clusters 20A-20B-20CW) Course 20A is an enforced requisite to 20B, which is an enforced requisite to 20CW. Limited to first-year freshmen. Letter grading. 20A-20B. Lecture, three hours; discussion, two hours. Examination of nature and meaning of race in American society through study of literature, art, and law. Consideration, among other topics, of construction of race as social and cultural category among two or more groups and exploration of ways in which race has shaped understanding of American citizenship. 20CW. Special Topics. Seminar, three hours. Enforced requisite: course 20B. Consideration of how experience, debates, and issues of race are represented and understood in historical, legal, cinematic, and literary contexts. Satisfies Writing II requirement.

21A-21B-21CW. History of Modern Thought. (6–6–6) (Formerly numbered General Education Clusters 21A-21B-21CW) Course 21A is an enforced requisite to 21B, which is an enforced requisite to 21CW. Limited to first-year freshmen. Letter grading. 21A-21B. Lecture, three hours; discussion, two hours. Introduction to key issues in humanities and social sciences through reading of prominent social theories of past four centuries. Consideration of writers from Rousseau and Wollstonecraft to Foucault and Beauvoir in historical context and freshness of academic specialities for which their work is fundamental. 21CW. Special Topics. Seminar, three hours. Enforced requisite: course 21B. Examination of cross-section of classical and contemporary social theories that shape them. Satisfies Writing II requirement.

22A-22B-22CW. Toward World Economy: Perils and Promise of Globalization. (5–5–5) (Formerly numbered General Education Clusters 22A-22B-22CW) Course 22A is an enforced requisite to 22B, which is an enforced requisite to 22CW. Limited to first-year freshmen. Letter grading. 22A-22B. Lecture, three hours; discussion, two hours. Exploration of causes and mechanisms of globalization as well as consequences. Critical examination of globalization theories, international institutions of trade, finance, governance, and the overall impact of globalization on human society. 22CW. Special Topics. Seminar, three hours. Enforced requisite: course 22B, and English Composition 3 or 3H or English as a Second Language 3. Topics may include global governance, development, and health. Satisfies Writing II requirement.

23A-23B-23CW. Inside Performing Arts: Interdisciplinary Exploration of Performance in Society and Culture. (5–5–5) (Formerly numbered General Education Clusters 23A-23B-23CW) Course 23A is an enforced requisite to 23B, which is an enforced requisite to 23CW. Limited to first-year freshmen. Letter grading. 23A-23B. Lecture, four hours; discussion, two hours. Introduction to historical development and evolution of performing arts, aesthetic theories and practices, and political, social, and cultural contexts within which performance has evolved. 23CW. Special Topics. Seminar, three hours. Enforced requisite: course 23B, and English Composition 3 or 3H or English as a Second Language 3. Topics include origins and ideas of performance, art and performance, and music as cultural practices. Satisfies Writing II requirement.

M24A-M24B-M24CW. Work, Labor, and Social Justice in U.S. (6–6–6) (Formerly numbered General Education Clusters M24A-M24B-M24CW) Course M24A is an enforced requisite to M24B, which is an enforced requisite to M24CW. Limited to first-year freshmen. Letter grading. M24A-M24B. Lecture, three hours; discussion, two hours. Exploration of ways in which work has been transformed over last century, impact of this transformation on working people, and role of labor movement as force for social justice. M24CW. Special Topics. Seminar, three hours. Enforced requisite: course M24B. Topics include labor law/history, gender, race, and workplace. Satisfies Writing II requirement.


26A-26B-26CW. Poverty and Health in Latin America. (6–6–6) (Formerly numbered General Education Clusters 26A-26B-26CW) Course 26A is an enforced requisite to 26B, which is an enforced requisite to 26CW. Limited to first-year freshmen. Letter grading. 26A. Lecture, three hours; discussion, two hours. Introduction to social determinants of health, with focus on cultural, historical, socioeconomic, public health, medical, political, and artistic context of poverty in modern Latin America and on different local, national, and international response. Enforced requisite: course 26B. Responses to health inequities and possible solutions to promote improved health outcomes and to social determinants of health illustrated through examples of current programs and policies. Major areas for addressing health inequity include government, community action, social justice and human rights movements, health sector and public health programs, and global priorities. Introduction to tools to prevent, treat, and control disease, health workforce, information systems, access to medicines, health systems financing, and health systems governance. 26CW. Special Topics. Seminar, three hours. Enforced requisite: course 26B. Students meet weekly in small group seminars based on topics related to course theme to allow them to study, discuss, and then generate policy solutions to create more equitable healthcare in Latin America. Focus on one particular area of Latin America or one local Latin American community to reflect field study sites to eventually be offered and serve as preparation for summer field study component. Satisfies Writing II requirement.

27A-27B-27CW. Global Islam. (6–6–6) Course 27A is an enforced requisite to 27B, which is an enforced requisite to 27CW. Introduction to Islam, immensely diverse global tradition which is second largest religion. Study of Islam and Muslims within framework of study of global religious traditions and emphasis on profound diversity of localized belief and practice found across world. Exploration of Islam’s evolution across 15 centuries, from late antiquity—when it emerged as a localized religion in Central Arabia—to modern era where it is practiced from US to Indonesia. Concentration on broad analytical categories in study of religion such as text, culture, history, and prophecy. Students transition to more complex analyses through chronological overview of Islamic history. Study of case studies of Muslim global networks in arenas such as art, music, literature, and political thought. Letter grading. 27A-27B. Lecture, three hours; discussion, one hour. 27CW. Special Topics. Seminar, three hours. Enforced requisite: course 27B. Satisfies Writing II requirement.

30A-30B-30CW. Never-Ending Stories: Multidisciplinary Perspectives on Myth and Folklore. (6–6–6) (Formerly numbered General Education Clusters 30A-30B-30CW) Course 30A is an enforced requisite to 30B, which is an enforced requisite to 30CW. Limited to first-year freshmen. Letter grading. 30A-30B. Lecture, three hours; discussion, two hours. Exploration in depth of particular mythological traditions, aspects of storytelling, role of myth in culture, society, and/or art,
and contributions of various disciplines to study of myth. 30CW. Special Topics. Seminar, three hours. Enforced requisite: course 30B. Topics may include myth and modern art (including literature, music, and film), myth and ritual, oral tradition and orality, myth and politics, ideology, myth and science, hero and trickster, and myths of creation. Satisfies Writing II requirement.

40A-40B-40CW. Chinese Classics, Their Legacy in East Asia, and Reimagination in Modern Times. (6–6–6) Formerly numbered General Education Clusters 40A-40B-40CW. Course 40A is enforced requisite to 40B, which is enforced requisite to 40CW. Limited to first-year freshmen. Letter grading. Three hours; discussion, two hours. Learning in traditional China was defined through mastery of canon of classic texts that students memorized as part of their education. These classics were also taught in Vietnam, Japan, and Korea, and served to create cultural ties across East Asia. Many more texts came to be considered classics—works of enduring value, read by large numbers of people across centuries, including religious scriptures, legal codes, novels, paintings, and performances. Exploration of how Chinese classics have been used and reimagined in different places and by different people for different purposes is the focus of these texts and cultural artifacts. Emphasis on how these works were interpreted throughout East Asia, relationship with past, and how shared history is seen as informing present. Satisfies Writing II requirement. Satisfies Global Citizenship requirement. Satisfies Writing II requirement.

48A-48B-48CW. Political Violence in Modern World: Causes, Cases, and Consequences. (6–6–6) Course 48A is requisite to 48B, which is requisite to 48CW. Limited to first-year freshmen. Lecture, three hours; discussion, two hours. In-depth examination of causes, dynamics, and consequences of political violence. Political violence can include anything from extra-legal warfare, ethnic cleansing and genocide, civil war, civil rights, political repression, revolution and counter-revolution, and more. Political violence is not modern phenomenon: it has been part of human experience from antiquity to present. Examination, from interdisciplinary perspective, of political violence, in particular, extreme form of political violence, genocide. Readings of theoretical and empirical works from history, comparative literature, comparative politics, psychology, and more. Emphasizes art, film, literature, diaries, memoirs, and news media to encourage critical thinking about political violence. 48CW. Special Topics. Seminar, three hours. Lecture, two hours; discussion, one hour. Enforced requisite: course 48B. In-depth examination of political violence. Satisfies Writing II requirement.

60A-60B-60CW. America in Sixties: Politics, Society, and Culture, 1954 to 1974. (6–6–6) Formerly numbered General Education Clusters 60A-60B-60CW. Course 60A is enforced requisite to 60B, which is enforced requisite to 60CW. Limited to first-year freshmen. Letter grading. 60A-60B. Lecture, three hours; discussion, two hours. Special Topics. Seminar, three hours; discussion, two hours. In-depth examination of U.S. society from 1954 to 1974. Examination, from interdisciplinary perspective, of political violence, in particular, extreme form of political violence, genocide. Readings of theoretical and empirical works from history, comparative literature, comparative politics, psychology, and more. Emphasizes art, film, literature, diaries, memoirs, and news media to encourage critical thinking about political violence. 48CW. Special Topics. Seminar, three hours. Lecture, two hours; discussion, one hour. Enforced requisite: course 48B. In-depth examination of political violence. Satisfies Writing II requirement.

60A-60B-60CW. America in Sixties: Politics, Society, and Culture, 1954 to 1974. (6–6–6) Formerly numbered General Education Clusters 60A-60B-60CW. Course 60A is enforced requisite to 60B, which is enforced requisite to 60CW. Limited to first-year freshmen. Letter grading. 60A-60B. Lecture, three hours; discussion, two hours. In-depth examination of U.S. society from 1954 to 1974. Examination, from interdisciplinary perspective, of political violence, in particular, extreme form of political violence, genocide. Readings of theoretical and empirical works from history, comparative literature, comparative politics, psychology, and more. Emphasizes art, film, literature, diaries, memoirs, and news media to encourage critical thinking about political violence. 48CW. Special Topics. Seminar, three hours. Lecture, two hours; discussion, one hour. Enforced requisite: course 48B. In-depth examination of political violence. Satisfies Writing II requirement.
The department also offers a Doctor of Philosophy (PhD) degree in Communication. The program’s core areas of specialization include: communication and cognition, political communication, and computational communication. Students are trained in the core of communication scholarship by engaging in coursework and research that aligns with the broader discipline.

Undergraduate Study

Communication BA

Students fulfilling the major in Communication must complete the seven required lower-division courses and a minimum of 10 or 11 upper-division courses as set forth below. Enrollment in the major is limited. Admission to the major is by application to the committee in charge. Applications are available on the department website to regularly enrolled UCLA students during spring quarter.

Learning Outcomes

The Communication major has the following learning outcomes:

- Demonstrated mastery of substantive areas of the field, including mass communication and media institutions, interpersonal communication, communication technology and digital systems, and political and legal communication
- Placement of particular communication events or examples in the context of broader patterns of human activity
- Critical evaluation of arguments based on evidence
- Design and implementation of original research projects
- Completion, using acquired knowledge and skills, of a project that demonstrates core competencies in the field
- Active participation in learning-in-practice opportunities
- Evaluation and critique of oral presentations
- Demonstrated mastery of conceptualization, formulation, and oral presentation of the student’s own ideas

Preparation for the Major

Students are encouraged but not required to complete as many lower-division preparation for the major courses as possible before admission to the program.

Required: Communication 1, 10, one course selected from Anthropology 4, Linguistics 1, M4, or Philosophy 23, one statistics course from Economics 41 or Statistics 10. Three additional courses must be selected from Political Science 40, Psychology 10, Sociology 1, and Economics 1 or 5 or Political Science 30.

Transfer Students

Transfer applicants to the Communication major with 90 or more units must complete at least four of the following seven lower-division required courses: Communication 10 or one interpersonal communication and one mass communication course, one public address course, one linguistics course, one statistics course, and three courses from psychology, American government, sociology, and microeconomics or political economy.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

The Major

Students must complete 10 or 11 upper-division courses. The practicum requirement can be satisfied by a course that also satisfies a core or an additional area elective course requirement.

Required Core Courses: Communication 100, 150.

Required Area Courses: A total of eight courses from the following four areas, including at least one core course in each area:

- Communication Technology and Digital Systems—Core courses: Communication 129, 151, 154, 155, 156, 158; elective courses: Communication 157, 188C, 191C
- Political and Legal Communication—Core courses: Communication 101, 160, 162, 170; elective courses: Communication 102, 163, 164, 168, 171, M176, 178, 188D, 191D, Political Science M141A, 141B (or Sociology 133), 141C, 141E.

Required Practicum Course: One course from Communication 101, 102, 103A, 103B, 104, 109, 110, 111, 116, M176, 188E, or 191E.

Honors Program

The departmental honors program provides exceptional students an opportunity for advanced research and study, under the guidance of a faculty member, that leads to the completion of an honors thesis. To qualify for graduation with departmental honors, students must (1) complete all requirements for the major; (2) have a cumulative grade-point average of 3.6 or better in upper-division coursework in the major and an overall GPA of 3.3 or better in all completed UC coursework; (3) complete Communication 198A, 198B, and 198C, and (4) produce a completed satisfactory honors thesis (as determined by a recommendation of their thesis adviser and final approval by the department chair). Contact the student affairs office for more information.

Computing Specialization

Majors in Communication may select a specialization in Computing by (1) satisfying all the requirements for a bachelor’s degree in the major, (2) completing Program in Computing 10A and 10B, and (3)
Graduate Study
Official, specific degree requirements are detailed in the program requirements for UCLA graduate degrees, available at the Graduate Division website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Graduate Degrees
The Department of Communication offers the Master of Science (M.S.) and Doctor of Philosophy (Ph.D.) degrees in Communication.

Communication

Lower-Division Courses
1. Principles of Oral Communication. (4) (Formerly numbered Communication Studies 1.) Lecture, four hours. Enforced requisite: satisfaction of Entry-Level Writing requirement. Examination of foundations of communication and public speaking. Consideration of number of basic theories related to study of communication and development of skills to enable composition and delivery of speeches in accordance with specific rhetorical concepts. Improvement of ability to analyze, organize, and critically think about communicative messages while becoming better equipped to articulate ideas. P/NP or letter grading.

1A. Public Speaking for Nonnative Speakers. (4) (Formerly numbered Communication Studies 1A.) Lecture, four hours. Designed for nonnative speakers of English, including English-as-a-second-language students. Emphasis on improving presentation skills, language usage, reasoning, style, and delivery. Consideration of pronunciation practice. Focus on theory and practice of public speaking, including selection of content, organization of ideas, language, and delivery. Practice in extemporaneous and manuscript speaking. Critical analysis of speeches in both contemporary and historical settings. Special emphasis on group discussions, evaluations, practice of both public and private speaking skills. Offered in summer only. P/NP or letter grading.

1B. Learning American English and Culture from Movies. (4) (Formerly numbered Communication Studies 1B.) Lecture, four hours. Introduction to interpersonal and mass communication using interdisciplinary approach. Exploration of basic methods and theoretical perspectives that social scientists and others use to study interpersonal and mass communication, and basic concepts used to describe and explain that communication. Historical overview of each major mass media. Study of significant current topical issues related to means of communication that reach large numbers of people. Letter grading.

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their research and illuminating many paths of discovery at UCLA. P/NP grading.

M72A-M72B-M72CW. Sex from Biology to Gendered Society. (6-6-6) (Formerly numbered Communication Studies 72A-M72B-M72CW) (Same as Anthropology 72A-M72B-M72CW, Sociology 72A-M72B-M72CW, and Sociology 72A-M72B-M72CW) Course M72A is an enforced requisite to M72B, which is enforced requisite to first-year freshmen. Letter grading. M72A-M72B-M72CW. Lecture, three hours; discussion, two hours. Examination of many ways in which sex and sexual identity shape and are shaped by biological and social forces, approached from complementary perspectives of anthropology, biology, medicine, and sociology. Specific topics include biological origins of sex differences, intersex, gender identity, gender inequality, homosexuality, sexual difference, gender and law, and politics of sex research. M72CW. Special Topics. Seminar, three hours. Enforced requisite: course M72B. Topics may include politics and sexuality, gender identity, social construction of gender, and reproductive technologies. Satisfies Writing II requirement.

88. Sophomore Seminars: Communication Studies. (4) (Formerly numbered Communication Studies 88.) Seminar, three hours. Interdisciplinary study of 20 lower-division students. Readings and discussions designed to introduce students to current research in discipline. Culminating project may be required. P/NP or letter grading.

89. Honors Seminars. (1) (Formerly numbered Communication Studies 89.) Seminar, three hours. Limited to 20 students. Designed as adjunct to lower-division lecture course. Exploration of topics in greater depth through supplementary readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

89HC. Honors Contracts. (1) (Formerly numbered Communication Studies 89HC.) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to lower-division lecture course. Individual student with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

99. Student Research Program. (1 to 2) (Formerly numbered Communication Studies 99.) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Courses
100. Communication Science. (4) (Formerly numbered Communication Studies 100.) Lecture, three hours. Requisite: course 10 or Linguistics 1 or Sociology 1 or Psychology 10. Examination of fundamental issues in communication sciences. Exploration of theoretical and methodological approaches that bridge major areas of communication research. P/NP or letter grading.

101. Freedom of Communication. (4) (Formerly numbered Communication Studies 101.) Lecture, four hours. Analysis of political, economic, and philosophical implications entailed in rights of free expression, access to audience, and access to information. Study of court decisions governing freedom of communication in U.S. P/NP or letter grading.


103A-103B. Forensics. (4-4) (Formerly numbered Communication Studies 103A-103B.) Lecture, three hours. Participation in on-campus and intercollegiate forensics activities, including exposure to fundamentals of competitive forensic events. Students practice public address, interpretation of literature, debate, oratory, and extemporaneous speaking and engage in independent research. P/NP or letter grading. 103A. Basic preparation; 103B. Advanced practicum in speech.

104. Analysis and Briefing. (4) (Formerly numbered Communication Studies 104.) Lecture, three hours. Intensive study of selected political or social issues, preparation of bibliography, analysis and evaluation of issues and arguments. P/NP or letter grading.

105. Media Conspiracy Theories in U.S. and Middle East. (4) (Formerly numbered Communication Studies 105.) Lecture, three hours. Three-week intensive seminars on mass media, conspiracy theories are reshaping politics and society around world. Although conspiracy theories are globally widespread, they are more fertile ground in Middle East and in U.S. Definition, identification, and analysis of conspiracy theories as they appear in media of Western democracies and Muslim majority societies. Interdisciplinary approach to study of conspiracy theories. Case studies, such as conspiracies about 9/11, taken from Middle Eastern media sources in English translation. Background knowledge of Middle East not required. P/NP or letter grading.

106. Reporting America. (4) (Formerly numbered Communication Studies 106.) Lecture, three hours. Introduction to main western European and Middle Eastern mass media, with materials in English. Exploration of how U.S. is represented in Europe, Middle East, Iran, and Afghanistan, with focus on three comparative case studies of Britain, Spain, and Germany. In-depth coverage of America as reflected in Europe and Middle East. P/NP or letter grading.

107. Terrorism in Journalism. (4) (Formerly numbered Communication Studies 107.) Lecture, three hours. How do media outlets in Middle East represent Islamist terrorism? How do they describe, analyze, and comment on suicide attacks? Focus on Arab, Afghan, and Iranian media discussions of this phenomenon to explore evolution of meaning of terrorism in Muslim societies. P/NP or letter grading.

108. Communication and Identity. (4) Lecture, three hours. Study of relationships among communication, culture, and identity, and examination of ways in which texts (broadly construed) constitute experience, difference, and subjectivity. Focus on representation and meaning in construction of self, social collectives, and world views. Consideration of how communication is performative endeavor for humans seeking to construct identity. Students are prepared to describe and explain theories that detail performance as communicative form, analyze ways language and discourse function as texts that work to produce significant personal and social identities, and describe specific principles, motivations, and theoretical categories within interdisciplinary study of culture that produce identity. Letter grading.

109. Entrepreneurial Communication. (4) (Formerly numbered Communication Studies 109.) Lecture, four hours. Study of entrepreneurial communication from foundations in internal and external communication and development of brand, identity, and presentation skills utilized in existing, as well as in development of, contemporary innovative businesses. P/NP or letter grading.

110. Gender and Communication. (4) (Formerly numbered Communication Studies 110.) Lecture, four hours. Understanding gender is fundamental part of understanding who we are as human beings. Exploration of crucial role of gender in spheres of life involving communication and communication and gender differences in communication. Contexts of communication
include family, workplace, sexuality, and intimate relationships. Discuss various media influences of perception. P/NP or letter grading.

111. Conflict and Communication. (4) (Formerly numbered Communication Studies 111.) Lecture, four hours. Analysis of when and why conflict is prevalent in society (including mass media) and how communication affects reactions to and consequences of conflict. Conflict is part of our evolutionary heritage. How well we handle various conflicts affects, to great degree, our happiness or failure wherever we interact with others, including intimate relations, school, and workplace. P/NP or letter grading.

112. Current Issues in Vocal Communication. (4) (Formerly numbered Communication Studies 112.) Lecture, two Seminar, three hours. Requisite: course 118 or 120 or 126. Examination of current topics in communication research. Topics include design of communication systems, animal signaling, social communication, and speech production and perception. P/NP or letter grading.

M113. Nonverbal Communication and Body Language. (4) (Formerly numbered Communication Studies 113.) Lecture, three hours. Examples of types of communication that occur in close relationships, especially romantic relationships. How well we handle various conflicts affects, to great degree, our happiness or failure wherever we interact with others, including intimate relations, school, and workplace. P/NP or letter grading.

114. Understanding Relationships. (4) (Formerly numbered Communication Studies 114.) Lecture, four hours. Explanation of communication across ethnic groups, especially romantic relationships. In-depth coverage of a variety of relationship topics, including intimacy, stages of intimate relationships, why we choose to get involved with some people as opposed to others, flirting, and self-disclosure. P/NP or letter grading.

115. Interpersonal Dynamics. (4) Lecture, three hours. Survey of recent scientific approaches to dyadic communication and relationships. Surveys selection of experimental, observational, and quantitative methods, and how they can be applied to key issues in dyadic communication and interpersonal relationships. Topics include recent technological techniques for measuring and influencing dyads, including role of peripheral devices such as phones or other wearable devices. Consideration of dyadic processes including influence, mimicry, leadership, active listening, and more. Survey of how findings apply beyond dyads to teams. Letter grading.

116. Communication and Conflict in Couples and Families. (4) (Formerly numbered Communication Studies 116.) Lecture, three hours. Examination of (1) dysfunctional communication and conflict in couples and families and (2) relationship of these processes to individual psychopathology, marital discord, and family disruption (e.g., separation and divorce). P/NP or letter grading.

M117. Negotiation. (4) (Formerly numbered Communication Studies M117.) (Same as Labor Studies M117.) Lecture, four hours. Art and science of negotiation in contexts between independent parties. Theory and practice that underlies successful negotiation. Experiential course in which students learn broad array of negotiation skills, including identifying goals and other communication modalities, identifying and incorporating components of successful negotiation, and resolving conflict between parties. Letter grading.

118. Language and Music. (4) (Formerly numbered Communication Studies 118.) Lecture, three hours. Cognitive science exploration of structure and evolution of language and music and their relationships to communication, cognition, and culture. P/NP or letter grading.

119. Voice and Its Perception. (4) (Formerly numbered Communication Studies 119.) Lecture, four hours. Focus on how human voice conveys information about identity of speakers, physical characteristics, personality, and emotional state, and on how listeners utilize this information to make judgments about speakers. Letter grading.

120. Group Communication. (4) (Formerly numbered Communication Studies 120.) Lecture, four hours. Examination of group communication from perspectives of group members and members of different cultures. Letter grading.

121. Communication Development. (4) Lecture, three hours. Topics in human development of interpersonal communication, including promoting self-awareness and self-understanding, engaging in different methods, ages, and opportunities for studying communication development, physiological and social mechanisms, cross-cultural similarities and differences in communication development, effects of media and technology, and disorders. Letter grading.

122. Visual Communication. (4) Lecture, three hours; discussion, one hour. Exploration of visual basis for communication through study of social minds of infants, children, and nonhuman primates. Letter grading.

M123W. Talk and Body. (5) (Formerly numbered Communication Studies M123W.) (Same as Anthropology M157W.) Lecture, four hours; discussion, one hour. Requisite: English Composition 3. Relationship between language and body, and nonverbal communication as skilled performances whose talk and action are lodged within both processes of human interaction and rich settings where people pursue courses of action that count in their lives. Satisfies Writing I Requirement. P/NP or letter grading.

M124R. Evolution of Language. (4) (Same as Anthropology M124R.) Lecture, three hours; discussion, one hour (when scheduled). Recommended preparatory: Anthropology 1 or 4 or Linguistics 1. Designed for juniors and seniors. What is the sign of communication systems, animal signaling, so-called language evolve? Examination of origin of human language from biological, comparative, developmental, social and computational perspectives. Topics include evolutionary theory, linguistic structure, gesture and speech, animal communication, language learning, language disorders, and computational models of language emergence. P/NP or letter grading.

M125. Talk and Social Institutions. (4) (Formerly numbered Communication Studies M125.) (Same as Sociology CM125.) Lecture, four hours; discussion, one hour. Designed for juniors/seniors. Practices of communication and social interaction in number of major institutional and social contexts. Setting varies but may include emergency services, police and courts, medicine, news interviews, and political oratory. P/NP or letter grading.

126. Evolution of Interpersonal Communication. (4) (Formerly numbered Communication Studies 126.) Lecture, four hours. Examination of current issues in interpersonal communication from perspectives of evolutionary psychology and biology. Topics include coevolution of signaler and receiver adaptations, nonverbal communication, courtship behavior, miscommunication between sexes, implied language use, and self-deception. Letter grading.

M127. Animal Communication. (4) (Formerly numbered Communication Studies M127.) (Same as Anthropology M128Q.) Lecture, three hours. Designed for Anthropology and Communication Studies majors. Evolutionary functions, design, and diversity of animal communication systems such as bird song, dolphin calls, whale song, primate social signals, and human language. P/NP or letter grading.

128. Play and Entertainment. (4) (Formerly numbered Communication Studies 128.) Lecture, three hours. Entertainment is significant component of both interpersonal and mass communication. Examination of evolutionary history, cognitive mechanisms, and social dimensions of entertainment, as well as their possible pedagogical effects. Letter grading.

129. Gaming Mind. (4) (Formerly numbered Communication Studies 129.) Lecture, three hours. Exploration of various aspects of online computer games that are becoming increasingly popular and technically sophisticated, with focus on what people learn from games, how they learn it, and whether learning is potentially useful. Letter grading.

130. Science of Language. (4) Lecture, four hours. Introduction to scientific foundations of psycholinguistics: connectionism and computational issues in communication. Survey of various scientific methods, and how they are applied to key issues in language and communication. Discussion of how we can measure meaning of words, use of sentences, and study of how these are processed (and produced) during communication. Includes some hands-on exercises, including learning some scientific tools that can be used for both in future research and in field. Letter grading.

131. Computer Models of Communicators. (4) Lecture, three hours. Introduction to using computerized models to model communication processes. Survey of various computational methods, and how to apply these in hands-on exercises. Exercises help support small-scale simulations of communicators on personal computers. Covers computer models for individual communicators, dyads, groups, and collective (mass) systems. Letter grading.

132. Multicultural Television. (4) (Formerly numbered Communication Studies 132.) Lecture, four hours; discussion, one hour. Critical evaluation of television programming and scholarly research of new developments in television. Application of research findings by students to real-world contexts in course discussions, papers, and presentations. Letter grading.

133. Decoding Media Strategies. (4) (Formerly numbered Communication Studies 133.) Lecture, three hours. Today’s mass media are thriving business, central part of cultural identity, and vital component of democracy. How do these different and often conflicting functions determine content of mass media? Examination of psychological dynamics of advertising, nature of entertainment and mass culture, practice of product placement, and changing patterns of media ownership. Assessment of impact of mass media on individuals and social institutions. Letter grading.

136. Media Portrayals of Gays and Lesbians. (4) (Formerly numbered Communication Studies 136.) Lecture, three hours. How mass media have portrayed gays and lesbians and why. Media’s depiction, portrayal, and handling of homosexuality, with particular focus on how gays and lesbians have been negatively stereotyped, portrayed unrealistically, and often not portrayed at all. Exploration not only of how gays and lesbians have been represented, but also why certain portrayals have tended to dominate. P/NP or letter grading.

M137. Transnational Bollywood. (4) (Formerly numbered Communication Studies M137.) (Same as Asian American Studies M172C.) Lecture, three hours. Study of how popular Bollywood cinema materializes colonial and postcolonial formations pertaining to gender, class and caste, sexuality, race, and economic liberalization in South Asia, as well as across South Asian communities in North America, U.K., and Africa. Examination of how complex relations between Bollywood and transnational South Asian diasporas enable us to better understand South Asian communication. P/NP or letter grading.

140. Theory of Persuasive Communication. (4) (Formerly numbered Communication Studies 140.) Lecture, four hours. Dynamics of communication design as influence. Elements of analysis and structure of persuasive discourse; integration of theoretical materials from relevant disciplines of humanities and social sciences. Letter grading.

141. Films of Persuasion: Social and Political Advocacy. (4) (Formerly numbered Communication Studies 141.) Lecture, three hours; discussion, one hour. Films often provide commentary about public issues. Examination of how films communicate to large audiences about history, society, and politics. Critical evaluation of these works to understand power and limitations of films as social persuasion. Letter grading.
143. Rhetoric of Popular Culture. (4) (Formerly numbered Communication Studies 143.) Lecture, three hours. Rhetorical approach to study of U.S. popular culture. Examination, both at theoretical level and through specific case studies, of ways in which popular cultural texts perform rhetorically to influence political and social struggles shaping everyday life. How do particular artifacts or communicative texts constitute source for (re)negotiation of cultural meanings as well as greater understanding of ways language functions as vehicle for human action. Letter grading.

M144A-M144B. Conversational Structures I, II. (4-4) (Formerly numbered Communication Studies M144A-M144B.) Lecture, three hours; discussion, one hour. P/NP or letter grading, M144A. Introduction to some structures that are employed in organization of conversational interaction, such as turn-taking organization, organization of repair, and some basic sequence structures with limited expansions. M144B. Requisite; course M144A. Consideration of some more expanded sequence structures, story structures, topical sequences, and overall structural organization of single conversations.

145. Situation Comedy and American Culture. (4) (Formerly numbered Communication Studies 145.) Lecture, three hours. Historical analysis of situation comedy genre from its beginning in late 1940s to present. Investigation of how sitcoms have influenced American life and culture and how American life and culture have influenced sitcoms. Examination of issues of race and ethnicity, class and economy, gender roles, and political culture. P/NP or letter grading.

146. Evolution of Mass Media Images. (5) (Formerly numbered Communication Studies 146.) Lecture, four hours; discussion/laboratory, one hour. Analysis of evolutionary psychology as basis for images selected by media portraying women and/or minorities in entertainment, advertising, and informational communication. Letter grading.

M147. Sociology of Mass Communication. (4) (Formerly numbered Communication Studies M147.) (Same as Sociology M176.) Lecture, four hours; discussion, one hour (when scheduled). Studies in relationship between mass communication and social organization. Topics include history and organization of major media institutions, social forces that shape production of mass media news and entertainment, selected studies in relationship of mass media to contemporary issues of race and ethnicity, class and economy, gender roles, and political culture. P/NP or letter grading.

148. Integrated Marketing Communications. (4) (Formerly numbered Communication Studies 148.) Lecture, three hours. Examination of integration of marketing communications in both traditional and digital media. Development and execution of communications strategies, with primary emphasis on planning, development, implementation, and measurement of communications as competitive differentiators, with particular attention to techniques of market segmentation and positioning, message strategy, promotion, and execution of marketing communications through appropriate media technologies. Letter grading.

M149. Media: Gender, Race, Class, and Sexuality. (5) (Formerly numbered Communication Studies M149.) (Same as Gender Studies M149 and Labor Studies M149.) Lecture, four hours; activity, one hour. Limited to 100 Communications, Gender Studies majors and Labor Studies minors. Examination of manner in which media culture produces influences to perceive various dominant and dominated and/or colonized groups of people. Ways in which women, gay, lesbian, bisexual, transgendered, racial, and ethnic marginalized peoples, class relations, and other subaltern or subordinated groups are presented and often mispresented, including information and employment of practical applications of communications and feminist theories for understanding ideological nature of stereotyping and politics of representation through use of popular media representations, lecture, class discussions, and readings. Introduction to theory and practice of cultural studies. Letter grading.

150. Methodologies in Communication Research. (5) (Formerly numbered Communication Studies 150.) Lecture, four hours; discussion, one hour. Requisite: Economics 41 or Statistics 10. Limited to Communi-

cation majors. Examination of quantitative and qualitative methodologies in communication research. Letter grading.


152. Analysis of Communication Effects. (4) (Formerly numbered Communication Studies 152.) Lecture, four hours. Survey of experimental and field research on the understanding of social psychological, cultural, and context-based communication elements, source message, and environmental factors affecting audi-

tence response. P/NP or letter grading.

154. Social Communication and New Technology. (4) (Formerly numbered Communication Studies 154.) Lecture, four hours. Internet's digital core was designed for military command. Yet emerging network was gradually co-opted to perform communicative functions such as gossip, dating, news, entertainment, and trade. Exploration of history, social effects, and possible futures of digital communication. Letter grading.

155. Artificial Intelligence and New Media. (4) (Formerly numbered Communication Studies 155.) Lecture, three hours. Examination of historical evolution of Artificial Intelligence (AI) and machine learning (ML) have made rapid progress in recent years on various fronts. Many of their advanced techniques are being transferred to number of domains such as business, medicine, advertisement, military operations, and social media, and aiding our decision making, planning, reasoning, and forecasting. Overview of how AI and ML are providing new forms of digital content as well as greater understanding of ways language functions as vehicle for human action. Letter grading.

156. Social Networking. (4) (Formerly numbered Communication Studies 162.) Lecture, four hours. Examination of how following personal connections for knowledge sharing, romance, business, politics, and entertainment. Critical investigation of current popular social networking sites (Facebook, Twitter, YouTube) through social network analysis and other social science research methods. P/NP or letter grading.

161. Theories of Freedom of Speech and Press. (4) (Formerly numbered Communication Studies 161.) Lecture, three hours. Analysis of how following personal lives of media-created celebrities impacts self-esteem, connectedness, and personal relationships from cultural studies and social sciences perspectives, and how entities cultivate celebrity for financial gain. Topics include celebrity gossip and privacy, news sharing, public relations, and impact of social media on fan support, image construction, and damage control. P/NP or letter grading.

165. Agitational Communication. (4) (Formerly numbered Communication Studies M165.) Lecture, four hours. Political Commentary. (5) (Formerly numbered Communication Studies M169.) (Same as Honors College Communication Studies 169.) Lecture, three hours. Analysis of how motivation and creativity interact with business interest, research, and policies in producing entertainment and for media marketing. Hallucinated as vehicle for human action.

166. Inside Hollywood. (4) (Formerly numbered Communication Studies 166.) Lecture, four hours. Identifi-

cation of how motivation and creativity interact with business interest, research, and policies in producing entertainment and for media marketing. Hallucinated as vehicle for human action.

170. Legal Communication. (4) (Formerly numbered Communication Studies 170.) Lecture, four hours. Study of trial and appellate processes as systems of communication. Analysis of elements of juridical pro-

cess as they affect quality of communication content. Study of rules of evidence, jury behavior, and structure of legal discourse. Letter grading.

171. Theories of Freedom of Speech and Press. (4) (Formerly numbered Communication Studies 171.) Lecture, three hours. Exploration of relationship between freedoms of speech and press and values of liberty, self-realization, self-government, truth, dignity, respect, justice, equality, association, and community. Study of significance of these values examined in connection with issues such as free speech, censorship, access to media, and control of commercial, corporate, and government speech. P/NP or letter grading.

180. Propaganda and Media. (4) (Formerly numbered Communication Studies 180.) Lecture, four hours; discussion, one hour (when scheduled). Introduction to methods and problems of criticism in public arts. Study of several types of critical methods: formalistic, analogue, pragmatic, and aesthetic criticism. Topics include definition of art and criticism, aesthetic media, genre and resources of film, television, theater, and public discourse, varieties of critical method, problems of critical judgment. Letter grading.

M176. Visual Communication and Social Advocacy. (4) (Formerly numbered Communication Studies M176.) Lecture, four hours. Examination of nature of propaganda, institutional structure of American media, and relationships of news media to political power. Study of political topics. Cartoons, posters, murals, and documentary photography have had powerful world impact. Survey of all four genres of visual communications as features of modern media. Letter grading.

178. Propaganda and Media. (4) (Formerly numbered Communication Studies 178.) Lecture, three hours. Examination of nature of propaganda, institutional structure of American media, and relationships of news media to political power. Study of political topics. Cartoons, posters, murals, and documentary photography have had powerful world impact. Survey of all four genres of visual communications as features of modern media. Letter grading.

179. Images of U.S. (4) (Formerly numbered Communication Studies 179.) Lecture, four hours. Awareness of international role of U.S. necessitates clear un-

derstanding of image of U.S. abroad. Contents include study of images of the U.S. in popular culture and political arena, and implications for international relations. Letter grading.
standing of way our nation is perceived by others. Exploration of roots of U.S. images in minds of people abroad. Analysis of influences that contribute to images and ways in which images affect practical matters. P/NP or letter grading.

182. Nonverbal Communication in Architecture. (4) (Formerly numbered Communication Studies 182.) Lecture, four hours. Study of how elements of design and style of various buildings in architectural history send messages to viewers and users of such buildings. Lecture.

183. Media and Mind. (4) (Formerly numbered Communication Studies 183.) Lecture, three hours. Investigation of media persuasion and entertainment appeal through interviews with audience; study of meeting with faculty mentor while facilitating USIE 88S course. Individual contract with faculty mentor required. May not be repeated. Letter grading.


188C. Individual Studies for USIE Facilitators. (2) Tutorial, to be arranged. Enforced course requirement. Limited to junior/senior majors. Individual to study in regularly scheduled meetings with faculty member. Individual contract with faculty mentor required. May not be repeated. Letter grading.

189B. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, writing, discussion, and development of culminating project. May be repeated for credit with topic change. P/NP or letter grading.

191A. Variable Topics Research Seminars: Mass Communication and Media Institutions. (4) (Formerly numbered Communication Studies 191A.) Seminar, three hours. Exploration of how cognitive processes underlie multiple aspects of communication, including social influences that contribute to perceived meaning of messages. May be repeated for credit with topic change. Letter grading.

191B. Variable Topics Research Seminars: Interpersonal Communication. (4) (Formerly numbered Communication Studies 191B.) Seminar, three hours. Research seminars on selected topics in interpersonal communication, including development of culminating project. May be repeated for credit with topic change. P/NP or letter grading.

191C. Variable Topics Research Seminars: Communication Technology and Digital Systems. (4) (Formerly numbered Communication Studies 191C.) Seminar, three hours. Research seminars on selected topics in communication technology and digital systems. Reading, discussion, and development of culminating project. May be repeated for credit with topic change. P/NP or letter grading.
COMMUNITY ENGAGEMENT AND SOCIAL CHANGE

Interdisciplinary Minor
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Amy E. Ritterbusch, PhD (Social Welfare)
Rafael Romero, PhD (Neuroscience)
Ananya Roy, PhD (Geography, Social Welfare, Urban Planning)
David Delgado Shorter, PhD (Anthropology, Gender Studies, World Arts and Cultures/Dance)

Scope and Objectives

The Community Engagement and Social Change minor is designed to provide students with a core analytical, experimental, and theoretical framework for understanding three intersecting dimensions of civic engagement at the local level: issues of social inequality, modes of social change, and the community in which the engagement takes place. The minor can be paired with any major as an applied and active way of putting disciplinary tools to use, and is intended for highly motivated students of any ideological perspective who are committed to education among a broader community of learners.

Students complete a core curriculum, elective courses, a course on a strategy of social change, and a community-engaged capstone research project examining a social issue in a specific Los Angeles community context.

Undergraduate Study

Community Engagement and Social Change Minor

The Community Engagement and Social Change minor integrates community engagement with an academic context that enriches the valuable learning gained through meaningful work.

To enter the minor, students must have an overall grade-point average of 2.7 or better, submit a completed application, and submit a written statement describing how civic engagement relates to their academic interests or career goals. Digital applications are available.

As they move through the minor, students compile a portfolio. They start the portfolio by articulating a plan for the completion of the minor that reflects the social issues, strategies of engagement, and local communities upon which they will focus their pathway through the minor. This plan is completed as the final reflective writing assignment for Community Engagement and Social Change 50XP or 100SL (for those students declaring an intention to pursue the minor). The portfolio is a repository for the products associated with their academic and experiential work for the minor, including a copy of their capstone research paper, and a critical reflection prior to graduation detailing their pathway through the minor and its implications for their future academic study and/or community engagement.


Required Capstone (8 units): Community Engagement and Social Change 191A, 191B, with grades of B or better. Students must have completed the core courses requirement, and at least one other com-
Community Engagement and Social Change

Lower-Division Courses

10. Introduction to Engaged Scholarship. (2) (Formerly numbered Civic Engagement 10.) Seminar, two hours. Limited to students participating in preapproved UCLA civic engagement programs. Introduc-
tion to history, research and philosophy of general University/community partnerships, as well as specific opportunities for active engagement by undergrad-
uate students at UCLA. Offered in summer only. P/NP grading.

18. Bruin Leaders: Model for Social Change. (1) (Formerly numbered Civic Engagement 18.) Lecture, two hours; fieldwork, one hour. Introduction to leader-
ship development and civic engagement through community service. Based on nonhierarchical mode of leadership developed by UCLA Graduate School of Edu-
cation and Information Studies. Topics include diversity issues, organizational skills and team-building development, and personal growth and community service goals. Participation in first-week orientation session required. Consult Schedule of Classes for topics to be offered in specific term. May not be re-
peated for credit. P/NP grading.

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

50XP. Engaging Los Angeles. (5) (Formerly numbered Community Engagement and Social Change 50SLL) Lecture, two hours; discussion, two hours. Community-engaged learning course with focus on diverse communities of Los Angeles. Analysis of general shared history of Los Angeles. Comparing or con-
trasting of experiences of several different racial/ethnic groups. Engagement in meaningful work off-campus to reflect on values, injustices, and inequities that have shaped experiences of native or immigrant communities. Analysis of Los Angeles in which resi-
dents coexist and interact while managing tensions and social justice values inherent in minority/majority city. Letter grading.

89. Honors Seminars. (1) (Formerly numbered Civic Engagement 89.) Seminar, three hours. Limited to 20 students. Designed as adjunct to lower-division cur-
riculum. Entry in good standing. Enrolled students will participate through supplemental readings, papers, or other activi-
ties and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

89HC. Honors Contracts. (1) (Formerly numbered Civic Engagement 89HC) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to lower-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for max-
imum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

95A-95B. Introduction to Community-Based Inter-
ships. (2-4) (Formerly numbered Civic Engagement 95.) Fieldwork, four hours (course 95A) and 10 hours (course 95B). Course 95A is not requisite to 95B. Introduction to commu-
nity-based work for students in specialized UCLA scholarship programs, people-oriented, organized, struc-
tured, and supervised off-campus experiences with academic context. Acceptable placements include corporate, nonprofit, and governmental organi-
izations that meet criteria for undergraduate intern-
ships as established by Center for Community Learning. Individual contract with supervising faculty member required. P/NP or letter grading.

95CE. Introduction to Community-Based Intern-
ships. (2) (Formerly numbered Civic Engagement 95CE.) Tutorial, one hour; fieldwork, four hours. Intro-
duction to community-based work for third- and fourth-year undergraduate students. Minimum of 80 units. Platform for preplanned, organized, struc-
tured, and supervised off-campus experiences with academic context. Acceptable placements in-
clude corporate, nonprofit, and governmental organi-
zations that meet criteria for undergraduate inter-
ships as established by Center for Community Learning. May be repeated once for credit. Individual contract with supervising faculty member required. P/NP or letter grading.

98A. Leadership and Social Change. (2) Seminar, two hours. Exploration of different modes of leader-
ship and consideration of how effective leadership can bring about positive social change. We live in a period of extraordinary opportunity and challenge—in which breathtaking technological advances sit alongside breathtaking cynicism and corruption. Examination of how effective and inspiring leaders can lead in such environ-
ment, if it is possible to make difference and effect change in face of deep structural inequality, criti-
cra that make effective leader, and if each of us bears with us our leadership. Introduc-
tion to past models of successful leadership and different models of present-day leadership, drawing on in-
spiring examples from social activism, politics, reli-
gion, law, philanthropy, and education. Students are encouraged to formulate their own models of leader-
ship. Three to four day experiential learning opportu-
nity in leadership development off campus. P/NP grading.

98B. Organizational Analysis and Workforce Readi-
ness. (2) Seminar, two hours. Required course 98A. Analytic training on how to study institutions and or-
ganizations. Students identify, contact, and interview principals from a work area of interest. Site visits to various working environments in Los Angeles area. Analytics training on how to study institutions and or-
ganizations and prepare research briefs on organiz-
ings/organizations as established by Center for Community Learning. Letter grading.

99. Student Research Program. (1 to 2) Tutorial (su-
pervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-divi-
sion students under guidance of faculty mentor. Stu-
dents must be in good academic standing and en-
rolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Courses

105SL. Perspectives on Civic Engagement. (4) (Formerly numbered Civic Engagement 105SL) Seminar, three hours. Introduction to civic engagement re-
search and practice open to students who have been accepted in Civic Engagement minor, as well as those freshman/sophomores who are interested in the field of civic engagement within undergraduate edu-
cation. Letter grading.

107. Reflections on Alternative Spring Break. (2) (Formerly numbered Civic Engagement 107.) Seminar, two hours. Limited to students who have participated in USAC Community Service Commission Alternative Spring Break immediately prior to Spring Quarter. Dis-
cussion of role of higher education initiatives in civic identity formation, with specific attention to reflection on Alternative Spring Break experiences. P/NP or letter grading.

108SL. Introduction to Early Childhood Education: Civic Engagement Perspectives. (4) (Formerly num-
bered Civic Engagement 108SL) Lecture, three hours; fieldwork, eight hours. Limited to students who are participating members of Jumpstart AmeriCorps lit-	eracy program. Service-learning course on early child-
hood development and civic engagement. Overview of child development theory as well as examination of policies and systems that impact practice of pre-
school education. Discussion of past and future of civic engagement movement designed to engage diverse groups of committed stakeholders in reaching common goal. P/NP or letter grading.

M105SL. Community-Based Studies of Popular Lit-
erature. (5) (Formerly numbered Civic Engagement M110.) Seminar, three hours. Enforced Composition 3. Service learning course that examines history and development of one or more genres of popular liter-
ature, with attention to contemporary communities of interest and writers in US society. Topics vary and may include children's literature and childhood literacy, mass market fiction and book club culture, or science fiction and science policy. Service-
learning component includes meaningful work with local nonprofit organizations selected in advance by instructor. May be repeated for credit with topic change. P/NP or letter grading.

M115. Citizenship and Public Service. (4) (Formerly numbered Civic Engagement M115.) (Same as Polit-
ical Science M115.) Lecture, three or four hours; dis-
cussion, one hour (when scheduled). Recommended requisite: Political Science 10. Designed for seniors/ma-
ture students. Study of ways in which political thinkers have conceived of ideas of citizenship and public service, how these ideas have changed over time, and frame-
works for thinking about citizenship in era of markets and global economy. P/NP or letter grading.

M122. Philanthropy as Civic Engagement. (5) (For-
merly numbered Civic Engagement M122.) (Same as Honors College M122.) Seminar, three hours. Limited to seniors; application required. Study of history, phil-
thropic and civic engagement. Understanding of phil-
thropic experience in setting priorities and making philan-
thropic investments in Los Angeles-based nonprofit organ-
izations. Letter grading.

110. Intercultural Communication in Global Work-
place. (4) Seminar, three hours. Students enrolled in international summer internships draw on their own and each other's experiences to critically think about
intercultural communication, as well as draw insights from that academic literature to diagnose and build intercultural communication competencies in context of workplace environment. P/NP or letter grading.

133SL. Civic Engagement and Public Use of Social Change. (4) (Formerly numbered Civic Engagement 133SL). Seminar, three hours; fieldwork, two hours. Service learning course that examines variable topics related to theory and practice of community-based research. Service learning component includes mentoring projects in collaboration with community partners selected in advance by instructor and Center for Community Learning. May be repeated for credit with topic or instructor change. Letter grading.

M134SL. Civic Engagement and Immigrants and Their Families. (5) (Formerly numbered Civic Engagement M134SL.) Same as Chicana and Chicano Studies M134SL and Labor Studies M134SL.) Lecture, two hours; discussion, two hours; field placement, two hours. Survey and exploration of immigrant landscape in Los Angeles—truly global city acting in part to buffer, settle, and incorporate immigrants in daily life. Focus on social justice and its importance to University/community partnerships and role of civic engagement in community change. Exploration of how nonprofit organizations use storytelling strategies to advance social justice. Opportunities to use research and writing skills to tell stories of social justice through print and online media. Students collaborate with nonprofit organizations to complete research and communication projects with special focus on how storytelling can empower individuals and communities and advance equity in diverse urban centers like Los Angeles. Letter grading.

M170SL. Food Studies and Food Justice in Los Angeles. (4) (Formerly numbered Civic Engagement M170SL.) (Same as Food Studies M170SL.) Seminar, three hours; fieldwork, two hours. Interdisciplinary service learning course that provides general understanding of the food chain in Los Angeles. Exploration of social justice issues faced by residents of lower-income communities. Reading of research from multiple disciplines, including but not limited to public health, environmental justice, and public policy. Service-learning component includes meaningful work off-campus community partners selected in advance by instructor and Center for Community Learning. Letter grading.

M175SL. Making Films about Food. (5) (Formerly numbered Civic Engagement M175SL.) (Same as Chicana and Chicano Studies M175SL and Food Studies M175SL.) Lecture, three hours; fieldwork, ten hours. Service learning course that examines variable topics related to food justice in Los Angeles. Exploration of social justice issues faced by residents of low-income communities. Reading of research from multiple disciplines, including but not limited to public health, environmental justice, and public policy. Service-learning component includes meaningful work off-campus community partners selected in advance by instructor and Center for Community Learning. Letter grading.

145. Conflict, Power, Inequality, and Change. (4) (Formerly numbered Civic Engagement 145.) Lecture, four hours, Broad historic trend of systems in conflict since beginning of colonialism, including capitalism, imperialism, globalization, and neoliberalism. Examination of modalities and theories of conflict and transformation, with emphasis on three primary forms of societal conflict: social movements, war, and terrorism. Study of resource scarcity through two specific dimensions: how it is leveraged to meet political ends, and how it can be harnessed for conflict intervention, resolution, transformation, and prevention. P/NP or letter grading.

150. Social Innovation Theory and Application. (4) (Formerly numbered Civic Engagement 150.) Seminar, three hours. Limited to students in UCLA Summer Social Innovation Research Program. Study of social innovation in theory and practice of civic engagement with particular emphasis on how social innovations have transformed way we address entrenched social issues. Study of elements of existing social innovation models and strategies for employing methods of social change in campus and community contexts. Offered in summer only. Letter grading.

151. Documentary Film: Making as Strategy for Social Change. (4) Lecture, two hours; discussion, two hours. Students produce a documentary film in genre of their choice (advocacy, observational, essayistic, eco-documentary, archival and subject) in context of socially-just research focused on a specific social issue. Students work in teams alongside faculty mentors while completing 10-week accelerator program. Students meet assigned nonprofit organization to develop tailored plan of work for 10-week accelerator. Students carry out work in conjunction with staff of organization under supervision of instructors and with assistance of experienced entrepreneur mentor. P/NP or letter grading.

188SA. Individual Studies for USIE Facilitators. (1) (Formerly numbered Civic Engagement 188SA.) Tutorial, to be arranged. Enforced corequisite: course 188SA. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to discuss selected USIE seminar topic, conduct preparatory research, and begin preparation of syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.

188SB. Individual Studies for USIE Facilitators. (5) (Formerly numbered Civic Engagement 188SB.) Tutorial, to be arranged. Enforced corequisite: course 188SB. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor while facilitating USIE 88S course. Individual contract with faculty mentor required. May not be repeated. Letter grading.

189. Advanced Honors Seminars. (1) (Formerly numbered Civic Engagement 189.) Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

189HC. Honors Contracts. (1) (Formerly numbered Civic Engagement 189HC.) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to upper-division lecture course. Individual contract to be arranged with faculty to serve as mentor while facilitating USIE 88S course. Individual contract with faculty mentor required. May not be repeated. Letter grading.

190A. Introduction to Community-Engaged Research. (4) (Same as Labor Studies M190A.) Seminar, three hours. Enrollment by consent of instructor. Designed for students participating in Astin Community Scholars Program. Introduction of principles of community-engaged research. Exploration of intentions behind doing research with community residents and organizations, our responsibilities when conducting research with community stakeholders, and relationship between socially-just research outcomes and methodologies. P/NP or letter grading.

190B. Community-Engaged Research in Practice: Community Scholars. (4) (Same as Labor Studies M190B.) Seminar, three hours. Requisite: course 190A. Enrollment by consent of instructor. Designed for students participating in Astin Community Scholars Program. Supervised research activity working with community stakeholders, graduate students, and key academic experts about emerging organizing models, best practices, and changing landscape in chosen topic. Students will meet with faculty mentors required to work with students from key community and labor organizations across Los Angeles on six-month dynamic participatory research project. Focus on current topic affecting Angelenos and neighboring communities. May include production of policy reports, popular education materials, and/or book publication by students in teams alongside staff of nonprofit organizations in 10-week social enterprise accelerator program aimed at helping participating organizations secure financial and operational resources they need to implement social enterprise for which the business plan has been constructed. Students meet assigned organization, study its business plan, and work with instructors of course and staff of nonprofit organization to develop tailored plan of work for 10-week accelerator. Students carry out work in conjunction with staff of organization under supervision of instructors and with assistance of experienced entrepreneur mentor. P/NP or letter grading.
M190C. Community-Engaged Research in Practice: Community Scholars. (4) (Same as Labor Studies M190C) Seminar, three hours. Requisites: courses M190A, M190B. Enrollment by consent of instructor. Designed for students participating in Astin Community Scholars Program. Students learn from faculty, community stakeholders, graduate students, and key experts about emerging organizing models, best practices, and changing landscape in chosen topic. Provides students with opportunity to work with key community leaders and organizations across Los Angeles on six-month dynamic participatory research project. Focus on current topic affecting Angelenos and neighboring communities. Key outcomes may include production of policy reports, popular education materials, and/or book publication by UCLA Labor Center and collaborative partners. Primary focus on engaging policy makers and other change agents. P/NP or letter grading.

191A. Capstone Research Seminar. (4) Seminar, three hours. Provides students with analytical and applied framework for process of researching historical and contemporary social issues and efforts to bring about change in local communities. Letter grading.

191B. Capstone Research Seminar: Projects. (4) Seminar, three hours. Provides students with analytical and applied framework for process of researching historical and contemporary social issues and efforts to bring about change in local communities. Culminates in capstone research project, typically length required of publishable journal articles (15-25 pages). Students’ research should be implementation of design completed in course 191A, and should be informed by their coursework in the minor. Letter grading.

194. Capstone Research Seminar. (4) (Formerly numbered Civic Engagement 194.) Seminar, two hours. Requisite: course 195CE. Required of students pursuing Civic Engagement minor. Integration of off-campus work with academic theories and concepts within field of civic engagement. Students report on their internship experiences and analyze relationship between their internship and issues of policy, ethics, systemic responses to community needs, or personal and intellectual transformations. Students identify one faculty mentor and develop proposal for required capstone research project. Letter grading.

194A. Astin Civic Engagement Research Seminar. (4) (Formerly numbered Civic Engagement 194A.) Seminar, three hours. Limited to students in Astin civic engagement spring training program. Integration of off-campus work with academic theories and concepts within field of civic engagement. Students report on their internship experiences and analyze relationship between their internship and issues of policy, ethics, systemic responses to community needs, or personal and intellectual transformations. Students identify one faculty mentor and develop proposal for required capstone research project. Letter grading.

195. Community or Corporate Internships in Civic Engagement. (4) (Formerly numbered Civic Engagement 195.) Tutorial, one hour; fieldwork, eight hours. Limited to juniors/seniors. Internship in supervised setting in corporate, governmental, or nonprofit setting, using knowledge base of civic engagement. Students submit weekly writing assignments and final paper that examine civic issues related to meaningful work at internship site. Students expected to learn ways in which individuals and groups can organize to solve problems, analyze issues, discerning change in democratic society. Must be repeated for three consecutive terms to fulfill minor requirements. Individual contract with supervising faculty member required. Letter grading.

195CE. Community and Corporate Internships in Community Engagement and Social Change. (4) (Formerly numbered Civic Engagement 195CE.) Tutorial, to be arranged; fieldwork, eight to 10 hours. Limited to juniors/seniors. Internship in corporate, governmental, or nonprofit setting coordinated through Center for Community Learning. Students complete weekly written assignments, attend biweekly meetings with graduate student coordinator, and write final research paper. Faculty sponsor and graduate student coordinator construct series of reading assignments that examine issues related to internship site. May be repeated for credit with consent of Center for Community Learning. Letter grading.

198. Honors Research in Civic Engagement. (4) (Formerly numbered Civic Engagement 198.) Tutorial, one hour. Required capstone course to Civic Engagement minor for students pursing College Honors. Development and completion of honors thesis or comprehensive research project under direct supervision of faculty member. Individual contract required. Letter grading.

199. Directed Research or Senior Project in Civic Engagement. (4) (Formerly numbered Civic Engagement 199.) Tutorial, to be arranged. Required capstone course to Civic Engagement minor. Supervised individual research or investigation under guidance of faculty mentor. Culminating paper or project required. May be repeated once for credit. Individual contract required. Letter grading.

Graduate Course

375. Teaching Apprentice Practicum, (1 to 4) (Formerly numbered Civic Engagement 375.) Seminar, to be arranged. Preparation: apprentice personnel employment as teaching assistant, associate, or fellow. Teaching apprenticeship and individual supervision of regular faculty member responsible for curriculum and instruction at UCLA. May be repeated for credit. S/U grading.

COMMUNITY HEALTH SCIENCES

Jonathan and Karin Fielding School of Public Health

36-071 Center for Health Sciences
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Community Health Sciences
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Dawn M. Upchurch, PhD, LAC, Vice Chair

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Deborah C. Glik, ScD
Kimberly D. Gregory, MD, MPH
Robert J. Kim-Farley, MD, MPH
James A. Macinko, PhD
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Mary Jane Rotheram-Borus, PhD, in Residence
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Scope and Objectives

The Department of Community Health Sciences is concerned with health equity and well-being for all individuals and communities. To understand and foster optimal health among diverse communities, the mission of the department is to prepare students to be interdisciplinary global leaders who can effectively address persistent and emerging public health issues, conduct and disseminate innovative research on the social determinants of health, translate the findings for public health practice, and collaborate with communities in research and training.

The department offers worldwide professional (MPH) and academic (MS and PhD) degree programs. Graduates of the professional programs assume positions in the planning, administration, and evaluation of public health programs and policies in the U.S. and abroad. Graduates of the academic programs assume teaching, research, and managerial positions in universities, government agencies, nongovernmental organizations, international health agencies, and research centers.

Graduate Study

Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Division website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Individual study with or other activities and led by lecture course instructor. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

100. Introduction to Community Health Sciences. (4) Lecture, four hours. Limited to students in Public Health minor or graduate students. Introductory course to provide non-Community Health Sciences MPH students and qualified undergraduate students with broad and comprehensive overview of concepts, empirical research, and practice in community health sciences, with emphasis on social context and determinants of population health and planning of policies for population health. Introduction to use of health and health ill, social construction of health, social and behavioral determinants of health, and health disparities, including socioeconomic status, race/ethnicity, gender, age, lifestyle, and behavioral theories of health-related behavior change, health promotion strategies and methods, and public policy. Case studies of evidence-based health promotion programs provided. Letter grading.

130. Nutrition and Health. (4) Lecture, three hours; laboratory, one hour. Preparation: one biology course, one chemistry course. Basic and clinical nutrition theory and practice for students in health sciences curriculum. P/NP or letter grading.

131. Healthy Food Access in Los Angeles: History and Practice of Urban Agriculture. (4) Lecture, three hours; laboratory, 90 minutes. History and recent revival of urban agriculture (gardening) in Los Angeles area. Exploration of how urban gardening is response to crises such as U.S. obesity epidemic and resulting health problems. Critiques of industrial agriculture in California and elsewhere in U.S. Exploration of how urban agriculture creates healthy food/active living and consumer movements that advocate access to locally grown, in-season, affordable food. Biweekly hands-on gardening laboratory in Sunset Canyon Recreation Center Organic Garden. P/NP or letter grading.

132. Health, Disease, and Health Sciences in Latin America. (4) Lecture, four hours. Introduction to health, disease, and health services in Latin America, with emphasis on epidemiology, health administration, medical anthropology, and nutrition. P/NP or letter grading.

M140. Health Issues for Asian Americans and Pacific Islanders: Myth or Model? (4) Same as Asian American Studies M129). Lecture, three hours; fieldwork, one hour. Introductory overview of mental and physical health issues of Asian Americans and Pacific Islanders; identification of health status indicators and barriers to both care delivery and research for these populations. Letter grading.

160. Intergroup Dialogue: Theory and Practice of Peer Facilitation. (4) Lecture, four hours. Recommended: coursework in intergroup relations, conflict resolution, and negotiation. Peer facilitator training course to develop understanding of the theoretical and research foundations of intergroup dialogue, peer-facilitated discussions involving relationship building (and coalition building) through thoughtful engagement around different social identity issues. Study of various techniques, tools, and strategies to support students in their capacity to maintain sustained dialogues with students from other social identity groups. Letter grading.

161. Intergroup Dialogue: Training Practicum. (4) Seminar, four hours. Enrolled requisite: course 160. Application and further development of content and skills learned in course 160. Co-facilitation of weekly dialogues with students on specific identity theme and for development of knowledge and techniques in areas of group dynamics, conflict intervention, communication and community, and mental health effects of structural inequality as they relate to discussions of social justice and multicultural issues in these areas and discussions of ongoing dialogue dynamics. May be repeated once for credit. Letter grading.


198. Field Studies in Cancer Control. (4) Lecture, two hours; discussion; one hour; fieldwork, four hours. Requisite: Molecular, Cell, and Developmental Biology 50. Designed for juniors/seniors. Opportunity for students to become involved in cancer control through classroom discussion, lectures, service in field, and guided research. Biology of cancer, its prevention, early detection, treatment, and rehabilitation. Letter grading.

187A-187B. Introduction to Interventions for At-Risk Populations. (4–4) Lecture, three hours; committee meetings/community service, two to six hours. Course 187A is requisite to 187B. Designed for juniors/seniors. Health and social needs of groups from primarily public health perspective, drawing on related academic/professional disciplines. Community-based service learning strategy used to enhance knowledge of targeted community. As enrolled, students trained as caseworkers and committee members. Letter grading.

188A-188B. Special Courses in Community Health Sciences. (4–4) Lecture, two hours (188A) and three hours (188B); Examination of current topics or particular subspecialties or experimental or temporary courses in community health sciences. Specific topic areas vary with instructor. May be repeated for credit with topic change. P/NP or letter grading.

189. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

189HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors and departmental honors programs. Designed as adjunct to lower-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.
195. Community or Corporate Internships in Community Health Sciences. (4) Tutorial, six hours. Limited to juniors/seniors. Internship in supervised setting in community agency or business. Further supervision provided by public health organization for which students do internship. Students meet on regular basis with instructor and provide periodic reports of their experience. May be repeated for credit. Individual contract with supervising placement sponsor required. P/NP or letter grading.

197. Individual Studies in Community Health Sciences. (2 to 4) Tutorial, four hours. Limited to juniors/seniors. Individual intensive study, with scheduled meetings with instructor and regular reports to student. Assigned reading and tangible evidence of mastery of subject matter required. May be repeated for credit. Individual contract required. P/NP or letter grading.

Graduate Courses

200. Global Health Problems. (4) Lecture, two hours; discussion, two hours. Overview of health profile of world in the century. Global health problems and methods by which they have been dealt in context of Alma Allen goal of health for all by year 2000. Letter grading.


M208. Introduction to Demographic Methods. (4) (Same as Biostatistics M208, Economics M208, and Sociology M208.) Lecture, two hours; discussion, four hours. Preparation: one introductory statistics course. Introduction to methods of demographic analysis. Topics include demographic rates, standardization, decomposition of differences, life tables, survival analysis, cohort analysis, birth interval analysis, models of population growth, stable populations, population projection, and demographic data sources. Letter grading.


210. Community Health Sciences. (4) Lecture, three hours; discussion, one hour. Preparation: one social sciences course. Basic concepts, relationships, and policy issues in field of community health, variability in definitions of health and illness, correlates of health and illness behavior, impact of social and community structure on health status, major contemporary approaches to health promotion and health education at community level. Use of comparative international perspective. Letter grading.

211A-211B. Program Planning, Research, and Evaluation in Community Health Sciences. (4-4) Lecture, three hours; discussion, one hour; outside assignments, eight hours. Preparation: course 211A. Development, planning, and administration of public health programs in community settings. Introduction to range of research methods and techniques used in designing and conducting health research with particular emphasis on evaluation of community-based public health programs. Course organized into three parts. Letter grading. 211A: Lecture, two hours; requisites: courses 211A, 211B, and Biostatistics 100B or Epidemiology 100 or Public Health 200A and 200B.

212. Advanced Social Research Methods in Health. (4) Lecture, four hours; laboratory, two hours; outside assignments, eight hours. Requisites: courses 211A, 211B, Biostatistics 100B, 406. Problems of health survey design and data collection; measurement issues in health research and use of computers for analysis of large-scale survey data using various statistical techniques. Letter grading.


M216. Qualitative Research Methodology. (4) (Same as Anthropology M284A.) Seminar, three hours; laboratory, one hour. Intensive seminar/field course in qualitative research methodology. Emphasis on qualitative methodology in research and evaluation related to healthcare. Letter grading.

M217. Current Issues in Food Studies. (4) (Same as Urban Planning M216.) Seminar, three hours. Limited to Food Studies graduate students. Current food issues. Lecture, seminar, and food-related assignments, eight hours. Preparation: one social or behavioral science course. Basic concepts, relationships, and associated processes of the current food system. How demographic models are used in estimation of population size, age structure, and associated processes. How demographic models are used in estimation of plausible pathways from perspectives of multi-disciplines (economics, nutrition, sociology, and more), with focus on linkages between social and physical environment (including built environment) and food equity/access; discussion of how food may be catalyst for improving social and capital health. Discussion of examples of local and international efforts to improve access to healthy foods and to limit access to unhealthy foods. Exploration of methods for assessing social capital and food-related aspects of neighborhood environments. S/U or letter grading.

221. Questionnaire Design and Administration. (4) (Same as Epidemiology M218.) Lecture, four hours. Requisite: courses 211A and 211B, or Epidemiology 212. Development of quantitative surveys and interview instruments. Design and use of data collection methods, including questionnaires and related materials. Letter grading.

226. Women's Health and Well-Being. (4) Lecture, four hours; discussion, one hour. Requisite: course 225. Analysis of gender and sexuality in women's health. Overview of scientific inquiry and research on racism as social determinant of health, with focus on linkages between social and physical environment (including built environment) and food equity/access; discussion of how food may be catalyst for improving social and capital health. Discussion of examples of local and international efforts to improve access to healthy foods and to limit access to unhealthy foods. Exploration of methods for assessing social capital and food-related aspects of neighborhood environments. S/U or letter grading.

228. Community Health Sciences. (4) Lecture, three hours; discussion, one hour. Preparation: one social sciences course. Basic concepts, relationships, and policy issues in field of community health, variability in definitions of health and illness, correlates of health and illness behavior, impact of social and community structure on health status, major contemporary approaches to health promotion and health education at community level. Use of comparative international perspective. Letter grading.

234. Social Determinants of Nutrition and Health. (4) Lecture, three hours; discussion, one hour. Preparation: one social sciences course. Basic concepts, relationships, and policy issues in field of community health, variability in definitions of health and illness, correlates of health and illness behavior, impact of social and community structure on health status, major contemporary approaches to health promotion and health education at community level. Use of comparative international perspective. Letter grading.
M232. Determinants of Health. (4) (Same as Health Policy M242.) Lecture, three hours; discussion, one hour. Designed for graduate students. Critical analysis of models for what determines health and evidence for social, economic, environmental, genetic, health system, and personal characteristics. Focus on health of populations and defined subgroups. Letter grading.

M234. Obesity, Physical Activity, and Nutrition Seminar. (4) (Same as Health Policy M253.) Seminar, three hours; outside study, one hour. Designed for graduate students. Multidisciplinary introduction at graduate level to epidemiology, physiology, and current state of preventive and therapeutic interventions for obesity in adults and children, including public health policy approaches to healthy nutrition and physical activity promotion. S/U or letter grading.

235. Influence of Social and Physical Environment on Racial Health Disparities. (4) Seminar, three hours. Preparation: at least one biostatistics or epidemiology course. Limited to graduate students. Examination of broad social, historical, and institutional perspectives, including measurement and identification of vulnerability, prevention, and options for relieving acute food shortages. Letter grading.


M239. Race, Ethnicity, and Culture as Concepts in Practice and Research. (4) (Same as Asian American Studies M239.) Seminar, three hours. Integration of cross-cultural findings in healthcare with current American (U.S.) healthcare system paradigms to facilitate development of culturally based healthcare programs and train culturally competent practitioners. Letter grading.

240. Child and Reproductive Health in Communities: Global Environmental Perspective. (4) Lecture, three hours; discussion, one hour. Aims to provide an understanding of the relationship between environmental factors and reproductive health in relation to environmental factors in interplay with socioeconomic and biological factors. Environmental influences are responsible for one quarter of total burden of disease worldwide, and for more than one third of burden among children—most of them living in resource-poor countries and communities. Discussion of the importance of different factors and potentially modifying factors, such as access to safe water or sanitation, as well as environmental contribution to high-burden outcomes in childhood and reproduction. Focus on lower income setting and discussion of relevant population-based approaches to assessment and intervention. Letter grading.


246. Women’s Roles and Family Health. (4) Lecture, two hours; discussion, one hour. Rapidly changing roles of women throughout world are having important effects on women’s own health and that of their families. Analysis of multidisciplinary research from both developed and industrialized countries to provide basis for in-depth discussion of programmatic and policy implications. Letter grading.

247. Population Change and Public Policy. (4) Lecture, four hours. Examination of international population change, population-related policies, and public health implications of demographic processes. Letter grading.

M249L. Ethical Theory and Applications in Public Health. (4) (Same as Health Policy M285.) Lecture, four hours. Requisites: Health Policy 200A, 200B. In-depth introduction to ethical theories and critical ethical issues pertaining to healthcare policy and healthcare management. Research, writing, and discussion of variety of topics related to health and human rights to enhance professionalism, leadership, and systems thinking and improve student sensitivity to needs of patients, coworkers, and fiduciary shareholders. How ethics are foundation of leadership. Letter grading.

M250. HIV/AIDS and Culture in Latin America. (4) (Same as Anthropology M250.) Lecture, three hours. Exploration of cultural, political, and public health context for people living with and at risk for HIV/AIDS and their families in Latin America. Public health aspects, including epidemiology, morbidity, and mortality in Latin American settings, and the social and cultural implications of these epidemics. Letter grading.

M251. Nutritional Epidemiology I. (4) (Same as Epidemiology M254.) Lecture, two hours; discussion/lab, three hours. Introduction to disease epidemiology, introductory exercise, descriptive epidemiology, and application of techniques to address these problems. Building of skills to work with adolescent populations and in community-based settings. Letter grading.


254. Intentional Disasters: War and Refugees. (2) Lecture, two hours. Requisites: courses 211A, 211B, 215. Epidemiology 100, one survey methods course. Previous international experience strongly encouraged. Overview of intentional disasters and health focus on technically underdeveloped areas and consequent population migration. Principal focus on health consequences of these events and strategies to address health issues. Letter grading.

M256. Interdisciplinary Response to Infectious Disease Emergencies: Public Health Perspective. (4) (Same as Medicine M256, Nursing M298, and Oral Biology M256.) Lecture, three hours; discussion, one hour. Designed to instill in professional students ideas of common emergency health problems and coordinate response, with specific attention to bioterrorism. Examination of tools to help students prevent, detect, and intervene in infectious disease emergencies. Interdisciplinary sessions also influence students in Schools of Dentistry, Medicine, and Nursing during weeks two through five. Letter grading.

257. Program Planning in Community Disaster Preparedness. (4) Lecture, four hours; outside study, three hours. Recommended requisites: courses 211A, 211B, 215. Health education and emergency management principles combined to design, plan, implement, and evaluate community disaster response plans, including needs assessment, identification of target population, objective writing, program planning, and process, outcome, and impact evaluation. Letter grading.

M258. Cooperative Interagency Management in Disasters. (4) Lecture, four hours. Recommended requisite: course 295. Designed for graduate students. Broad overview of how different agencies involved in disaster responses work together to handle impact of mass population emergencies. Identification of role of local, state, and federal governments, nonprofit and private sector organizations, media, and healthcare facilities in disaster situations. Students meet with representatives of different agencies involved in disaster responses and visit one of a state’s emergency management operations facilities. Letter grading.


M263. Social Demography of Los Angeles. (4) (Same as Sociology M263.) Lecture, three hours. Designed for graduate students. Use of city of Los Angeles to examine major social and demographic factors that characterize cities in U.S. Examination of role of these factors in affecting health outcomes. Letter grading.

M264. Latin America: Traditional Medicine, Shamanism, and Folk Illness. (4) (Same as Anthropology M233Q and Latin American Studies M264.) Lecture, three hours. Recommended preparation: course 132, bilingual English/Spanish skills. Examination of role of traditional medicine and shamanism in Latin America and exploration of how indigenous and mestizo people view and treat illness by utilizing Western-defined diseases with variety of health-seeking methods. Examination of art, music, and ritual and case examples of religion and healing practices via psychoanalytic and ethnomedical methods. Letter grading.

270A-270B. Foundations of Community Health Sciences. (4–4) Lecture, four hours. Enforced requisite: course 210. Course 270A is enforced requisite to 270B. Limited to departmental doctoral students. In-
depth in analysis of theories, methods, and research on which community health sciences are based. Letter grading.


M272. Social Epidemiology. (4) Same as Epidemiology 272. Lecture, three hours; discussion, one hour. Requisite: Epidemiology 100 or Public Health 200A and 200B. Relationship between sociological, cultural, and psychosocial factors in etiology, occurrence, prevention, and control of disease in families, morbidity, and mortality on the basis of age, gender, ethnicity, and other socioenvironmental factors associated with general susceptibility to disease and subsequent mortality. Letter grading.


277. Advanced Community Health Education. (4) Lecture, two hours; discussion, two hours. Requisite: course 210. Before planning educational components of health program, one must assess behaviors and factors influencing health program. Conceptual, theoretical, and evaluative skills developed and applied in constructing community-based educational program. Letter grading.

M278. Work and Health. (4) Same as Environmental Health Sciences M278. Lecture, three hours; practicum, one hour. Recommended preparation: graduate-level methods/statistics course, basic epide- miology. Designed for graduate students. Exploration of impact of physical and psychological health in context of newly emerging discipline. Focus on psychosocial models, measurement (including hands-on experience), contextual factors (gender, eth- nicity, social class), and how work stressors can be ameliorated. S/U or letter grading.

281A. Capstone Seminar: Health Promotion and Education. (4) Seminar, 90 minutes; discussion, 90 minutes. Enforced requisite: course 210. Current prob- lems and theory in health promotion and education (e.g., nutrition, family health, AIDS/HIV, minority health); learning from presentations and critical discus- sions of master's project reports completed under faculty supervision. Letter grading.

281B. Capstone Seminar: Health Promotion and Education. (2) Seminar, one hour; discussion, one hour. Current problems and findings in health promo- tion and education (e.g., nutrition, family health, AIDS/HIV, minority health); learning from presentations and critical discussions of master's project reports completed under faculty supervision. Letter grading.

282. Social Marketing for Health Promotion and Communication. (4) Lecture, three hours; fieldwork, one hour. Requisite: course 210. Planning, creating, implementation, and evaluation of comprehensive health communication campaigns, including use of social marketing practices and strategies of audience research, marketing psychology, creative message development, branding, comprehensive media use for dissemination, transmedia. Competencies: con- ducting focus group interviews, creating and evalu- ating effective health campaigns, critical assessment of existing campaigns. Letter grading.

283. Evidence-Based Health Promotion Programs for Older Adults. (4) Seminar; three hours. Requisite: course 210. Graduate seminar intended to explore so- ciocultural determinants of health-related behaviors among aged. Letter grading.

284. Sociocultural Aspects of Mental Health. (4) Discussion, three hours. Designed for graduate stu- dents. Examination of how society shapes mental health of its members and lives of those who have been identified as mentally ill. Group differences (e.g., gender, ethnicity) in disorder and how it is socially constructed. Letter grading.

286. Doctoral Roundtable in Community Health Sciences. (4) Seminar, two hours. Designed for de- partmental doctoral students who must enroll every term until they are advanced to candidacy. Interactive seminar with focus on research process and social mechanisms in science. May be repeated for credit. S/ U grading.

M287. Politics of Health Policy. (4) Same as Health Policy M287. Lecture, three hours; discussion, one hour. Requisites: course 210, or Health Policy 200A and 200B. Examination of politics of health policy pro- cess at community, state, national, and international levels and the structure of institu- tions; economic and social factors; interest groups, classes, and social movements; media and public opinion; and other factors. Letter grading.

288. Health Communication in Popular Media. (4) Lecture, three hours; discussion, one hour. Requisites: course 210 or prior social sciences courses. Media utilization, media effects, media content, media advoca- cy, media literacy, health journalism, video and television, music and audio. New media, entertain- ment education, and transmedia. Competencies: media content analysis, writing popular nonfiction (blogs, journalism), creating and evaluating effective communication work, creating and evaluating health communication. Letter grading.

290. Race, Class, Culture, and Aging. (4) Lecture, three hours; discussion, one hour. Experience of aging for African American, Latino, and Asian elderly exam- ined in context of their families, communities, and na- tion. Exploration of cultural and structural influences on health and lived experiences of those elders. Letter grading.

291. Health Policy and Aged. (4) Lecture, three hours; discussion, one hour. Examination of political, economic, and social forces that shape health policy for aged, identifying failings in those policies within framework of broader health policy problems. Letter or S/U grading.

292. Information Technology for Health Promotion and Communication. (4) Lecture, three hours; field practice, one hour. Requisites: course 210 or prior so- cial sciences courses. Health literacy, Internet use and health communication, design of health communica- tion materials using digital media that integrates prac- tice and theory and includes websites, print materials, short videos, curricula, and training materials. Labora- tory: research and technical. Competencies: creating health communication materials for diverse audiences using new media information technology applied to website, social media, media, video, and audio platforms.

293. Social and Behavioral Research in AIDS: Roundtable Discussion. (2 to 4) Discussion, two hours; individual consultation, two hours. Review and discussion of research programs directed toward identification of psychosocial, biobehavioral, environ- mental, and community factors related to prevention and control of AIDS/HIV. Letter grading.


296. Advanced Research Topics in Community Health Sciences. (2 to 4) Discussion, two to four hours. Advanced study and analysis of current topics in community health sciences. Discussion of current research and practical applications of research specialty of faculty member teaching course. May be repeated for credit. S/U or letter grading.

375. Teaching Apprentice Practicum. (1 to 4) Seminar, to be arranged. Preparation: apprentice person- nel employment as teaching assistant, associate, or fellow. Teaching apprenticeship under active guid- ance and supervision of regular faculty member re- sponsible for curriculum; may not be taken at UCLA. May be repeated for credit. S/U grading.

400. Field Studies in Public Health. (4) Fieldwork, to be arranged. Field observation and studies in selected community organizations for health promotion or research case. Students participate in placement and program training documentation on form available from Student Affairs Office. May not be applied toward M290 minimum course requirement; 4 units may be ap- plied toward up to 60-unit minimum total required for MPH degree. Letter grading.

M411. Issues in Cancer Prevention and Control. (4) (Same as Health Policy M411.) Lecture, four hours. Designed for juniors/seniors and graduate students. Introduction to causes and characteristics of cancer epidemic, cancer control goals for nation, and inter- ventions designed to encourage smoking cessation/ prevention, cancer screening, and other dietary, psych- osocial, and lifestyle changes. Letter grading.

M420. Children with Special Healthcare Needs: Systems Perspective. (4) (Same as Health Policy M420 and Social Welfare M290L) Lecture; three hours; fieldwork, one hour. Examination of epidemiological, diagnostic, and economic, and social forces that shape health policy for aged, identifying failings in those policies within framework of broader health policy problems. Letter or S/U grading.

M428. Health Research and Media Program Community Leadership Seminar. (2) (Same as Health Policy M428.) Seminar, two hours. Designed for graduate students. Examination of characteristics of commu- nity-based organizations (CBOs) and role of leader- ship in decision-making process involving in major is- sues facing maternal and child health in Los Angeles County. Focus on specific leadership competencies that are or should be employed by organizations effec- tive in shaping maternal and child health programs and policies (or any population-level policies and pro- grams). Leaders from CBOs in Los Angeles meet with students, discuss roles and responsibilities, and share experiences, and underscore community leadership concepts demonstrated by those CBOs. S/U or letter grading.

M430. Building Advocacy Skills: Reproductive Health Focus. (4) (Same as Health Policy M430.) Seminar. Three hours. Recommended requisite: one prior health policy course such as Community Health Sciences 247 or Health Policy 235. Designed for School of Public Health graduate and doctoral stu- dents. Skills-building course to develop competency in assessing, developing, and implementing advocacy strategies for reproductive health initiatives. Introduc- tion to legislative and community advocacy initiatives and to policymaking process and to policy analysis and development of resources necessary for legisla- tive advocacy. Identification of advocacy goals and objectives, development of advocacy goals, coalition building, organizational capacity building, mass media rela- tions, and message development for various audi- ences. Students learn about range of former and cur- rent reproductive health advocacy campaigns. Letter grading.

431. Foundations of Reproductive Health. (4) Lecture, three hours. Limited to graduate students. Un- derstanding reproductive technologies and practices is central to public health, which is described in de- signing programs to address problems such as un- wanted pregnancy, family planning, sexually trans- mitted diseases, and inadequate preventive services. Emphasis is on foundations of reproductive health from medical perspective, with particular attention to implications for public health programs, health ser- vices, and policy. Topics include anatomy and physi-
ology of male and female reproductive health tracts, methods of birth control, medical and surgical abortion, infertility, maternal care, and sexual violence and trauma. S/U or letter grading.

432. Perinatal Healthcare: Principles, Programs, and Policies. (4) Lecture, four hours; discussion, one hour. Combination of perinatal health care, including perinatal epidemiology, outcome measures, public programs, controversies surrounding new technology, regionalization, organization of services at federal, state, and county levels, and medical/legal issues. S/U or letter grading.

434A. Maternal and Child Health in Developing Areas. (4) Lecture, four hours; discussion, two hours; fieldwork, two hours. Preparation: requisite: course 231. Major health problems and child health services in developing areas, stressing causation, management, and prevention. Particular reference to adapting programs to limited resources in cross-cultural milieu. S/U or letter grading.

435. Seminar: Advanced Issues in Women’s Health. (4) Seminar, three hours. Preparation: at least one prior women’s health course, one to two biostatistics courses, one research methods course. Provides more advanced understanding of biostatistics in which scientists “know” and considerations of women’s place in scientific discourse. Examination of series of case studies as starting point for discussion. Letter grading.

436A-M436B. Child Health, Programs, and Policies. (4-4) (Same as Health Policy M449A-M449B.) Lecture, four hours; discussion, one hour; research and literature review, one hour. Designed for graduate students. Examination of community and environmental factors and health services issues that are present along U.S.-Mexico and coastal California borders. Integrated within public health framework are issues and mitigation of national security and disaster/terrorist risks and hazards. Letter grading.

441. Planning and Evaluation of Global Health Programs. (4) Lecture, four hours. Theory, guidelines, and team exercise for planning community health/family planning programs and selected health services in developing countries. Phases include community needs identification; goal setting; budget and work plan development; funding; staffing; evaluation design; data and cost analysis; and project progress. Letter grading.

444. Anthropometric and Dietary Aspects of Nutritional Assessment. (4) Lecture, two hours; discussion, one hour; laboratory, two hours. Practical skills in anthropometric and dietary assessment, including selection of appropriate methods, data gathering and handling, and analysis and presentation. Letter grading.

446. Nutrition Education and Training: Third World Considerations. (4) Lecture, two hours; discussion, one hour; student participation, one hour. Requisite: course 434A. Problems and priorities in nutrition education and training for families and health workers in Third World countries. Development of new concepts in primary healthcare services, mass media, communication, and governmental and international interventions. S/U or letter grading.

447. Health and Social Context in Middle East. (4) Lecture, four hours. Recommended: preparation; background in Islamic or Middle Eastern studies. Requisite: course 200 or 231 or 434A. Current health issues and problems of countries in Middle East and implications for socioeconomic development. Review of economic, demographic, and cultural variation of region to provide background for discussion of trends and patterns of health and nutritional status of population in area. S/U or letter grading.

448. Nutrition Policies and Programs: Domestic and International Perspectives. (4) Lecture, two hours; discussion, two hours; field visits. Preparation: one nutrition sciences course and/or nutrition program experience. Nutrition programs and policies in U.S. and developing countries compared and contrasted. Analysis of role of major international, governmental, and nongovernmental agencies. Emphasis on meeting needs of vulnerable populations. Letter grading.

449. Nutrition and Chronic Disease. (4) Lecture, four hours; discussion, one hour; fieldwork, one hour. Requisite: one introductory nutrition or biology course. Advanced-level seminar on nutritional needs of healthy individuals, current knowledge of role in nutrition and dietary prevention, nutritional and metabolic responses to disease, and role of nutritional therapy in management of disease. Letter grading.

451. Post-Disaster Community Health. (4) Lecture, four hours; discussion, two hours; fieldwork, two hours. Examination of how public health research and practices can be combined to address post-disaster community health needs. Identification of disaster-related health problems, data collection strategies, and service delivery approaches in post-disaster environment. Letter grading.

452. Management of Food and Nutrition in Major Emergencies. (4) Lecture, three hours. Designed for second-year master’s or doctoral students interested in humanitarian relief work. Basic principles required to design rational and cost-effective food and nutrition emergency relief approaches and programs. Letter grading.

CM707. Improving Worker Health: Social Movements, Policy Debates, and Public Health. (4) (Same as Environmental Health Sciences M471 and Urban Planning M470.) Lecture, three hours; fieldwork, two hours. Examination of intersection between work, health, and environment, analysis of social causes of health disparities, investigation of historical trends and social movements, interpretation of current policy debates, and development of innovative interventions. Concurrently scheduled with course CM707. S/U or letter grading.

477. Health Disparities, Health Equity, and Sexual Minority Populations. (4) Lecture, two hours; discussion, one hour. Limited to graduate students. Examination of health disparities affecting sexual minority populations, category that includes lesbians, gay men, bisexuals, and transgender (LGBT) persons. Use of Healthy People 2010 Companion Document for LGBT Health to outline key health issues and national recommendations for achieving reductions in each area. Discussion of considerations for providing clinical care and public health practice in this population, unique social and contextual factors influencing LGBT health, and methodological issues for conducting research among LGBT persons. S/U or letter grading.

482. Practicum: Community Health Sciences. (4) Discussion, two hours; fieldwork, up to 20 hours. Requisites: courses 210, 211A, 211B. Understanding of professional practice in health-related organizations. Letter grading.

484. Risk Communications. (4) Lecture, three hours; fieldwork, one hour. Requisites: courses 210, 211A, and 211B, or prior public health and behavioral sciences courses. Risk communication theory, research, and practice, including social and psychological bases of population risk perceptions, media theories, and how risk is portrayed in media. Environmental, product safety, food-borne and infectious diseases, disasters, and bioterrorism communication. Competencies: understanding everyday and emergency risk communication principles, creating valid risk communication messages and materials, working proactively with new media. Letter grading.

485. Resource Development for Community Health Programs. (4) Lecture, three hours; fieldwork, one hour. Designed for graduate students. Overview course of fund and resource development for public health and community-based programs. Lectures and workshops include developing grant proposals, researching funding sources, evaluating proposals, developing volunteer and in-kind resources, and implementing capital campaigns. Letter grading.


501. Cooperative Program. (2 to 8) Tutorial, to be arranged. Preparation: consent of UCLA graduate advisor and associate dean, and host campus instructor, department chair, and graduate dean. Used to record enrollment of UCLA students in courses taken under cooperative arrangements with USC. No more than 8 units may be applied toward master’s degree minimum total course requirement; may not be applied toward minimum graduate course requirement. May be repeated for credit. S/U or letter grading.

556. Directed Individual Study or Research. (2 to 12) Tutorial, to be arranged. Limited to graduate students. Individual guided studies under direct faculty supervision. Only 4 units may be applied toward MPH and MS minimum total course requirement. May be repeated for credit. S/U or letter grading.

597. Preparation for Master’s Comprehensive or Doctoral Qualifying Examinations. (2 to 12) Tutorial, to be arranged. Limited to graduate students. May not be repeated toward any degree course requirements. May be repeated for credit. S/U or letter grading.

598. Master’s Thesis Research. (2 to 8) Tutorial, to be arranged. Only 4 units may be applied toward MPH and MS minimum total course requirement; may not be applied toward minimum graduate course requirement. May be repeated for credit. S/U or letter grading.

599. Doctoral Dissertation Research. (2 to 12) Tutorial, to be arranged. May not be applied toward any degree course requirements. May be repeated for credit. S/U or letter grading.

COMPARATIVE LITERATURE

College of Letters and Science

350 Kaplan Hall
Box 951536
Los Angeles, CA 90095-1536

Comparative Literature

310-825-7650

Department e-mail

Katherine C. King, PhD, Co-Chair
Kathleen L. Komar, PhD, Co-Chair

Professors

Ali Behdad, PhD (John Charles Hills Professor of Literature)
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Saree Makdisi, PhD
Hannah M. McClure, PhD
Aamir R. Mutti, PhD
Todd S. Presner, PhD (Michael and Irene Ross Professor of Yiddish Studies)
Kenneth Reinhard, PhD
Michael P. Rothberg, PhD (1939 Society Samuel Goetz Professor of Holocaust Studies)
Jennifer A. Sharpe, PhD
Shu-mei Shih, PhD
Zrinka Stahuljak, PhD

Professors Emeriti

Katherine C. King, PhD
Françoise Lionnet, PhD
Ross P. Shideler, PhD
Samuel Weber, PhD
Preparation for the Major

Required: (1) Two courses from the Comparative Literature 1, 2, or 4 series (with approval of the director of undergraduate studies, a comparable and appropriate lower-division course in another department may be substituted for one of the courses), (2) completion of the College Writing requirement, and (3) literary proficiency in at least one language other than English, to be demonstrated by admission into one upper-division literature course in the original language.

Transfer Students

Transfer applicants to the Comparative Literature major with 90 or more units must complete as many of the following introductory courses as possible prior to admission to UCLA: one English composition course, two literature survey courses, at least one of which must be world literature, and the equivalent of at least one year of foreign language. Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

The Major

Required: Ten courses, of which (1) five must be from comparative literature offerings, including Comparative Literature 100 and at least four additional comparative literature courses selected from M101 through 197, (2) three upper-division literature courses using original language texts in the primary language area, and (3) two upper-division literature courses using original language texts in the secondary language area (students may petition the undergraduate adviser to take two upper-division literature courses in translation if their primary literature area is in a language other than English).

Honors Program

The honors program is open to Comparative Literature majors with a 3.5 departmental and a 3.25 overall grade-point average. Eligible interested students should contact the undergraduate adviser to enter the program.

Honors candidates must complete all requirements for the major and an honors research paper (in addition to regular course requirements) in two of the four required upper-division comparative literature courses. Candidates must also complete a fourth course in the primary literature area and Comparative Literature 198 with a core faculty member in which they write a senior honors paper of approximately 25 pages.

Comparative Literature Minor

The Comparative Literature minor offers students interested in literature and the humanities the opportunity to gain insight into the critical problems and theories addressed by comparative literature and to apply that knowledge in literature and comparative literature courses.

To enter the minor students must have fulfilled the College Writing requirement, have completed 40 units with an overall grade-point average of 2.0 or better, have taken at least one year or equivalent of a language other than English, and file a petition with either the faculty or staff undergraduate adviser, 3508 Kaplan Hall, 310-825-7650.

Required Courses (28 units minimum): (1) Four upper-division comparative literature courses (one course from Comparative Literature 1A through 4AW may be substituted), (2) two upper-division courses in one literature (e.g., Arabic, Chinese, English, French, German, Korean, Russian, Spanish) in the original language, and (3) one upper-division course in a second literature in the original language (one level-six foreign language course may be substituted). If students complete two upper-division courses in a language other than English, they may petition to take one upper-division course taught in English translation to fulfill the third requirement.

A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor.

Each minor course must be taken for a letter grade, and students must have an overall grade-point average of 2.0 or better in the minor. Successful completion of the minor is indicated on the transcript and diploma.

Graduate Study

Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Division website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Graduate Degrees

The Department of Comparative Literature offers Master of Arts (MA), Candidate in Philosophy (CPhil), and Doctor of Philosophy (PhD) degrees in Comparative Literature.

Comparative Literature Lower-Division Courses

1A. World Literature: Antiquity to Middle Ages. (5) Lecture, three hours; discussion, one hour. Enforced requisite: satisfaction of Entry-Level Writing requirement. Not open for credit to students with credit for course 2AW or 4AW. Study of major texts in world literature, with emphasis on Western civilization. Texts include major works and authors such as Iliad or Odyssey, Greek tragedies, portions of Bible, Virgil, Petronius, St. Augustine, and others such as Gilgamesh or Tristan and Iseult. P/NP or letter grading.

1B. World Literature: Middle Ages to 17th Century. (5) Lecture, three hours; discussion, one hour. Enforced requisite: satisfaction of Entry-Level Writing requirement. Not open for credit to students with credit for course 2BW or 4BW. Study of world literature, with emphasis on Western civilization. Texts include major works and authors such as Dante’s Divine Comedy, Cervantes’ Don Quixote, Shakespeare’s King Lear, and Sor Juana’s Mexican poetry. P/NP or letter grading.

1C. World Literature: Age of Enlightenment to 20th Century. (5) Lecture, three hours; discussion, one hour. Enforced requisite: satisfaction of Entry-Level Writing requirement. Not open for credit to students with credit for course 2CW or 4CW. Study of major
texts in world literature, with emphasis on Western civilization. Authors include Swift, Voltaire, Diderot, Rousseau, Goethe, Flaubert, Ibsen, Strindberg, Dostoevsky, Kafka, Joyce, Woolf, and Stevens. P/NP or letter grading.

1D. Great Books from World at Large. (5) Lecture, three hours; discussion, one hour. Enforced requisite: satisfaction of Entry-Level Writing requirement. Not open for credit to students with credit for course 2DW or 4DW. Study of major literary texts usually overlooked in the canon of Western literature. Texts from at least three of following areas read in any given term: African, Caribbean, East Asian, Latin American, and Middle Eastern literature. P/NP or letter grading.

1E. Social Media and Storytelling: Comparing Cultures. (5) Lecture, two hours; discussion, two hours. Enforced requisite: satisfaction of Entry-Level Writing requirement. Study of social media as platform for storytelling, with core focus on three distinct cultures: U.S., China, and Russia. History, form, and various functions of social media. Examination of how we tell stories about ourselves and how we interpret digital narratives we see, hear, or read from organizations near and far. Analysis of networked narratives encountered online. P/NP or letter grading.

2AW. Survey of Literature: Antiquity to Middle Ages. (5) Lecture, two hours; discussion, two hours. Enforced requisite: English Composition 3 or 3H or English as a Second Language 36. Not open for credit to students with credit for course 1A or 4AW. Study of selected texts from the Middle Ages to 17th century, with emphasis on literary analysis and expository writing. Texts include works and authors such as Homer, Dante, Chaucer, Dante’s Divine Comedy, Cervantes’ Don Quixote, Shakespeare, Dryden, Restoration drama, Dryden’s The Hind and The Panther, Dryden’s The Spanish Galleon, and Alfieri’s Man of Law’s Business. Satisfies Writing II requirement. Letter grading.

2BW. Survey of Literature: Middle Ages to 17th Century. (5) Lecture, two hours; discussion, two hours. Enforced requisite: English Composition 3 or 3H or English as a Second Language 36. Not open for credit to students with credit for course 1B or 4BW. Study of Middle Ages to 17th century, with emphasis on literary analysis and expository writing. Texts include works and authors such as Shakespeare, Calderón, Molière, and Racine. Satisfies Writing II requirement. Letter grading.

2CW. Survey of Literature: Age of Enlightenment to 20th Century. (5) Lecture, two hours; discussion, two hours. Enforced requisite: English Composition 3 or 3H or English as a Second Language 36. Not open for credit to students with credit for course 1D or 2DW. Study of major literary texts usually overlooked in courses that focus only on canon of Western literature, with emphasis on literary analysis and expository writing. Texts may include works by authors such as Swift, Voltaire, Diderot, Rousseau, Goethe, M. Shelley, Flaubert, Ibsen, Strindberg, Dostoevsky, Kafka, Joyce, Beckett, L. Hughes, and Garcia Marquez. Satisfies Writing II requirement. Letter grading.

4BW. Literature and Writing: Middle Ages to 17th Century. (9) Discussion, four hours. Enforced requisite: English Composition 3 or 3H or English as a Second Language 36. Not open for credit to students with credit for course 1B or 2BW. Study and discussion of selected texts from Middle Ages to 17th century, with emphasis on literary analysis and expository writing. Texts may include works and authors such as Chaucer, Dante’s Divine Comedy, Cervantes’ Don Quixote, Shakespeare, Dryden, Restoration drama, Dryden’s The Hind and The Panther, Dryden’s The Spanish Galleon, and Alfieri’s Man of Law’s Business. Satisfies Writing II requirement. Letter grading.

4CW. Literature and Writing: Age of Enlightenment to 20th Century. (9) Discussion, four hours. Enforced requisite: English Composition 3 or 3H or English as a Second Language 36. Not open for credit to students with credit for course 1C or 2CW. Study and discussion of major literary texts usually overlooked in courses that focus only on canon of Western literature, with emphasis on literary analysis and expository writing. Texts may include works by authors such as Swift, Voltaire, Diderot, Rousseau, Goethe, M. Shelley, Flaubert, Ibsen, Strindberg, Dostoevsky, Kafka, Joyce, Beckett, L. Hughes, and Garcia Marquez. Satisfies Writing II requirement. Letter grading.

100. Introduction to Literary and Critical Theory. (5) Lecture, four hours. Preparation: satisfaction of Entry-Level Writing and College Writing requirements. Recommended: two courses from English 1A or 4A, 2A, 2C, 2CW, 4CW or 2 or 3 courses in English 10 series or Spanish 60 series, etc. Seminar-style introduction to discipline of comparative literature presented through series of texts illustrating its formation and practice. Letter grading. M101. Hebrew Literature in English—Literary Traditions of Ancient Israel: Bible and Apocrypha. (4) (Same as Jewish Studies M150A.) Lecture, three hours. Study of literary culture of ancient Israel through examination of principal compositional strategies of Hebrew Bible and Apocrypha (read in translation). P/NP or letter grading.


103. People on Run: Migrants, Minorities, and Multiculturalism in Europe. (4) Seminar, three hours. Problem of migrants and refugees in ongoing crisis of European Union. Examination of effects of current crisis of European Union and of European multiculturalism in particular. Overview of history of European integration since World War II, as well as more focused examination of ways in which culture and migration have come to dominate discussions of future of what had primarily been conceived of as one economic union. Offered in summer only. P/NP or letter grading.

104. Art of Film Adaptation. (4) Seminar, three hours. Preparation: upper-division credit with current or recent coursework in theoretical texts about film adaptation. Exploration of art of film adaptation in broad sense, including transformation of short stories, plays, novels, historical accounts, biographies, paintings, musical compositions, or philosophical concepts into multi-layered medium of cinema. Adaptations addressed include selection of films from range of cultural and linguistic traditions by directors such as Resnais, Kurosawa, Babenco, Rossellini, Hitchcock, Antonioni, Kieslowski, and Tarkovsky. Specific directors, films, and cinematic movements discussed vary from year to year. P/NP or letter grading.

C105. Comic Vision. (4) Lecture, three hours. Designed for upper-division literature majors. Literary masterpieces, both dramatic and nondramatic, selected to demonstrate variety of comic expression. Undergraduate students read all works in translation. P/NP or letter grading.

106. Archetypal Heroes in Literature. (4) Seminar, three hours. Designed for seniors/juniors. Survey and analysis of function and appearance of such archetypal heroes as Achilles, Ulysses, Prometheus, Oedipus, and Orpheus in literature from antiquity to modern period. All works read in translation. P/NP or letter grading.

108. Autobiography in Francophone and Anglophone Worlds. (5) Seminar, three hours. Designed for juniors/seniors. Focus on number of narratives that use autobiography to situate self in relation to history of nations and biography of family members. Introduction to theories of subjectivity and to genre of self-writing in France, Africa, and Caribbean. Comparisons will be made between works by Annie Ernaux, and Jamaica Kincaid to better understand limits of genre. Texts represent different limit cases of autobiography and can be read as biography, auto/ethnography, autobiography, or self-writing. Exploration of differences that emerge between autobiographical pact (Lejeune) that some authors create with their readers and liberties that others take with history. Attention to way visual culture (photography, film) helps authors make their point, access memory, or create metaphors of self. P/NP or letter grading.
111. Historical Methodologies of Comparative Literature. (Seminar, three hours.) Preparation: satisfaction of Entry-Level Writing and College writing requirements. Requisites: two courses from Comparative Literature 1 or 2 or English 10 or Spanish 60 series. Recommended: course 100. Exploration of history of comparative literature discipline and variety of central methodological past and present debates concerning nature of discourse. Introduction to several key theoretical texts from early 20th century to present, addressing these and other related questions: what does it mean to read comparatively? What is significance of literature across cultural and linguistic borders? What are criteria for conducting such comparative readings? Is comparative reading more concerned with finding similarities or differences? P/NP or letter grading.

112. Poetics of Hip-Hop. (Seminar, three hours.) Exploration of poetic hip-hop within tradition of comparative literature. Examination of rhythms, rhymes, flow, wordplay, traditions of signifying, beats, samples, production, and hermeneutics of music videos within historical framework. Historical and current hip-hop criticism and scholarship from comparative perspective, with goal of developing methods, approaches for interpreting and writing about hip-hop. P/NP or letter grading.

113. Opera in LA Live. (Seminar, three hours; field trips.) Interpretation of operas currently being performed in Los Angeles from critical perspective of comparative literature studies. Content varies to match changing repertoire. Critical exploration and relation of every aspect of opera as literary and musical form. Analysis and interpretation of original literary source and libretto, music, singing, stage, direction, and performance. Two or more field trips to LA Opera, UCLA Opera, and/or Long Beach Opera to experience opera. P/NP or letter grading.

119. Al-Andalus: Literature of Islamic Spain. (Same as Arabic M155.) Lecture, three hours. Study of literature of Islamic Spain to learn about interaction of Arabic and Jewish and Christian cultures and to recognize Islamic culture as vital force in European life and letters. P/NP or letter grading.

120. Women and Literature in Southeastern Europe. (Same as Central and East European Studies M120.) Seminar, three hours. Examination of changing roles of women in Balkan countries (Albania, Bosnia-Herzegovina, Bulgaria, Croatia, Greece, Macedonia, Montenegro, Romania, Serbia, Slovenia, Turkey) in last forty years. Focus on social, political, and economic factors affecting women’s roles during countries’ transition from agricultural to industrial economy and from communism to post-communism (in former communist countries). Sensitize students to complexity of issues in region and helps them better understand multiplicity of causes of present situation. Interdisciplinary study, drawing on sociological, women’s studies, and comparative literature, and women writers for analysis. Discussion and debating of topics covered in articles, different positions taken by authors, and ways in which aspects of these realities are represented by women writers from region. P/NP or letter grading.

122. Renaissance Drama. (Lecture, three hours.) Designed for upper-division literature majors. Broad introduction to subject matter and types of plays. Renaissance. Exploration of history and literary influences on plays. Readings include works of such dramatists as Tasso, Machiavelli, Lope de Vega, Racine, Jonson, Shakespeare. May be concurrently scheduled with course C222. Undergraduate students read all works in translation, P/NP or letter grading.

C263. Undergraduate students may read all works in translation. P/NP or letter grading.

M110. One Thousand and One Nights/Alf Layla Wa-Layla. (Same as Arabic M110.) Lecture, three hours. Knowledge of Arabic not required. Since its appearance in Europe in 1704, One Thousand and One Nights is most well-known work of Arabic literature in West. Utilization of cycle of tales more commonly known as Arabian Nights, including history of its translation, contemporary oral performances of tales in Arabic-speaking world, literary emergence of vernacular language Arabic, and Western appropriations of tales in music, film, and novels (Ravel, Rimsky-Korsakov, Barth, Poe, and Walt Disney). P/NP or letter grading.
tion to new set of African authors and attempt to dis- 
cern similarities or differences they may have with 
major authors such as Achebe, Ngugi, Armatr, Soy- 
linka, etc. P/NP or letter grading.

CM170. Alternate Traditions: In Search of Female 
Voices in Contemporary Literature. (8) Same as 
Gender Studies 128. Seminar, three hours. De- 
signed for upper-division literature majors. Investiga- 
tion of narrative texts by contemporary French, 
German, English, American, Spanish American, Af- 
can, and postcolonial narratives from cross-cultural 
perspective. Common themes, problems, and tech- 
niques. Concurrently scheduled with course CM270. 
P/NP or letter grading.

M171. Chinese Immigrant Literature and Film. (4) 
(Same as Asian American Studies M130B and 
Chinese M153.) Seminar, three hours; discussion, 
one hour. Knowledge of Chinese not required. In-depth 
look at Chinese immigrant experience by reading liter- 
ature and watching films. Theories of diaspora, 
gender, and race to inform thinking and discussion of 
relevant issues. P/NP or letter grading.

C172. Postmodern Novel. (4) Seminar, three hours. 
Designed for undergraduates. Seminar on the study of 
postmodern novel as it developed out of modernism. 
Postmodernism defined in three different ways—phil- 
osophically, scientifically, and economically. Emphasis 
on relationship of postmodernism to theories of structur- 
alism and poststructuralism. Readings include authors 
such as Borges, Beckett, Nabokov, Pynchon, Fuentes, 
Grass, Böll, and Calvino. Concurrently scheduled with 
course CM170. Undergraduates read all works in 
translation. P/NP or letter grading.

M175. Race, Gender, Class. (5) (Same as Asian 
American Studies M165S.) Seminar, three hours. Theo- 
etical and literary readings combined to explore three 
main aspects of social and cultural experience (race, 
gender, class) as separate but interconnected spheres 
affecting both minority and majority populations in 
U.S. examination of the impact of postmodern perspectives. 
P/NP or letter grading.

M176. Literature and Technology. (4) (Same as Jap- 
anese M156E.) Lecture, three hours. Knowledge of Jap- 
anese not required. Examination of representation of 
technology in 20th-century fiction. Discussion of im- 
pact of technology on shifting images of gender, sub- 
jectivity, and national identity. P/NP or letter grading.

177. Comparative Literature of Francophone and 
Anglophone Caribbean. (5) Seminar, three hours. 
Designed for junior/senior literature majors. Study of 
literature and culture of Caribbean basin from New 
Orleans to Haiti, Martinique, Guadeloupe, Jamaica, Antigua, 
or Trinidad. Topics include history of French and English 
colonial influence in the region. Haitian revolution and 
it’s literary legacies, emergence of nationalist discourses, 
search for cultural identity, rhetoric of negritude, 
global poetics of relation, créolité movement, and 
literary achievements of African diaspora. P/NP or letter grading.

C178. India Ink: Literature and Culture of Modern 
South Asia. (5) Seminar, three hours. Survey of signif- 
ificant issues in history of 20th-century Indian literature 
and culture. Great works of modern Indian culture by 
such figures as Rabindranath Tagore, Satyajit Ray, 
Faiz Ahmed Faiz, and U.R. Anantha Murthy, including 
novels, short stories, and poetry. Readings taken in 
cultural criticism and historical scholarship. Central 
and defining issue for 20th-century Indian culture is 
experience of British colonial rule and massive cultural 
and material changes that accompanied it. Exploration 
of manner in which literature and culture have de- 
veloped in interaction with powerful social forces, 
such as struggle for national independence from 
British rule. Writers include Matamma Gandhi and ex- 
pansion of Indian diaspora. Concurrently scheduled 
with course C278. P/NP or letter grading.

M179SL. Movement in Art, Philosophy, and Daily 
Life. (5) (Same as Middle Eastern Studies M179SL.) 
Seminar, three hours; discussion, three hours. Explora- 
tion of relation between humans and world. Only rele- 
vant output of brain, irrespective of what may or may 
not go on inside it, is control over movements. In living 
animals, sentience or consciousness exists to inte- 
grate often complex input and decide on course of ac- 

180. Variable Topics: Medical Humanities in 
Comparative Contexts. (4) Seminar, three hours. De- 
signed for seniors. Study of Western traditions of de- 
fined periods and approaches in medical humanities, 
giving pride of place to literary and cultural expres- 
sions and ways of understanding health issues such as an- 
thropology, history, linguistics, philosophy, psy- 
chology, or sociology. Consult Schedule of Classes for 
topics to be offered in specific term. May be repeated 
for credit with topic or instructor change. P/NP or letter grading.

180SL. Variable Topics: Medical Humanities in 
Comparative Contexts and Community-Based 
Learning. (4) Seminar, three hours; fieldwork, three 
hours. Exploration of topics in medical humanities 
with community service component, giving pride of place 
to literary and cultural expressions with other disci- 
lines such as art, philosophy, or sociology. Ways in 
which medical humanities can make contributions to 
Los Angeles community service learning. Consult Schedule of Classes for topics to be offered in specific term. May be repeated for credit with topic or instructor change. P/NP or letter grading.

186. Undergraduate Research Seminar: Compara- 
tive Literature. Seminar, three hours. Prepared reading 
and analysis of selected works by African authors 
and literary achievements of African diaspora. P/NP or 
letter grading.

189. Alternate Traditions: In Search of Female 
Voices in Comparative Literature. (4) Seminar, three hours. 
Study of layer of cinema explored by directors 
and literary works of African diaspora. P/NP or letter 
grading.

190. Research Colloquia in Comparative Literature. 
(Same as Gender Studies 127.) Seminar, three hours. 
Designed to bring together students undertaking supervised research in 
seminar setting with one or more faculty members 
to discuss their own work or related work in discipline. 
Led by one supervising faculty member. May be re- 
peated for credit. P/NP or letter grading.

191. Variable Topics in Comparative Literature. (4) 
Seminar, three hours. Designed for juniors/seniors. 
Study of major issues and themes in comparative literature, with 
focus on critical and theoretical perspec- 
tives. Common themes, problems, and tech- 
niques. Concurrently scheduled with course CM272. 
P/NP or letter grading.

188A. Individual Studies for USIE Facilitators. (1) 
Tutorial, to be arranged. Enrolled course. Requires 
Consult Schedule of Classes to be arranged. P/NP or 
letter grading.

188B. Individual Studies for USIE Facilitators. (1) 
Tutorial, to be arranged. Enrolled course. Requires 
Consult Schedule of Classes to be arranged. P/NP or 
letter grading.

188C. Individual Studies for USIE Facilitators. (2) 
Tutorial, to be arranged. Enrolled course. Requires 
Consult Schedule of Classes to be arranged. P/NP or 
letter grading.

189. Advanced Honors Seminars. (1) Seminar, three 
hours. Limited to 10 students. Designed as adjunct to 
undergraduate lecture course. Exploration of topics in 
greater depth through supplemental readings, papers, 
or other activities and led by lecture course instructor. 
May be applied toward honors credit for eligible stu- 
dents. Honors content noted on transcript. P/NP or 
letter grading.

MC110. Honors Contracts. (1) Tutorial, three hours. 
Limited to students in College Honors Program. De- 
signed as adjunct to upper-division lecture course. In-
dividual study with lecture course instructor to explore 
topics in greater depth through supplemental read-
ing, papers, or other activities. May be repeated for 
maximum of 4 units. Individual honors contract re- 
quired. Honors content noted on transcript. Letter grading.

190. Research Colloquia in Comparative Literature. 
(Same as Gender Studies 127.) Seminar, three hours. 
Designed to bring together students undertaking supervised research in 
seminar setting with one or more faculty members 
to discuss their own work or related work in discipline. 
Led by one supervising faculty member. May be re- 
peated for credit. P/NP or letter grading.

191. Variable Topics in Comparative Literature. (4) 
Seminar, three hours. Designed for juniors/seniors. 
Study of major issues and themes in comparative literature, with 
focus on critical and theoretical perspec- 
tives. Common themes, problems, and tech- 
niques. Concurrently scheduled with course CM272. 
P/NP or letter grading.

188A. Individual Studies for USIE Facilitators. (1) 
Tutorial, to be arranged. Enrolled course. Requires 
Consult Schedule of Classes to be arranged. P/NP or 
letter grading.

188B. Individual Studies for USIE Facilitators. (1) 
Tutorial, to be arranged. Enrolled course. Requires 
Consult Schedule of Classes to be arranged. P/NP or 
letter grading.

188C. Individual Studies for USIE Facilitators. (2) 
Tutorial, to be arranged. Enrolled course. Requires 
Consult Schedule of Classes to be arranged. P/NP or 
letter grading.

Graduate Courses

200A. Theory of Comparative Literature. (6) Sem- 
inar, three hours. Study of theory of literature, with em- 
phasis on genealogy of theoretical problems. S/U or 
letter grading.

200B. Methodology of Comparative Literature. (6) 
Seminar, three hours. Requisite: course 200A. Study of 
methodology of comparative literature, with em- 
phasis on its history. S/U or letter grading.
202. Classical Tradition: Epic, Tragedy, or Comedy. (4) Seminar, three hours. Preparation: reading knowledge of Greek, Latin, or Italian. Analysis of Greek and Roman works and their re-creations in Renaissance and modern periods. Emphasis on how poets build on work of their predecessors. Reading may range from Iliad or Odyssey to tragedies by Sophocles and Euripides or satires by Aristophanes. S/U or letter grading.

C205. Comic Vision. (4) Lecture, three hours. Prepara-
tion: reading knowledge of one appropriate foreign language. Lecture, reading knowledge of major comic writers, both dramatic and nondramatic, selected to demonstrate varieties of comic expression. May be concurrently scheduled with course C125. S/U or letter grading.

C210. Comparative Studies in Autobiography. (5) Seminar, three hours. Limited to graduate students. Introduction to theories of autobiography and subjectivity and to the practice of autobiography in literature and visual art. Use of French and English across centuries. Topics include early modern approaches to self-writing, Rousseau and emergence of modern self, women's autobiographies, modes of social autobiography, cultural studies, and turn to personal, fictions of self-representation, serial autobiography, and virtual selves. Theorists may include Georges Gusdorf, Philippe Lejeune, Paul de Man, Jacques Derrida, Helene Cixous, Michel Foucault, Pierre Bourdieu, and Toril Moi. S/U or letter grading.

220. Topics in Medieval Studies. (4) Seminar, four hours. Preparation: reading knowledge of one appropriate foreign language. Intensive examination of the literature of the Middle Ages, with emphasis on its function and influence on Renaissance writers. Reading may range from Beowulf or Chaucer to Dante or Boccaccio. S/U or letter grading.

C222. Renaissance Drama. (4) Lecture, three hours. Preparation: reading knowledge of one appropriate foreign language. Broad introduction to subject matter and theory of Renaissance drama, with consideration of historical and literary influences on plays. Readings include works of such dramatists as Tasso, Machiavelli, Lope de Vega, Racine, Jonson, and Shakespeare. May be concurrently scheduled with course C122. Students required to prepare papers based on texts read in original languages and to meet as group one additional hour each week. S/U or letter grading.

M251. Literatures and Cultures of Maghreb. (4) (Same as Arabic M255.) Seminar, three hours. Limited to graduate students. Examination of traditionally diverse literatures of Maghreb in their multiple and competing cultural traditions, religious and cultural formations, Pan-Arabism and post-colonial nationhood, Third-Worldism and economic development, modernity and globalization, immigration and citizenship, sociocultural change, and popular culture. Reading is in English, with supplementary readings in Arabic. S/U or letter grading.


C253. Post-Symbolist Poetry and Poetics. (5) Seminar, four hours. Study of specific poets and poets' techniques. May include Whittmeyer, Yeats, Eliot, Auden, Rilke, Wallace Stevens. May be concurrently scheduled with course C140. Students required to prepare papers based on texts read in original languages and to meet as group one additional hour each week. S/U or letter grading.

C256. Fantastic Fantasies. (4) Seminar, three hours. Time and again in modern literature, corpses become conduits or catalysts that ghouls that fiction frequently cannot put to rest, and what is their connection to national history or nation language or narrative? Readings from James Joyce, John Banville, Henry James, Toni Morrison, Adolfo Bioy Casares, Juan Carlos Onetti, Juan Rulfo, and Carlos Fuentes, with films by Alejandro Amenabar, Andrei Tarkovsky, and Kenji Mizoguchi. May be concurrently scheduled with course C156. Graduate students required to prepare papers based on texts read in original languages. S/U or letter grading.

C260. Literature and Visual Arts. (4) Lecture, three hours. Preparation: reading knowledge of art history valuable but not required. Assuming that literature and visual arts are in some degree expressions of cultural and philosophical patterns of eras, study of relationships between written word and painterly, sculptural, and interdisciplinary investigation of similarities and differences between plastic and verbal arts in comparative study. May be repeated for credit with different emphasis and focus. May be concurrently scheduled with course C160. Students required to attend workshops in visual arts. S/U or letter grading.

C261. Race and History. (4) Seminar, three hours. Analysis of use of historical events, situations, and characters in literary works of Renaissance and/ or modern period. Readings and individual assignments may range from the work of African-American, Caribbean, and Native American authors such as Frederick Douglass, Studs Terkel, and Guillermo Cabrera Infante with films by Alejandro Amenabar, Andrei Tarkovsky, and Kenji Mizoguchi to the work of their contemporaries. May be concurrently scheduled with course C161. Students required to prepare papers based on texts read in original languages. S/U or letter grading.

C263. Crisis of Consciousness in Modern Literature. (5) Seminar, three hours. Preparation: reading knowledge of one appropriate foreign language. Study of modern European and American works that are concerned both in subject matter and artistic methods with growing self-consciousness of human beings and their society, with focus on works of Kafka, Rilke, Woolf, Sartr, and Stevens. May be concurrently scheduled with course C163. Students required to prepare papers based on texts read in original languages and to meet as group one additional hour each week. S/U or letter grading.

C264. Modern European Novel. (5) Seminar, three hours. Preparation: reading knowledge of at least one appropriate foreign language. Study of modern Euro-

C275. Nationalism and Immigration Today. (4) (Same as American Studies M261.) Seminar, three hours. Investigations of politics of power, gender, and race in com-

M274. Theorizing Third World. (4) (Same as American Studies M274.) Seminar, three hours. Preparation: reading knowledge of one appropriate foreign language. Study of postmodern novel as it developed out of modernism. Postmodernism defined in three different ways—philosophically, scientifically, and economically. Emphasis on relationship of recent novels to theories of structuralism and poststruc- turalism and to cultural studies. Selected works include those by Borges, Beckett, Nabokov, Pynchon, Fuentes, Grass, Boll, and Calvino. Concurrently scheduled with course C172. Graduate students required to meet as group one additional hour each week. S/U or letter grading.

C276. Reading Modern Bodies. (4) (Same as Japanese M276.) Seminar, three hours. Prepared for graduate students. Explorations of construction of human body through various modern technologies and dis-

277. Caribbean Literature from Negritude to Dias-
pora. (4) Seminar, three hours. Historical approach to modern Anglophone and Francophone Caribbean literature, tracing writing to cultural identity beginning with negritude movement's claim to Africa as expressed in Aimé Césaire's classic poem Cahier d'un retour au pays natal and ending with consideration of
dispersion of identities in work of writers and intellectuals who contend with problems of diasporic Caribbean culture. S/U or letter grading.

C278. India Inq: Literature and Culture of Modern South Asia. (5) Seminar, three hours. Survey of significant issues in history of 20th-century Indian literature and culture. Course explores works of modern Indian culture by such figures as Rabindranath Tagore, Satyajit Ray, Faiz Ahmad Faiz, and U.R. Anantha Murthy, including novels, short stories, poetry, films, music, and works in cultural and visual scholarship. Central and defining issue for 20th-century Indian culture is experience of British colonial rule and massive cultural and material changes that accompanied it. Exploration of manner in which literature and culture have developed in interaction with powerful social forces, such as struggle for national independence from Britain under leaders like Mahatma Gandhi and expansion of Indian diaspora. Concurrently scheduled with course C178. S/U grading.

279. Subaltern Studies: Colonial Histories and Cultural Critique. (5) Seminar, three hours. Examination of certain links between practice of cultural criticism and problems in historiography of colonial and post-colonial societies. Use of key texts by members of Subaltern Studies collective of Indian historians to explore some central issues arising from this relationship. What kind of interdisciplinary space is produced by dialog of history and literary and cultural theory? Attention to literary texts to practice such interdisciplinary critiquing. Nature of modernity in colonial setting. What is nature of bourgeoisie in colonial society? What kind of modernization does it seek? What is relationship of modern metropolitan bourgeoisie to indigenous one? S/U or letter grading.

280. Latin American Literature in Comparative Contexts. (4) Seminar, three hours. Preparation: reading knowledge of one foreign language. In-depth study of one topic of Latin American literature in comparative context. May be repeated for credit. S/U or letter grading.

284. Theories of Translation. (4) Seminar, three hours. Examination of various approaches to concept of translation and to its significance for literary studies. Readings include authors such as Matthew Arnold, Walter Benjamin, George Steiner, and Susan Bassnett. S/U or letter grading.

285. Translation Workshop. (4) Seminar, three hours. Preparation: solid reading knowledge of at least one foreign language. Open to qualified undergraduates with proper language preparation. Introduction to principles of literary translation heuristically, that is, on basis of actual translation tasks students translate, and presentation of student work for discussion. Opportunity for students to determine whether they have desire and talent to pursue literary translation as part of their professional and artistic development. S/U or letter grading.

286. Workshop: Social Sciences Translation. (4) Seminar, three hours; tutorial, one hour. Preparation: solid reading knowledge of at least one foreign language. Designed for graduate social sciences students. Techniques students need to render scholarly texts in their fields from language they use in their research into English and to advance their knowledge of language to stage where they can use it more effectively in all aspects of their research, as well as take advantage of translation techniques they have learned. S/U or letter grading.

C287. Reading across Culture. (5) Seminar, three hours. What is it we devise when we try to understand words, habits, gestures, and beliefs not our own? Do we understand something foreign to us by immersing ourselves in it or by standing apart? Does ability to understand others imply taking a universal standpoint? Can we make judgments about beliefs other than our own? Questions of cultural interpretation have long history in both Western and non-Western cultures. Discussion of history of quest to understand cross-cultural interpretation and comparative interpretation of cultures in both comparative literature and cultural anthropology. Reading of some very complex and influential writings, such as much written by Claude Lévi-Strauss, Amitav Ghosh, James Clifford, Edward Said, Gayatri Spivak, and Erich Auerbach. Concurrently scheduled with course C187. S/U or letter grading.

M288. Modern Arab Thought. (4) (Same as Arabic M288.) Seminar, three hours. While much has been written and said about resurgence and spread of political Islam after collapse of ideology of secular nationalism and failure of Arab left to apprehend exigencies of postrevolutionary/postcolonial moment, little has been devoted to less sensational topic of modern Arab intellectuals, despite unmistakable penetration of critical output produced by Arab thinkers and artists in aftermath of 1967. Course addresses and redresses this glaring imbalance by introducing new cultural material—literary, critical, philosophical, artistic, and journalistic—produced before and after al-Nahda but mostly before and after 1967 and fosters insightful approaches to unlikely coexistence in Arab contemporaneity of ever-deepening and generalized crisis and of steady and consolidated development (if not effervescence) of cultural and artistic production. S/U or letter grading.

289. Theory of Film and Literature. (5) Seminar, three hours; film screening, two hours. Study of redenomination and principles of theories of film and literature. Approaches vary by instructor (e.g., postcoloniality, psychoanalytic, Marxist, psychoanalytic, and Marxist approaches). S/U or letter grading.


292. Theories of Empire. (4) Seminar, three hours. History and theoreticalization of modern imperialism and colonialism since relevant writings of Karl Marx and Friedrich Engels. Examination of number of landmark theories of empire and consideration of whether or not they may be said to constitute coherent tradition or line of theoretical development. Question of resistance to imperial rule and role it plays in these theoretical accounts. S/U or letter grading.


294. Seminar: Literary Theory. (5) (Same as English M365.) Seminar, three hours. Advanced interdisciplinary seminar to explore philosophical, historical, and critical foundations of literary theory as well as current issues in literary and cultural studies. S/U or letter grading.

299. Aesthetics and Literature. (4) Seminar, three hours. Preparation: reading knowledge of one appropriate foreign language. Study of literary theory through exploration of approaches to literature by philosophers grounded on analytic tradition. Careful attention to concepts of truth, meaning, expression, representation, metaphor, fiction, and literature. Letter grading.

375. Teaching Apprentice Practicum. (1 to 4) Seminar, to be arranged. Preparation: consent of UCLA graduate advisor or supervisor. Teaching assistantship for students who wish to observe undergraduate teaching and to be prepared to assist in course preparation and supervision. S/U grading.


501. Cooperative Program. (2 to 8) Tutorial, to be arranged. Preparation: consent of UCLA graduate advisor and visiting assistant professor. May be repeated for credit. S/U grading.

586. Directed Individual Study or Research. (2 to 12) Tutorial, to be arranged. Limited to graduate comparative literature students. Necessary for students in comparative literature who need additional individual study and research. May be repeated for credit. S/U or letter grading.
tegration of courses selected from one of five designated concentrations in bioinformatics, biological data sciences, biomedical systems, neurosystems, or systems biology. The major is appropriate preparation for employment or for graduate studies in any of these areas, with emphasis on interdisciplinary activities. It is also appropriate preparation for professional school studies in dentistry, engineering, management, medicine, and public health.

Undergraduate Study

The Computational and Systems Biology major is a designated capstone major. The capstone experience is a senior-level sequence of two courses integrating the discipline via mathematical modeling, simulation, and active research and report writing. Students are expected to demonstrate critical thinking skills and familiarity with research techniques needed to successfully pursue a research project in computational and systems biology, conceive and execute a research project on which they engage current methods and theory, communicate original scholarly findings to peers both in oral and written form, and work productively with others as part of a research team. The experience culminates with completion of the senior thesis requirement.

Computational and Systems Biology majors select a coherent integration of courses from one of five designated concentrations: bioinformatics, biological data sciences, biomedical systems, neurosystems, or systems biology. The synergy for all concentrations is integrative systems, information, and computational systems modeling sciences in biology. The focus is primarily quantitative, as mastery of advanced quantitative skills is essential for multidisciplinary understanding. Each concentration emphasizes different systems or modalities, and modeling or other computational approaches. For students interested in broad options for postgraduate studies in life sciences and related areas, including medicine, the systems biology concentration covers the widest spectrum of quantitative systems studies at all levels. The other concentrations are more focused. For example, bioinformatics is more focused on computational aspects of genetics and biology at molecular and cellular levels. Students normally select one, but because the concentrations have substantial methodologic overlap, well-justified combinations are also possible.

The bioinformatics concentration is designed for students interested in computational discovery and management of biological data, primarily genomic, proteomic, or metabolomic data. Bioinformatics emphasizes computational, statistical, and other mathematical approaches for mining, modeling, and analyzing high-throughput biological data and the inherent structure of biological information. Example research problems include finding statistical patterns that reveal genomic or evolutionary or developmental information, studying how regulatory sequences give rise to programs of gene expression, or researching how the genome encodes the capabilities of the human mind.

The biological data sciences concentration addresses a diverse set of biological questions—ranging from medicine, to genomics, physiology, pharmacology, neuroscience, ecology, and evolution—using recent tools and advances in mathematics and computation—specifically machine learning, statistical data sciences, and informatics. Biological data sciences leverages new and developing courses within computational and systems biology and across UCLA, and greatly aids students who aim to go directly into industry—biotech, pharmaceuti- cals, and more—as well as computational biology graduate school. The concentration has a strong focus and deep integration with life sciences.

The biomedical systems concentration is designed for students interested primarily in medical system studies; the systems aspects of biomedical, surgical, or other biomedical engineering system devices including MEEMs or nanoscale system devices; and use of dynamic biosystem modeling for optimizing or developing new clinical diagnostic or therapeutic protocols. Example research problems include feedback biocontrol system model development for imaging-based medical diagnosis and optimal control of therapeutic drug delivery.

The neurosystems concentration is designed for students interested primarily in the nervous system, or quantitative neurophysiology, with emphasis on neural systems networks that control behavior—molecular, cellular, and whole-organism levels; neural information and control systems; and systems electrophysiology and neural electronic systems for controlling prostheses. Example research problems include analysis of (real) neural networks in normal and abnormal brain function, design of prosthetic systems for hearing (cochlear implant) and walking (spinal cord stimulation) recovery, and MEMS-based brain-machine interface devices.

The systems biology concentration is designed for students who want to understand biological systems holistically and quantitatively, and pursue research with an emphasis on systems and integrative principles in biology or medicine. The curriculum imparts an understanding of systems biology (often called the new physiology) using dynamical systems modeling, control, computer simulation, and other computational methods—integrated with the biology. For example, at the cellular level, systems biologists integrate proteomic, transcriptomic, and metabolomic information into a more complete systems picture of living organisms. However, the methodologies include single-scale or multiscale modeling for enhancing understanding of regulatory biomechanisms at all levels—molecular, cellular, organ, and/or whole-organism levels—and are prevalent in population and ecosystem studies, as well as systems-level problems in medicine and pharmacology.

Computational and Systems Biology BS

Capstone Major

Learning Outcomes

The Computational and Systems Biology major has the following learning outcomes:

- Demonstrated critical thinking skills, and familiarity with research techniques, needed to successfully pursue a research project
- Conception and execution of a research project that engages current methods and theory
- Oral and written communication of original scholarly findings to peers
- Productive participation with others as part of a research team

Premajor

Students entering UCLA directly from high school or first-term transfer students who declare the Computational and Systems Biology premajor at the time of application are automatically admitted.

Current students who were admitted as freshmen or transfer students (transfer students must have been admitted under the division of life sciences) may request to declare the premajor once they have met the following criteria: (1) completed one quarter at UCLA, (2) are in good academic standing, (3) have a minimum cumulative grade-point average (GPA) of 2.0, and (4) have established a premajor GPA of a minimum of 2.7 by taking at least one premajor course at UCLA for a letter grade.

Requests to declare the premajor should be sent by e-mail to the program. For more information, see the program website.

All courses taken for the premajor must be completed with a grade of C or better. Premajor courses Program in Computing 10B and 10C, or Computer Sciences 32 are required for students following the Biological Data Sciences or Bioinformatics concentrations, but do not have to be completed prior to applying to the major.

All students are identified as premajors until they satisfy the preparation for the major requirements by achieving (1) a minimum 2.7 GPA in all premajor courses, and (2) a minimum grade of C in all premajor courses.

Preparation for the Major

Required: A minimum of 66 to 82 units (depending on the calculus series, computer programming courses, and additional requisites for specific concentrations), including Chemistry and Biochemistry 14A, 14B, and 14BL, or 20A, 20B, and 20L; Computer Science 31 or Program in Computing 10A; Life Sciences 30A, 30B, 40, and Computational and Systems Biology M32 or Mathematics M32T, or Mathematics 31A or 31AL, 31B, and Statistics 10; Mathematics 32A, 33B; Physics 1A, 1B, and 1C, or 1AH, 1BH, and 1CH, or Physics 5A, 5B, and 5C.

Students must also complete one of two life sciences sequences—either Life Sciences 1, 2, 3, and 4, or 7A, 7B, and 7C. They may not substitute courses in either sequence.

Students following the bioinformatics concentration must also complete Computer Science 32 or Program in Computing 10B and 10C.

Students following the biological data sciences concentration must also complete Computer Science 32.

Students following the bioinformatics, biomedical systems, or systems biology concentrations must also complete Computational and Systems Biology M32 (same as Life Sciences M32 and Mathematics M32T) or Mathematics 32A.

Additional lower-division courses may be requisite to desired concentration courses.
Students are allowed to repeat up to two premajor courses. Those who do not pass a course a second time are dismissed from the program.

Transfer Students
Transfer applicants to the Computational and Systems Biology major with 90 or more units must complete as many of the following introductory courses as possible prior to admission to UCLA: one year of general chemistry with laboratory for majors, two years of calculus for majors, one year of calculus-based physics, one year of biology with laboratory for majors, and one programming course using C++, Python, or similar language.

Transfer applicants must meet the same academic requirements as current UCLA students, based on all courses transferred from another institution that satisfy premajor requirements, and must have completed one 12-unit term of residence in regular session at UCLA.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

The Major
The major consists of a methodology core of seven courses (27 units) and a concentration of five upper-division courses (20 units minimum). Each course in the major must be passed with a grade of C or better.

Methodology Core
Required: (1) Computational and Systems Biology M150, M184, 185, (2) one probability course from: Electrical and Computer Engineering 131A, Mathematics 170A, 170E, or Statistics 100A, (3) one statistics course from: Biostatistics 100A or Statistics 100B, and (4) two capstone courses: Computational and Systems Biology M187 and 199 or 198A and 198B.

Concentrations
Required: A minimum of five courses (20 units minimum) from the concentrations listed below. No 199 course may be applied toward any concentration. An approved list of elective courses for each concentration is available in the program office and on the department website.

Bioinformatics (at least 20 units): Computer Science CM121, CM124, Molecular, Cell, and Developmental Biology 16SA (or 144), Physiological Science 125 (or Molecular, Cell, and Developmental Biology 187AL), and one additional course from the bioinformatics approved course list. Note: Computer Science 32 or Program in Computing 10B and 10C, and Computational and Systems Biology M32 (same as Life Sciences M32 or Mathematics M32T) or Mathematics 32A are completed in the premajor.

Biological Data Sciences (at least 20 units): Computer Science CM121, CM146 (or Statistics 101C or C161), 180, and two additional courses from the biological data sciences approved list. Note: Computer Science 32 is completed in the premajor.

Biomedical Systems (at least 20 units): Bioengineering C102, Computational and Systems Biology M186, Electrical and Computer Engineering 133A (or Mathematics 131A), and one additional course from the biomedical systems approved course list. Note: Computational and Systems Biology M32 (same as Life Sciences M32 or Mathematics M32T) or Mathematics 32A is completed in the premajor.

Neurosystems (20 units): Computational and Systems Biology M186 (or Computer Science M182), Neuroscience M101A, M101B, 102 (or Electrical and Computer Engineering 113 or Mathematics 155), and one additional course from the neurosystems approved list.

Systems Biology (at least 20 units): Computational and Systems Biology M186, Ecology and Evolutionary Biology 170 (or Physiological Science 166), Molecular, Cell, and Developmental Biology 100 (or 144 or 165A), Physiological Science 125 (or Molecular, Cell, and Developmental Biology 187AL), and one additional course from the systems biology approved list. Note: Computational and Systems Biology M32 (same as Life Sciences M32 or Mathematics M32T) or Mathematics 32A is completed in the premajor.

Honors Program
Students with a grade-point average of 3.5 or better in required major courses and a 3.0 cumulative GPA may apply for admission to the honors program. Honors or highest honors may be granted at the discretion of the faculty sponsor and the faculty committee to students demonstrating exceptional ability on the senior research thesis.

Mathematical Biology Minor
The Mathematical Biology minor introduces undergraduate students to an active interdisciplinary research field at UCLA. The minor core examines biological systems in a holistic and quantitative manner by emphasizing systems and integrative principles in biology. Students who complete the minor have sufficient training to apply the knowledge they learn in graduate school or employment of their choice. Students complete a core curriculum and an elective course. The minor consists of lower-division courses basic to the minor, five core courses, and one elective course that provide the needed background in mathematical biology, molecular and cell biology, statistics and probability, and mathematical modeling and simulation methods for biological systems.

To enter the minor, students must be in good academic standing (2.0 grade-point average or better) and have completed Computer Science 31 or Program in Computing 10A with a grade of C or better. Requests to declare the minor must be sent by e-mail to the program. The e-mail should include full name, UID number, request to declare the minor, and a statement indicating whether the student consents to being added to the departmental undergraduate news listerv.

Required Lower-Division Course (4 units): Mathematics 33A.

Required Upper-Division Courses (22 units): Chemistry and Biochemistry 153A, M230B, Computational and Systems Biology M184, Microbiology, Immunology, and Molecular Genetics 105, and two elective courses selected from Biostatistics 100A, Chemistry and Biochemistry M117, 156, Electrical and Computer Engineering 102, 113, Statistics 100A, 100B.

A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor.

Each minor course must be taken for a letter grade, and students must have an overall grade-point average of 2.0 or better in the minor. Successful completion of the minor is indicated on the transcript and diploma.

Structural Biology Minor
The Structural Biology minor introduces undergraduate students to an active interdisciplinary research field at UCLA. It examines biological systems in a holistic and quantitative manner by emphasizing systems and integrative principles in biology. It consists of lower-division courses basic to the minor, four core courses, and one elective course that provide the needed background in structural biology, biological microscopy, and biochemistry. Students who complete the minor have sufficient training to apply the knowledge they learn in graduate school or employment of their choice.

To enter the minor, students must be in good academic standing (2.0 grade-point average or better) and have completed Computer Science 31 or Program in Computing 10A with a grade of C or better. Requests to declare the minor must be sent by e-mail to the program. The e-mail should include full name, UID number, request to declare the minor, and a statement indicating whether the student consents to being added to the departmental undergraduate news listerv.

Required Lower-Division Course (4 units): Mathematics 33A.

Required Upper-Division Courses (22 units): Chemistry and Biochemistry 153A, M230B, Computational and Systems Biology M184, Microbiology, Immunology, and Molecular Genetics 105, and two elective courses selected from Biostatistics 100A, Chemistry and Biochemistry M117, 156, Electrical and Computer Engineering 102, 113, Statistics 100A, 100B.

A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor.

Each minor course must be taken for a letter grade, and students must have an overall grade-point average of 2.0 or better in the minor. Successful completion of the minor is indicated on the transcript and diploma.

Systems Biology Minor
The Systems Biology minor introduces undergraduate students to an active, interdisciplinary, quantitative biosciences research and teaching field at UCLA. It offers a coherent course plan encompassing basic foundations of the field. Beside broadening student knowledge in systems biology, the minor provides students with enhanced perspective about computational and systems biology methods and applications and better prepares students to make more informed choices about their future directions and careers. The minor consists of lower-division courses basic to the minor, a survey seminar
course, four core courses, and one elective course that provide the needed background in molecular and cell biology, computational and systems engineering, and mathematical modeling and simulation methods for biological systems.

To enter the minor, students must be in good academic standing (2.0 grade-point average or better) and have completed Computer Science 31 or Program in Computing 10A with a grade of C or better. Requests to declare the minor must be sent by e-mail to the program. The e-mail should include full name, UID number, request to declare the minor, and a statement indicating whether the student consents to being added to the departmental undergraduate news listerv.

**Required Lower-Division Courses (8 units):** Mathematics 33A, 33B.

**Required Upper-Division Courses (20 units):** Computational and Systems Biology M184, M186, Electrical and Computer Engineering 102, 141 (or Mechanical and Aerospace Engineering 171A), Molecular, Cell, and Developmental Biology M140 or 144, and one elective course selected from Mathematics 134, 151A, 151B, 170A, 170B, 171, Molecular, Cell, and Developmental Biology 172, or Psychological Science 125.

A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor.

Each minor course must be taken for a letter grade, and students must have an overall grade-point average of 2.0 or better in the minor. Successful completion of the minor is indicated on the transcript and diploma.

### Computational and Systems Biology

#### Lower-Division Courses

**M32. Essential Calculus for Mathematical Biologists.** (4) (Same as Mathematics M32T and Life Sciences M32.) Lecture, three hours; discussion, one hour. Requisites: Life Sciences 20A, 20B. Not open to students with credit for Mathematics 31A, 31B, 32A, or 32B. Designed for life sciences students. Methods and results of single and multivariable calculus essential for quantitative training in biology. Limits, differentiation, integration and methods of integration, Taylor polynomials, topics in greater depth through supplemental readings, papers, or other activities. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

**89. Honors Seminars.** (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to lower-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

**89HC. Honors Contracts.** (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to upper-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

**189A-189B. Honors Research in Computational and Systems Biology.** (4) (Formerly numbered 198A, 198B.) Tutorial, 12 hours. Maximum of 8 units of courses 198A and 198B may be applied toward major. Individual contract required. 189A. Requisite: course M150. Limited to Computational and Systems Biology students. Supervised individual research involving extensive reading and development of honors thesis or comprehensive project under guidance of faculty mentor. In Progress grading (credit to be given on completion of course 198B). 189B. Requisite: course 198A. Continued research and reading culminating in honors thesis under direct supervision of faculty member. Letter grading.

**199. Directed Research in Computational and Systems Biology.** (4) Limited to seniors. Supervised individual research under guidance of faculty mentor. Culminating report/thesis required. May be repeated for credit. Four units may be applied toward major requirements. Individual contract required. Letter grading.
The department builds from abstract modeling toward research vital to the advancement of current biomedical frontiers. The doctoral program reflects this in requirements for advanced training in a biomedical research specialty and in the mathematical and computing skills required to contend realistically with the complex phenomena encountered in biology and medicine. The art of quantitative research is developed individually from the first year. The master’s program adapts to the needs of researchers desiring supplemental quantitative science training.

The department welcomes both undergraduate and graduate students in other majors to its courses in mathematical modeling, research computing, and biomedical statistics. Pre-medical majors with mathematical and computational interests can receive early guidance toward an MD/PhD joint degree. The department also offers quantitative research training in the medical curriculum and postgraduate medical programs.

Graduate Study

Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduation Division website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Graduate Degrees

The Department of Computational Medicine offers Master of Science (MS) and Doctor of Philosophy (PhD) degrees in Biostatistics and the Master of Science (MS) degree in Clinical Research.

Biomathematics

Lower-Division Courses

The first year is designed to provide students with the necessary background in mathematics, computer science, and basic training in the methods of biostatistics. Emphasis is placed on the development of analytical thinking, and on the design and analysis of research projects.

19. First Year Students Seminar.

Lecture, two hours. Series of presentations by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

98. Student Research Program.

Lecture, one hour. Directed research for lower-division students under guidance of faculty mentor. Individual contract required; consult Undergraduate Research Center. S/U or letter grading.

Upper-Division Courses

The department builds from abstract modeling toward research vital to the advancement of current biomedical frontiers. The doctoral program reflects this in requirements for advanced training in a biomedical research specialty and in the mathematical and computing skills required to contend realistically with the complex phenomena encountered in biology and medicine. The art of quantitative research is developed individually from the first year. The master’s program adapts to the needs of researchers desiring supplemental quantitative science training.

The department welcomes both undergraduate and graduate students in other majors to its courses in mathematical modeling, research computing, and biomedical statistics. Pre-medical majors with mathematical and computational interests can receive early guidance toward an MD/PhD joint degree. The department also offers quantitative research training in the medical curriculum and postgraduate medical programs.

Graduate Study

Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduation Division website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Graduate Degrees

The Department of Computational Medicine offers Master of Science (MS) and Doctor of Philosophy (PhD) degrees in Biostatistics and the Master of Science (MS) degree in Clinical Research.

Biomathematics

Lower-Division Courses

The first year is designed to provide students with the necessary background in mathematics, computer science, and basic training in the methods of biostatistics. Emphasis is placed on the development of analytical thinking, and on the design and analysis of research projects.

19. First Year Students Seminar.

Lecture, two hours. Series of presentations by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

98. Student Research Program.

Lecture, one hour. Directed research for lower-division students under guidance of faculty mentor. Individual contract required; consult Undergraduate Research Center. S/U or letter grading.

Upper-Division Courses

The department builds from abstract modeling toward research vital to the advancement of current biomedical frontiers. The doctoral program reflects this in requirements for advanced training in a biomedical research specialty and in the mathematical and computing skills required to contend realistically with the complex phenomena encountered in biology and medicine. The art of quantitative research is developed individually from the first year. The master’s program adapts to the needs of researchers desiring supplemental quantitative science training.

The department welcomes both undergraduate and graduate students in other majors to its courses in mathematical modeling, research computing, and biomedical statistics. Pre-medical majors with mathematical and computational interests can receive early guidance toward an MD/PhD joint degree. The department also offers quantitative research training in the medical curriculum and postgraduate medical programs.

Graduate Study

Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduation Division website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Graduate Degrees

The Department of Computational Medicine offers Master of Science (MS) and Doctor of Philosophy (PhD) degrees in Biostatistics and the Master of Science (MS) degree in Clinical Research.

Biomathematics

Lower-Division Courses

The first year is designed to provide students with the necessary background in mathematics, computer science, and basic training in the methods of biostatistics. Emphasis is placed on the development of analytical thinking, and on the design and analysis of research projects.

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Upper-Division Courses

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The department welcomes both undergraduate and graduate students in other majors to its courses in mathematical modeling, research computing, and biomedical statistics. Pre-medical majors with mathematical and computational interests can receive early guidance toward an MD/PhD joint degree. The department also offers quantitative research training in the medical curriculum and postgraduate medical programs.
M207A. Theoretical Genetic Modeling. (4) (Same as Biostatistics M272 and Human Genetics M207A.) Lecture, three hours; discussion, one hour. Requisites: Mathematics 115A, 131A, Statistics 100B. Mathematical models in statistical genetics. Topics include population genetics, genetic epidemiology, gene mapping, design of genetics experiments, DNA sequence analysis, and molecular phylogeny. S/U or letter grading.

M207B. Applied Genetic Modeling. (4) (Same as Biostatistics M273 and Human Genetics M207B.) Lecture, three hours; laboratory, one hour. Requisites: Biostatistics 200B, 202B (may be taken concurrently) or equivalent coursework or consent of instructor. Covers subjects such as (prior knowledge of human genetics not required). Topics include statistical methodology underlying genetic analysis of both quantitative and qualitative complex traits. Laboratory for hands-on practice in analysis of genetic data. Lab reports required. Course complements M207A; students may take either and are encouraged to take both. S/U or letter grading.


M211. Mathematical and Statistical Phylogenetics. (4) (Same as Biostatistics M239 and Human Genetics M211.) Lecture, three hours; laboratory, one hour. Theoretical models in molecular evolution, with focus on phylogenetic techniques. Topics include evolutionary tree reconstruction methods, studies of viral evolution, phyleogeography, and coalescent approaches. Examples from evolutionary biology and medicine. Laboratory for hands-on computer analysis of sequence data. S/U or letter grading.

213. Modeling Vascular Networks. (4) Lecture, four hours. Preparation: ordinary partial differential equations, complex analysis, elementary knowledge of partial differential equations. Introduction to equations that describe fluid dynamics and branching networks and the arterial and capillary networks to provide a vision of models for structure and flow of vascular systems. Vascular systems are nearly ubiquitous in nature, occurring across animals, plants, and other organisms. Covers topics such as tumor growth and angiogenesis, sleep, allometric scaling, and other phenomena. S/U or letter grading.

M230. Computed Tomography: Theory and Applications. (4) (Same as Physics and Biology in Medicine M230.) Lecture, four hours. Computed tomography is three-dimensional imaging technique being widely used in radiology and is becoming active research area in biomedicine. Basic principles of computed tomography (CT), various reconstruction algorithms, special characteristics of CT, physics in CT, and various biomedical applications. S/U or letter grading.

M232. Statistical Analysis of Incomplete Data. (4) (Same as Biostatistics M232.) Lecture, three hours; discussion, one hour. Requisites: Biostatistics 200C, 202B. Focus on topics that arise from missing data, recognizing familiar methods as solutions to missing-data problems, missing-data mechanisms, weighting and imputation strategies, model-based and design-based inference, and general maximum likelihood methods. Letter grading.

M234. Applied Bayesian Inference. (4) (Same as Biostatistics M234.) Lecture, three hours; laboratory, one hour. Preparation: substantial regression course. Topics: Bayesian approach to statistical inference, with emphasis on biomedical applications and concepts rather than mathematical theory. Topics include Dirichlet processes, nonparametric inference, latent Dirichlet allocation, mixture models, nonparametric Bayesian hierarchical models, advanced Markov chain Monte Carlo methods, and some general hierarchical modeling. S/U or letter grading.

259. Controversies in Clinical Trials. (2) Lecture, one hour; discussion, one hour. Preparation: completion of professional health sciences or MD degree. Review of all MS in Clinical Research students. Discussion and analysis of eight published and well-known trials with students, one invited clinical faculty member, and course director. Development of critical ability to evaluate trial designs and results. S/U or letter grading.

M260A-M260B. Methodology in Clinical Research I, II. (4-4) (Same as Medicine M260A-M260B.) Lecture, four hours. Recommended preparation: MD, PhD, or dental degree. Requisites: courses 170A, 265A. Course M260A is required to M260B. Presentation of principles and practices of major disciplines underlying clinical research methodology, such as bio-statistics, epidemiology, pharmacokinetics. S/U or letter grading.

M260C. Methodology in Clinical Research III. (4) (Same as Medicine M260C.) Discussion, four hours. Recommended preparation: MD, PhD, or dental degree. Preparation: practice of major disciplines underlying clinical research methodology, such as biostatistics, epidemiology, pharmacokinetics. S/U or letter grading.

M261. Responsible Conduct of Research Involving Humans. (2) (Same as Medicine M261.) Lecture, two hours; discussion, two hours. Preparation: completion of one basic course in protection of human research subjects through Collaborative Institutional Training Initiative. Discussion of current issues in responsible conduct of clinical research, including reporting of research, basis for authorship, issues in genetic research, responsibilities of researchers to animals and humans, conflicts of interest, Institutional Review Board (IRB), and related topics. S/U or letter grading.

M262. Communication of Science. (2) (Same as Psychiatry M262.) Lecture, two hours; discussion, one hour. Presentation of various types of scientific writings and their good practice. Details of writing specific articles: methods, results, discussion. Writing of review article. Grant submissions: aims, background, results, design, data, Communication with lay public. S/U or letter grading.

M263. Clinical Pharmacology. (2) (Same as Medicine M263 and Psychiatry M263.) Lecture, two hours. Preparation: completion of professional health sciences degree (MD, PhD). Overview of principles of clinical pharmacology, especially as they relate to clinical and translational medicine and to advances in contemporary medicine such as targeting, gene therapy, and genomics. Letter grading.

264. Applied Data Collection and Analysis. (4) Lecture, four hours. Preparation: presentation of research project development, including protocol development, data collection, quality control, clinical/electronic health record (EHR) data, structuring data for analysis, and data archiving. Lectures, in-class exercises, actual studies and datasets, and student presentations. Letter grading.

265A. Data Analysis Strategies I. (4) Lecture, two hours; laboratory, two hours. Preparation: MD or PhD desirable. Course: topics to provide students with hands-on experience developing and testing hypotheses using various types of databases. Topics: researchers develop techniques to infer networks, data management, and analysis strategies and written presentation of findings. Experience with full process of hypothesis generation, operationalization of variables, selection of analysis techniques and the generation of findings so students are better prepared to complete data analysis, interpretation of results, and written presentation of their findings (e.g., for master’s thesis and subsequent articles). Students encouraged to provide their own data. Databases provided for use in completing exercises for those without available data. Letter grading.

268A. Applied Regression Analysis in Medical Sciences. (4) Lecture, three hours; discussion, one hour. Requisite: course 270A. Proficiency in applied regression analysis, with focus on interpretation of results and performing computation. Primary topics include simple and multiple regression, model selection, regression model selection, analysis of variance, logistic regression, and survival analysis. Letter grading.

266B. Advanced Biostatistics. (4) Lecture, three hours; discussion, one hour. Requisite: course 266A. Continuation of course 266A. Expertise in multivariate methods, such as principle components, factor analysis, cluster analysis, and more contemporary methods, including recursive partitioning and missing data. Multilevel and longitudinal analysis. Letter grading.

M270. Optimal Parameter Estimation and Experimental Design for Biomedical Systems. (4) (Same as Bioengineering M266B, Computer Science M265B, and Medicine M270D.) Lecture, four hours; outside study, eight hours. Preparation: course 220 or Bioengineering CM286 or CM296A. Estimation methodology and model parameter inference algorithms for fitting dynamic system models to biomedical data. Model discrimination methods. Theory and algorithms for designing optimal experiments for developing and quantifying models, with specific sampling schedules and model evaluation via statistical tests. Students will have opportunity to develop software for model building and optimal experiment design via applications in physiology and pharmacology. Letter grading.

M271. Statistical Methods in Computational Biology. (4) (Same as Bioinformatics M223 and Statistics M224.) Lecture, three hours; discussion, one hour. Preparation: elementary probability concepts. Requisites: Introduction to statistical methods and widely applied in several branches of computational biology, such as gene expression, sequence alignment, motif discovery, genomics, and biological networks, with emphasis on understanding of basic statistical concepts and use of statistical inference to solve biological problems. Letter grading.


M282. Longitudinal Data. (4) (Same as Biostatistics B236.) Lecture, three hours; laboratory, one hour. Requisite: Biostatistics 200B or another substantial regression course. Analysis of continuous responses for
which multivariate normal model may be assumed. Students learn how to think about longitudinal data, plot data, and how to specify mean and variance of longitudinal response. Advanced topics include introductions to clustered, multivariate, and discrete longitudinal data. S/U or letter grading.

M284. Methodology of Clinical Trials. (4) Same as Biostatistics M238. Lecture, three hours; discussion, one hour. Requisite: Biostatistics 200B. Introductory material on design and analysis of clinical trials, including adaptive methods for early and late randomized trials. S/U or letter grading.

285. Introduction to High-Throughput Data Analysis. (4) Seminar, three hours. Requisites: courses M260A, M260B. Advanced study and analysis of current topics in clinical research. Discussion of current research and literature in research specialty of faculty member teaching course. Content varies from term to term and may include lectures from visiting scientists. May be repeated for credit with consent of instructor. S/U or letter grading.

299. Special Topics in Clinical Research. (2 to 6) Seminar, three hours. Requisites: courses M260A, M260B. Advanced study and analysis of current topics in clinical research. Discussion of current research and literature in research specialty of faculty member teaching course. Content varies from term to term and may include lectures from visiting scientists. May be repeated for credit with topic change. S/U or letter grading.

569. Directed Individual Study or Research in Biostatistics. (2 to 12) Tutorial, to be arranged. Individual study on topics not yet covered by offerings of department. May be repeated for credit with topic change. S/U or letter grading.

591. Preparation for MS or PhD Comprehensive Examination or PhD Qualifying Examination. (2 to 8) Tutorial, to be arranged. Individual study. S/U or letter grading.


COMPUTER SCIENCE

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Computer Science
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Alien Klingler, PhD
Lawrence P. McNamee, PhD
Richard R. Muntz, PhD
D. Stott Parker, Jr., PhD
Judea Pearl, PhD
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Carlo A. Zaniolo, PhD (Norman E. Friedmann Professor Emeritus of Knowledge Sciences)

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Yuval Tamir, PhD
Guy Van den Broeck, PhD
Harry G. Xu, PhD

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Quanquan Gu, PhD
Choi-Jui Hsieh, PhD
Ravi Netravali, PhD
Anthony J. Nowatzki, PhD
Sriram Sankararaman, PhD
Fabien Scalzo, PhD, in Residence

Senior Lecturers SOE

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David A. Smallberg, MS

Adjunct Professors

David E. Heckerman, PhD
Van Jacobsen, MS
Alan C. Kay, PhD
Peter L. Reiher, PhD

Adjunct Associate Professors

Carey S. Nachenberg, MS
Giovanni Pau, PhD
Ramin Ramezani, PhD

Adjunct Assistant Professors

Alexander Afanasyev, PhD
Ameet S. Talwalkar, PhD

Scope and Objectives

Computer science is concerned with the design, modeling, analysis, and applications of computer systems. Its study at UCLA provides education at the undergraduate and graduate levels necessary to understand, design, implement, and use the software and hardware of digital computers and digital systems. The programs offer comprehensive and integrated studies of subjects in computer system architecture, computer networks, distributed computer systems, programming languages and software systems, information and data management, artificial intelligence, computer science theory, computational systems biology and bioinformatics, and computer vision and graphics.

The undergraduate and graduate studies and research projects in the Department of Computer Science are supported by significant computing resources. In addition to the departmental computing facility, there are over a dozen research laboratories specializing in areas such as distributed systems, multimedia computer communications, distributed sensor networks, VLSI systems, VLSI CAD, embedded and reconfigurable systems, computer graphics, bioinformatics, and artificial intelligence. Also, the Cognitive Systems Laboratory is engaged in studying computer systems that emulate or support human reasoning. The Biocybernetics Laboratory is devoted to multidisciplinary research involving the application of engineering and computer science methods to problems in biology and medicine.

The BS degree may be attained through the Computer Science and Engineering major, Computer Science major, or Computer Engineering major described below.

In addition, the department offers MS and PhD degrees in Computer Science, as well as minor fields for graduate students seeking engineering degrees. In cooperation with the John E. Anderson Graduate School of Management, the Computer Science Department offers a concurrent degree program that enables students to obtain the MS in Computer Science and the MBA (Master of Business Administration).

Undergraduate Study

The computer science and computer engineering program is accredited by the Computing Accreditation Commission and the Engineering Accreditation Commission of ABET.

The computer science program is accredited by the Computing Accreditation Commission of ABET.

The Computer Science and Engineering, and Computer Science, majors are designated capstone majors. Computer Science and Engineering students complete a major product design course. Computer Science students complete either a software engineering or a major product design course.

Graduates are expected to apply the basic mathematical and scientific concepts that underlie modern computer science and engineering: design a software or digital hardware system, component, or process to meet desired needs within realistic constraints; function productively with others as part of a team; identify, formulate, and solve computer software- and hardware-related engineering problems; and demonstrate effective communication skills.

The Computer Engineering major is a designated capstone major that is jointly administered by the Computer Science, and Electrical and Computer Engineering, departments. Undergraduate students complete a design course in which they integrate their knowledge of the discipline and engage in creative design within realistic and professional constraints. Students apply their knowledge and expertise gained in previous mathematics, science, and engineering coursework. Students identify, formulate, and solve engineering problems and present their projects to the class.
Computer Science and Engineering BS

Capstone Major
The Computer Science and Engineering curriculum at UCLA provides students with the education and training necessary to design, implement, test, and utilize the hardware and software of digital computers and digital systems. The curriculum has components spanning both the Computer Science and Electrical and Computer Engineering departments. The curriculum covers all aspects of computer systems from electronic design through logic design, MSI, LSI, and VLSI concepts; device utilization, machine language design, implementation and programming, operating system concepts, systems programming, networking fundamentals, and higher-level language skills; and their application. Students are prepared for employment in a wide spectrum of high-technology industries.

Learning Outcomes
The Computer Science and Engineering major has the following learning outcomes:

- Application of basic mathematical and scientific concepts that underlie the modern field
- Design of a software or digital hardware system, component, or process to meet desired needs within realistic constraints
- Function productively with others on a team, including those with different specialties within the field
- Identification, formulation, and solution of computer software- and hardware-related engineering problems
- Effective communication

Preparation for the Major
Required: Computer Science 1, 31, 32, 33, 35L, M51A; Electrical and Computer Engineering 3; Mathematics 31A, 31B, 32A, 32B, 33A, 33B, 6L; Physics 1A, 1B, 1C, and 4AL or 4BL.

The Major
Required: Computer Science 111, 118, 131, M151B; M152A, 180, 181, Electrical and Computer Engineering 100, 102, 115C; one course from Civil and Environmental Engineering 110, Electrical and Computer Engineering 131A, Mathematics 170A, 170E; or Statistics 100A; one capstone design course (Computer Science 152B); a minimum of 4 units and one elective course selected from Electrical and Computer Engineering 101A through M185; a minimum of 12 units and three elective courses selected from Computer Science 111 through CM187; and 12 units of technical breadth courses selected from an approved list available in the Office of Academic and Student Affairs.

Students who want to deepen their knowledge of electrical engineering are encouraged to select that discipline as their technical breadth area. Credit is not allowed for both Computer Science 170A and Electrical and Computer Engineering 133A unless at least one of them is applied as part of the technical breadth area. Electrical and Computer Engineering 110, 131A, and CM182 may not satisfy elective credit. A petition may be submitted to consider four units of Computer Science 194 or 199 for an elective. Credit is not guaranteed and subject to vice chair review.

A multiple-listed (M) course offered in another department may be used instead of the same computer science course (e.g., Electrical and Computer Engineering M116C may be taken instead of Computer Science M116B). Credit is applied automatically.

For information on UC, school, and general education requirements, see the College and Schools chapter.

Computer Science BS

Capstone Major
The Computer Science curriculum is designed to accommodate students who want professional preparation in computer science but do not necessarily have a strong interest in computer systems hardware. The curriculum consists of components in computer science, a minor or technical support area, and a core of courses from the social sciences, life sciences, and humanities. Within the curriculum, students study subject matter in software engineering, principles of programming languages, data structures, computer architecture, theory of computation and formal languages, operating systems, distributed systems, computer modeling, computer networks, compiler construction, and artificial intelligence. Majors are prepared for employment in a wide range of industrial and business environments.

Learning Outcomes
The Computer Science major has the following learning outcomes:

- Application of basic mathematical and scientific concepts that underlie the modern field
- Design of a software or digital hardware system, component, or process to meet desired needs within realistic constraints
- Function productively with others on a team, including those with different specialties within the field
- Identification, formulation, and solution of computer software- and hardware-related engineering problems
- Effective communication

Preparation for the Major
Required: Computer Science 1, 31, 32, 33, 35L, M51A; Electrical and Computer Engineering 3; Mathematics 170A, 170E; or Statistics 100A; one capstone design course (Computer Science 152B); a minimum of 20 units and five elective courses selected from Computer Science 111 through CM187; a minimum of 12 units and three science and technology courses (not used to satisfy other requirements) that may include 12 units of upper-division computer science courses or 12 units of courses selected from an approved list available in the Office of Academic and Student Affairs; and 12 units of technical breadth courses selected from an approved list available in the Office of Academic and Student Affairs.

Students must take at least one course from Computer Science 130 or 132. Computer Science 130 or 152B may be applied as an elective only if it is not taken as the capstone course. Credit is not allowed for both Computer Science 170A and Electrical and Computer Engineering 133A unless at least one of them is applied as part of the science and technology requirement or as part of the technical breadth area. A petition may be submitted to consider four units of Computer Science 194 or 199 for an elective. Credit is not guaranteed and subject to vice chair review.

A multiple-listed (M) course offered in another department may be used instead of the same computer science course (e.g., Electrical and Computer Engineering M116C may be taken instead of Computer Science M116B). Credit is applied automatically.

For information on UC, school, and general education requirements, see the College and Schools chapter.

Computer Engineering BS

Capstone Major
The undergraduate curriculum provides all computer engineering students with preparation in the mathematical and scientific disciplines that lead to a wide range of industrial and business environments. The design of hardware, software, and algorithmic elements of such systems represents an already dominant and rapidly growing part of the computer engineering profession. Students are encouraged to make use of their computer science and electrical and computer engineering electives and a two-semester capstone design course to pursue deeper knowledge within one of these areas according to their interests, whether for graduate study or preparation for employment.

Learning Outcomes
The Computer Engineering major has the following learning outcomes:

- Application of mathematical, scientific, and engineering knowledge
- Design of a software or hardware system, component, or process to meet desired needs within realistic economic, environmental, social, ethical, health, safety, security, reliability, manufacturability, and sustainability constraints
- Function productively on a team with others
- Identification, formulation, and solution of computer engineering problems
- Effective communication
Preparation for the Major

Required: Computer Science 1 (or Electrical and Computer Engineering 1), 31, 32, 33, 35L, M51A (or Electrical and Computer Engineering M16L), 180; Electrical and Computer Engineering 100, 102, 113, 115C; one course from Civil and Environmental Engineering 110, Electrical and Computer Engineering 131A, Mathematics 170A, 170E, Statistics 100A; 8 units of computer science and 8 units of electrical and computer engineering upper-division electives; three technical breadth courses (12 units) selected from an approved list available in the Office of Academic and Student Affairs; 8 units capstone design from either Electrical and Computer Engineering 180D/180D8 or 183D/183D8.

For information on UC, school, and general education requirements, see the College and Schools chapter.

Bioinformatics Minor

The Bioinformatics minor introduces undergraduate students to the emerging interdisciplinary field of bioinformatics, an active area of research at UCLA combining elements of the computational sciences with the biological sciences. The minor organizes the many course offerings in different UCLA departments into a coherent course plan providing students with significant training in bioinformatics in addition to the training they obtain from their major. Students who complete the minor will be strong candidates for admission to PhD programs in bioinformatics as well as have the relevant training to obtain jobs in the biotechnology industry.

Students complete a core curriculum and an elective course and are strongly encouraged to participate in undergraduate research as early as possible in one of the many groups offering research opportunities in bioinformatics.

To enter the minor, students must be (1) in good academic standing (2.0 grade-point average or better), (2) have completed at least two of the lower-division requirements with minimum grades of C, and (3) file a petition in the division requirements with minimum grades of C, or (2) have completed at least two of the lower-division courses.

Upper-Division Courses

19. Directed Research in Bioinformatics. (2 to 4)
   Tutorial, six to 12 hours. Limited to juniors/seniors. Supervised individual research under guidance of faculty mentor. Culminating paper required. May be repeated for credit. Individual contract required. Letter grading.

Graduate Study

Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Division website.

Graduate Degrees

The Department of Computer Science offers Master of Science (MS) and Doctor of Philosophy (PhD) degrees in Computer Science. A concurrent degree program (Computer Science MS/Management MBA) is also offered.

Bioinformatics Lower-Division Courses

19. Fiat Lux Freshman Seminars. (1 Seminar, 1 hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.)

99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under faculty mentor. Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Course

19. Directed Research in Bioinformatics. (2 to 4)
   Tutorial, six to 12 hours. Limited to juniors/seniors. Supervised individual research under guidance of faculty mentor. Culminating paper required. May be repeated for credit. Individual contract required. Letter grading.

Computer Science Lower-Division Courses

1. Freshman Computer Science Seminar. (1 Seminar, 1 hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.)

19. Fiat Lux Freshman Seminars. (1 Seminar, 1 hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.)

30. Principles and Practices of Computing. (4 Lecture, four hours; discussion, two hours; outside study, six hours. Designed for students in computer science and related majors who do not have prior programming experience. Precursor course to introductory computer science sequence (courses 31, 32, 33). Teaches students how to use computers as tools for problem solving, creativity, and exploration through design and implementation of computer programs. Basic data types, operators and control structures. Input/output. Procedural and data abstraction. Introduction to object-oriented software development. Functions, recursion. Arrays, strings, pointers. Abstract data types, object-oriented programming. Examples and exercises from computer science theory and applications. Letter grading.)

31. Introduction to Computer Organization. (5 Lecture, four hours; discussion, two hours; outside study, nine hours. Enforced requisite: course 32. Introductory course on computer architecture, assembly language, and operating systems fundamentals. Number systems, machine language, and assembly language. Procedure calls, stacks, interrupts, and traps. Assemblers, linkers, and loaders. Operating systems concepts: processes and process management, input/output and operating systems.)
CM121. Algorithms in Bioinformatics. (4) (Same as Chemistry CM160B.) Lecture, four hours; discussion, two hours. Requisites: course 32 or Program in Computing 10C with grade of C– or better, and one course from Biostatistics 100A, Civil Engineering 110, Electrical Engineering 131A, Mathematics 170A, or Statistics 100A. Designed for juniors/seniors. Probability and stochastic processes; Markov chains. Applications include probabilistic algorithms, probabilistic reasoning, and Markov models. Letter grading.

CM124. Machine Learning Applications in Genetics. (4) (Same as Human Genetics CM124.) Lecture, four hours; discussion, two hours; outside study, six hours. Requisites: course 111, 131. Recommended requisite: Engineering 183EW or 185EW. Structured programming, program specification, program proving, abstraction, types, design patterns, artificial intelligence. Software tools, software control systems, program testing, team programming. Letter grading.

118. Computer Network Fundamentals. (4) Lecture, four hours; discussion, two hours; outside study, six hours. Open to freshman/sophomore. Introduction to design and performance evaluation of computer networks, including such topics as what protocols are, layered network architecture, transmission control, network applications, transport protocols, routing algorithms and protocols, internetworking, congestion control, and link layer protocols including Ethernet and wireless channel. Letter grading.

M119. Fundamentals of Embedded Networked Systems. (4) (Same as Electrical and Computer Engineering M119.) Lecture, four hours; discussion, one hour; outside study, seven hours. Requisites: Civil and Environmental Engineering 110 or Electrical and Computer Engineering 131A or Mathematics 170A or Statistics 100A, course 118 or Electrical and Computer Engineering 132B, course 33. Design trade-offs and principles of operation of cyber physical systems such as devices and systems constituting Internet of Things. Topics include signal propagation and modeling, sensing, node architecture and operation, and applications. Letter grading.

CM121. Introduction to Bioinformatics. (4) (Same as Chemistry CM160A.) Lecture, four hours; discussion, two hours. Requisites: course 32 or Program in Computing 10C with grade of C– or better, and one course from Biostatistics 100A, Civil Engineering 110, Electrical Engineering 131A, Mathematics 170A, or Statistics 100A. Prior knowledge of biology not required. Designed for engineering students as well as students from biological sciences and medical school. Introduction to bioinformatics and methodologies, with emphasis on algorithms and inventing new computational and statistical techniques to analyze biological data. Focus on sequence analysis and alignment algorithms. Concurrently scheduled with course CM221, P/NP grading.
M171L. Data Communication Systems Laboratory. (2-4) (Same as Electrical and Computer Engineering M171L.) Laboratory, four to eight hours; outside study, two to four hours. Recommended prerequisite: course M152A. Limited to seniors. Open to score of 2.0 or higher in CM185A. Letter grading.

M172. Real-Time Three-Dimensional Animation. (4) Lecture, four hours; discussion, two hours; outside study, six hours. Enforced prerequisite: course 32. Introduction to handling of geometry, appearance, and motion specifically for real-time virtual environments, both on theoretical and practical levels. Completion of one quality real-time three-dimensional animation by following through from preproduction to postproduction. Emphasis on achieving high quality productions to qualify and submit products to Student Academy Awards competition. Students are expected to make technical decisions to adapt stories to games and animation. Introduction to interaction concepts, enabling students to create low-fidelity real-time three-dimensional visualization in artificial intelligence, enabling them to refine their interactions to create high-fidelity real-time three-dimensional animation. Letter grading.

M174A. Introduction to Computer Graphics. (4) Lecture, four hours; discussion, two hours; outside study, six hours. Enforced prerequisite: course 174A. Basic principles behind modern two- and three-dimensional computer graphics systems, including complete set of tools that modern designer needs to create realistic images in real time. How to position and manipulate objects in scene using geometric and camera transformations. How to create final image using perspective and orthographic transformations. Basics of modeling primitives such as polygonal models and implicit and parametric surfaces. Basic ideas behind color spaces, illumination models, shading, and texture mapping. Letter grading.

M174B. Introduction to Computer Graphics: Three-Dimensional Photography and Rendering. (4) Lecture, four hours; discussion, two hours; outside study, six hours. Enforced prerequisite: course 174A. State of art in image-based and image-space rendering. How to use cameras and light to capture shape and appearance of real objects and scenes. Process provides simple way to acquire three-dimensional models of unparalleled detail and realism. Applications of techniques from entertainment (reverse engineering and postprocessing of movies, generation of realistic synthetic objects and characters) to medicine (modeling of biological structures from imaging data), architecture, preparing motivation, flavor, culture, and cutting-edge experience. How systems can be used to implement in simulation diagrams for quantifying and exploring biological models. How to use these techniques to create models that are in harmony with the natural environment, and to use them to visualize and explore new ideas for research. Letter grading.

M184. Introduction to Computational and Systems Biology. (2) (Same as Bioengineering M184 and Computational and Systems Biology M184.) Lecture, two hours; outside study, four hours. Enforced prerequisite: one course from 31, Civil Engineering M20, Mechanical and Aerospace Engineering M20, or Program in Computing 10A; and Life Sciences 3C or Mathematics 3B or 31B. Survey course designed to introduce students to computational and systems modeling and simulation in biology and medicine, providing motivation, flavor, culture, and cutting-edge experience. How systems can be used to examine in more detail and aiming for more informed basis for focused studies by students with computational and systems biology interests. Presentations by individual UCLA researchers discussing their active computational and systems biology research. P/NP grading.

CM186. Computational Systems Biology: Modeling and Simulation of Biological Systems. (5) (Same as Bioengineering CM186, Computational and Systems Biology M186, and Ecology and Evolutionary Biology M178.) Lecture, four hours; laboratory, three hours; outside study, eight hours. Dynamic biosystems modeling and computer simulation methods for studying biological and medical processes at multiple levels of organization. Control system, multicellular, compartmental, predator-prey, pharmacokinetic (PK), pharmacodynamic (PD), and other structural modeling methods applied to life sciences problems at molec-
ular, cellular (biochemical pathways/networks), organ, and organismic levels. Both theory- and data-driven modeling, with focus on translating biomodeling goals and data into mathematics models and implementing them for simulation and analysis. Basics of numerical simulation algorithms, with modeling software exercises in class and PC laboratory assignments. Concurrently scheduled with course CM286. Letter grading.

157. Research Communication in Computational and Systems Biology. (4) Same as Bioengineering CM187 and Computational and Systems Biology M158.) Lecture, four hours; outside study, eight hours. Requisite: course M182 or CM186 or Computational and Systems Biology M150. Closely directed, interactive, and real research experience in active quantitative systems biology research laboratory. Discussion of research topics of current interest in scientific community, appropriate to student interests and capabilities. Critiques of oral presentations and written progress reports explain how to proceed with research results. Major emphasis on effective research reporting, both oral and written. Concurrently scheduled with course CM287. Letter grading.

188. Special Courses in Computer Science. (4) Lecture, four hours; discussion, two hours; outside study, two hours. Requisite: course 194. Research Group Seminars: Computer Science. (4) Seminar, four hours; outside study, two hours. Designed for graduate computer science students. Seminar for undergraduate students taught on experimental or temporary basis, such as those taught by resident and visiting faculty members. May be repeated for credit with topic or instructor change. Letter grading. 188SA. Individual Studies for USIE Facilitators. (1) Tutorial, to be arranged. Enforced corequisite: Honors Collegium 101E. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to discuss selected USIE seminar topic, conduct preparatory research, and begin preparation of syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading. 188SB. Individual Studies for USIE Facilitators. (1) Tutorial, to be arranged. Enforced corequisite: Honors Collegium 101E. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to finalize course syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.

188SC. Individual Studies for USIE Facilitators. (2) Tutorial, to be arranged. Enforced corequisite: Honors Collegium 101E. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor while facilitating USIE 88S course. Individual contract with faculty mentor required. May not be repeated. Letter grading.

192. Methods and Application of Collaborative Learning Theory in Life Sciences. (2) Seminar, two hours; clinic, four hours. Requisites: course 192A or Life Sciences 180A (may be taken concurrently), and at least one term of prior experience in same course in which collaborative learning theory is practiced and refined under supervision of instructors. With instructor guidance, students apply pedagogical principles based on current education research, assist with development of innovative instructional materials, and receive frequent feedback on their progress. May be repeated for credit with instructor consent. Letter grading.

192A. Introduction to Collaborative Learning Theory and Practice. (1) Seminar, one hour; outside study, two hours. Training seminar for undergraduate students who are selected for learning assistance (LA) program. Exploration of current trends in pedagogy and education research focused on methods of learning and their practical application in small-group settings. Practice in active communication skills with constant assessment of and feedback on progress. Letter grading.

194. Research Group Seminars: Computer Science. (4) Seminar, four hours; outside study, eight hours. Requisite: course 194. Research Group Seminars: Computer Science. (4) Seminar, four hours; outside study, eight hours. Designed for graduate computer science students who are part of research group. Discussion of research methods and current literature in field or of research of faculty members or students. May be repeated for credit. Letter grading.

199. Directed Research in Computer Science. (2 to 8) Tutorial, to be arranged. Limited to juniors/seniors. Supervised individual research or investigation under guidance of faculty mentor. Culminating paper or project required. May be repeated for credit with approval of individual, contract; enrollment permissions available in Office of Academic and Student Affairs. Letter grading.

Graduate Courses

201. Computer Science Seminar. (2) Seminar, four hours; outside study, two hours. Designed for graduate computer science students currently scheduled with course CM286. Letter grading. 202. Advanced Computer Science Seminar. (4) Seminar, four hours; outside study, eight hours. Preparation: completion of major field examination in computer science. Current computer science research into theory of, analysis and synthesis of, and applications of information processing systems. Each member completes one tutorial and one or more original pieces of work in one specialized area. May be repeated for credit. S/U grading.

205. Health Analytics. (4) Lecture, four hours; outside study, two hours. Designed for graduate computer science students. Review of Markov chains and baby queueing theory. Introduction to bioinformatics and methodologies, as Bioinformatics M221, Chemistry CM260A, and one course from Biostatistics 100A, Civil Engineering 110, Electrical Engineering 131A, Mathematics 170A, or Statistics 100A. Required: Concurrently scheduled with course CM221. Letter grading.

211. Network Protocol and Systems Software Design for Wireless and Mobile Internet. (4) Lecture, four hours; outside study, eight hours. Requisite: course 118. Focus on mobile information access: changing network models, and protocols. Includes (1) networking fundamentals: design philosophy of TCP/IP end-to-end arguments, and protocol design principles, (2) networking protocols: 802.11 MAC standard, packet scheduling, mobile IP, ad hoc routing, and wireless TCP, (3) mobile computing systems software: middleware, services, and applications, and (4) topical studies: energy-efficient design, security, location management, and quality of service. Letter grading.


M213A. Embedded Systems. (4) Same as Electrical and Computer Engineering M221A. Lecture, four hours; discussion, one hour; outside study, seven hours. Designed for graduate computer science and electrical engineering students. Methodologies and technologies for designing embedded systems. Topics include hardware and software platforms for embedded systems, techniques for modeling and specification of system behavior, software organization, real-time operating systems, real-time communication and packet scheduling, low-power battery and energy-aware system design, timing synchronization, fault tolerance and debugging, and techniques for hardware and architecture optimization. Theoretical foundations as well as practical design methods. Letter grading.

M213B. Energy-Aware Computing and Cyber-Physical Systems. (4) Same as Electrical and Computer Engineering M220B.) Lecture, four hours; outside study, eight hours. Requisite: course M51A or Electrical and Computer Engineering M16. Recommended: concurrent course 111, and one of 108AB or Electrical and Computer Engineering M116C. System-level management and cross-layer methods for power and energy consumption in computing and communication at various scales ranging from embedded, mobile, personal, enterprise, and data-center scale. Computing, networking, sensing, and control technologies and algorithms for improving energy sustainability in human-centric and cyber-physical systems. Modeling of energy consumption, energy sources, and energy storage; dynamic power management; power-performance scaling and energy proportionality; duty-cycling, power-aware scheduling; low-power protocols; battery modeling and management; thermal management; sensing of power consumption. Letter grading.

216. Network Architectures. (4) Lecture, four hours; outside study, eight hours. Recommended preparation: one course on networks. Requisite: course 211. Introduction to algorithms for routers and servers. Models of network devices and hardware design. Principles for efficient implementation of algorithms (exact match, prefix lookups, advanced cardiac life support), fair queueing implementations, crossbar and scalable switches, with examples from well-known networking devices. Advanced traffic measurement and network security. Letter grading.

217A. Internet Architecture and Protocols. (4) Lecture, four hours; outside study, eight hours. Enforced requisite: course 118. Focus on mastering existing set of Internet protocols. Introduces core transport protocols, routing protocols, DNS, NTP, and security protocols such as DNSSEC, to understand principles behind design of these protocols, appreciate their design tradeoffs, and learn lessons from their operations. Letter grading.

217B. Advanced Topics in Internet Research. (4) Lecture, four hours; discussion, two hours. Outside study, six hours. Requisite: course 217A. Designed for graduate students of Internet protocoling and advanced Internet history and fundamental principles underlying TCP/IP protocol design. Discussion of current Internet research topics, including latest research results in routing protocols, transport protocols, network measurements, network security protocols, and clean-slate approach to network architecture design. Fundamental issues in network protocol design and implementations. Letter grading.


219. Current Topics in Computer System Modeling Analysis. (4) Lecture, eight hours; outside study, four hours. Review of current literature in area of computer system modeling analysis in which instructor has developed special proficiency as consequence of research interests. Students report on selected topics. May be repeated for credit with consent of instructor. Letter grading.

221. Introduction to Bioinformatics. (4) Same as Bioinformatics M221, Chemistry CM260A, and Human Genetics M260A.) Lecture, four hours; discussion, two hours. Requisites: course 32 or Program in Computing 10C with grade of C– or better, and one course from Biostatistics 100A, Civil Engineering 110, Electrical Engineering 131A, Mathematics 170A, or Statistics 100A. Concurrently scheduled with course CM221. Letter grading.

222. Algorithms in Bioinformatics. (4) Same as Bioinformatics M222 and Chemistry CM260B.) Lecture, four hours; discussion, two hours. Requisites:
course 32 or Program in Computing 10C with grade of C– or better, and one course from Biostatistics 100A, Civil Engineering 110, Electrical Engineering 131A, Mathematics 170A, or Statistics 100A. Course CM221 is not requisite to CM222. Designed for engineering students and for students from biological science, and medical school. Development and application of computational approaches to biological questions, with focus on formulating interdisciplinary problems as computational problems and then solving these problems using computational techniques from statistics and computer science. Concurrently scheduled with course CM122. Letter grading.

CM224. Machine Learning Applications in Genetics. (4) (Same as Bioinformatics M224 and Human Genetics CM224.) Lecture, four hours; discussion, two hours; outside study, six hours. Requisites: course 32 or Program in Computing 10C with grade of C– or better, Mathematics 33A, and one course from Civil Engineering 110, Electrical and Computer Engineering 131A, Mathematics 170A, or Statistics 100A. Designed for engineering students as well as students from biological sciences and medical school. Introduction to computational analysis of genetic variation and computation for comparative re-search in genetics and genomics. Topics include genetic information, and genomics. Focus on formulating interdisciplinary problems as computational problems and then solving those problems using computational techniques from statistics and computer science. Concurrently scheduled with course CM124. Letter grading.

M225. Computational Methods in Genomics. (4) (Same as Bioinformatics M225 and Human Genetics M265.) Lecture, two and one half hours; discussion, two and one half hours; outside study, seven hours. Introduction to computational approaches in bioinformatics, genomics, and computational genetics and preparation for computational interdisciplinary research in genetics and genomics. Topics include gene analysis, regulatory genomics, association analysis, association study design, isolated and admixed populations, population substructure, human structural variation, model organisms, and genomic technologies. Computational techniques and methods include those from statistics and computer science. Letter grading.

M226. Machine Learning in Bioinformatics. (4) (Same as Bioinformatics M226 and Human Genetics M226.) Lecture, four hours; outside study, eight hours. Enforced requisite: course 32 or Program in Computing 10C with grade of C– or better. Required of: one course from Biostatistics 100A, 100A, Civil Engineering 110, Electrical Engineering 131A, Mathematics 170A, or Statistics 100A. Familiarity with probability, statistics, linear algebra, and algorithms expected. Designed for engineering students as well as students from biological sciences and medical school. Biology has become data-intensive science. Bottleneck in being able to make sense of these processes has shifted from data generation to statistical models and inference algorithms that can analyze these datasets. Statistical machine learning provides important solutions to this challenge. Knowledge gained in this course offers new challenges to field of machine learning. Examination of statistical and computational aspects of machine learning techniques and their application to key biological questions. Letter grading.

M229S. Seminar: Current Topics in Bioinformatics. (4) (Same as Biological Chemistry M229S and Human Genetics M229S.) Seminar, four hours; outside study, eight hours. Designed for graduate engineering students as well as biological science medical school. Introduction to current topics in bioinformatics, genomics, and computational genetics and preparation for computational interdisciplinary research in genetics and genomics. Topics include genome analysis, regulatory genomics, association analysis, association study design, isolated and admixed populations, population substructure, human structural variation, model organisms, and genomic technologies. Computational techniques include those from statistics and computer science. May be repeated for credit with topic change. Letter grading.

230. Software Engineering. (4) Lecture, four hours; discussion, two hours. Recommended preparation for undergraduates: prior software engineering course. Required of: course 32. Course is designed for undergraduate-level knowledge of data structures and object-oriented program languages. As software systems become increasingly large and complex, automated software engineering analysis and development tools play important role in various software engineering tasks, such as design, construction, evolution, and testing, and debug. Topics include foundations, techniques, tools, and applications of automated software engineering technology. Development, extension, and evaluation of mini automated software engineering analysis tool and assessment of how tool fits into software development process. Introduction to current research topics in automated software engineering. SU or letter grading.

231. Types and Programming Languages. (4) Lecture, four hours; outside study, eight hours. Requisites: course 131. Introduction to static type systems and their usage in programming language design and software research. Concepts such as computa-tional lambda calculus, type soundness proofs, types for mutable references, types for exceptions. Parametric polymorphism, type-safe types and type-safety; type inference, type checking, and type synthesis. Combinational parametric polymorphism and subtyping. Types for modules, parameterized modules. Formal specification and implementation of variety of type systems, and to a lesser degree extension literature on modern applications of type systems. Letter grading.

232. Static Program Analysis. (4) Lecture, four hours; outside study, eight hours. Requisite: course 132. Introduction to object-oriented programs and its usage for optimization and bug finding. Class hierarchy analysis, rapid type analysis, equality-based analysis, subset-based analysis, flow-insensitive and flow-sensitive analysis, context-insensi-tive and context-sensitive analysis. Soundness proofs for static analyses. Efficient data structures for static analysis information such as directed graphs and binary decision diagrams. Flow-directed type inlining, type-safe method inlining, synchronization optimization, deadlock detection, security vulnerability detection. Formal specification and implementation of variety of static analyses standing in front of research literature on modern applications of static analysis. Letter grading.

233A. Parallel Programming. (4) Lecture, four hours; outside study, eight hours. Requisite: course 131. Mutual exclusion and resource allocation in distributed systems; primitives for parallel computation: specification of parallelism, interprocess communica-tion and synchronization, atomic actions, binary and multiway rendezvous; synchronous and asynchronous languages: CSP, Ada, Linda, Maitsie, UC, and others; introduction to parallel program verification. Letter grading.

233B. Verification of Concurrent Programs. (4) Lecture, four hours; outside study, eight hours. Requisite: course 233A. Formal techniques for verification of concurrent programs. Topics include safety, liveness, program correctness, and verification; verification tools and techniques; weakest precondition semantics, Hoare logic, tem-poral logic, UNITY, and axiomatic semantics for se-lected parallel languages. Letter grading.

234. Computer-Aided Verification. (4) Lecture, four hours; discussion, two hours. Requisite: course 181. Introduction to theory and practice of formal methods for design and analysis of concurrent and embedded systems, with focus on algorithmic tech-niques for checking and model-based tools. Topics include semantics of reactive systems, invariant verification, temporal logic model checking, theory of omega automata, state-space extraction tools for compositional and hier-archical reasoning. Letter grading.

255. Advanced Operating Systems. (4) Lecture, four hours. Preparation: C or C++ programming experi-ence. Requisite: course 111. In-depth investigation of operating systems issues through guided construction of research operating system for PC machines and consideration of recent literature. Memory manage-ment and protection, interrupts and traps, processes, interprocess communication, preemptive multitasking, file systems. Virtualization, networking, profiling, re-search in operating systems and related projects, including extra challenge work. Letter grading.

236. Computer Security. (4) Lecture, four hours; outside study, eight hours. Requisites: courses 111, 118, and research interest. Letter grading.

237A. Prototyping Programming Languages. (4) Lecture, four hours; discussion, two hours; outside study, six hours. Enforced requisite: course 131. How different programming language paradigms provide different information, describe information, and offer trade-offs on many dimensions, such as modularity, extensibility, expressiveness, and safety. Concrete exploration of three major programming par-digms: functional, object-oriented, and logic—by prototyping implementations of lan-guages in each. Analysis of prototypes to shed light on design and structural properties of each language and to allow paradigm to evolve against one another. Hands-on experience implementing new abstractions, both as stand-alone languages and as li-braries in existing languages. Concurrently scheduled with course CM137A. Letter grading.

237B. Programming Language Design. (4) Seminar, four hours; outside study, eight hours. Enforced requisite: course 237A. Study of various program-ming language designs, from computing history and role of research operating systems in which instructor has developed special proficiency as consequence of research interests. May be repeated for credit with topic change. Letter grading.

240A. Databases and Knowledge Bases. (4) Lecture, four hours; outside study, eight hours. Requisite: course 143. Theoretical and technological foundation of Intelligent Database Systems, that merge database technology, knowledge representation, and advanced programming environments. Rule-based knowledge representation, spatio-temporal reasoning, and logic-based declarative querying/programming and object relational databases (ORDBs). Other topics include object-relational systems and data mining techni-ques. Letter grading.

240B. Advanced Data and Knowledge Bases. (4) Lecture, four hours; outside study, eight hours. Requisite: courses 143, 240A, and research interest. Letter grading.

242. Pictorial and Multimedia Database Manage-ment. (4) Lecture, three and one half hours; discussion, three minutes; laboratory, one hour; outside study, seven hours. Requisite: course 143. Multimedia data:

25A. Advanced Scalable Architectures. (4) Lecture, four hours; outside study, eight hours. Required: course 251B. Recommended: course 251A. State-of-art scalable multiprocessors. Interdependency among implementation technology, chip microarchitecture, hardware-software stack, system architecture, and building blocks, such as chip multiprocessors (CMP). On-chip and off-chip communication. Mechanisms for exploiting parallelism at multiple levels. Current research areas. Examples of chips and systems. Letter grading.

M258A. Design of VLSI Circuits and Systems. (4) (Same as Electrical and Computer Engineering M258A.) Lecture, four hours; discussion, two hours; laboratory, two hours. Required: courses 251A or Electrical and Computer Engineering M151B, and Electrical and Computer Engineering 115A. Recommended: Electrical and Computer Engineering M216C. Design of VLSI circuits and systems using modern integrated circuit design tools. Introduction to the design process and exploration of topics in fundamentals of VLSI circuit design, including circuit design and optimization, layout, and design for testability. May be taken as a pass/fail course for students who have not completed the prerequisites. Letter grading.
264A. Automated Reasoning: Theory and Applications. (4) Lecture, four hours; laboratory, four hours. Introduction to automated reasoning using propositional and first-order logic. Topics include syntax and semantics of formal logic; algorithms for logical reasoning, including satisfiability and entailment; syntactic and semantic restrictions on knowledge bases; effect of these restrictions on expressiveness, computational tractability; applications of automated reasoning to diagnosis, planning, design, formal verification, and reliability analysis. Letter grading.


M266B. Statistical Computing and Inference in Vision and Cognition. (4) (Same as Statistics M232B.) Lecture, three hours. Preparation: basic statistics, linear algebra (matrix analysis), computer vision. Introduction to broad range of algorithms for statistical inference and learning that could be used in vision, pattern recognition, natural language processing, and machine intelligence. Topics include Markov chain Monte Carlo computing, sequential Monte Carlo methods, belief propagation, partial differential equations. S/U or letter grading.

267A. Probabilistic Programming and Relational Learning. (4) Lecture, four hours; outside study, eight hours. Introduction to computational models of probability and statistical models of relational data. Study of relational Markov models, latent Dirichlet allocations, relational graphical models, and Markov logic networks, as well as various probabilistic programming languages. Covers their syntax and semantics, probabilistic programming languages, parameter estimation, structure learning algorithms, and theoretical properties of representation and inference. Expressive statistical modeling, how to formalize and reason about complex domains, causal reasoning, and encoding in- termediate machine learning models. Study of key applications in natural language processing, graph mining, computer vision, and computational biology. Letter grading.


268S. Seminar: Computational Neuroscience. (2) Seminar, two hours; outside study, four hours. For students undertaking thesis research. Discussion of recent and current research in computational neuroscience. Neural networks and connectionism as paradigm for parallel and concurrent computation in application to problems of perception, vision, language, reasoning, and robotics. May be repeated for credit. S/U grading.

269. Seminar: Current Topics in Artificial Intelligence. (4) Seminar, to be arranged. Review of current literature on advanced topics in artificial intelligence, in which instructor has developed special proficiency as consequence of research interests. Students report on selected topics. May be repeated for credit with topic change. Letter grading.

272AC. Computer Animation. (4) Lecture, four hours; discussion, two hours; outside study, six hours. Advanced course on course 272A. Re- quired one course 272A. Important features of character modeling, forward and inverse kinematics, forward and inverse dynamics, motion capture animation techniques, physics-based animation of particles and systems, and motion. Currently scheduled with course C174C. Letter grading.


267A. Pattern Recognition and Machine Learning. (4) (Same as Statistics M231A.) Lecture, three hours. Preparation: basic statistics, linear algebra (matrix analysis), computer vision. Introduction to pattern recognition and machine learning that could be used in computer vision, image processing, speech, bioinformatics, data mining. Specific topics include modeling plants using L-systems, biomechanical simulation and control, behavioral animation, reinforcement and neural-network learning of locomotion, cognitive robotics and artificial life. Exposure to effective computational modeling of natural phenomena of life and their incorporation into machine learning. Lecture, laboratory, and discussion. Topics include notions of hardness, one-way functions, hard-core bits, pseudorandom generators, mathematical primitives, software obfuscation. May be repeated for credit with topic change. Letter grading.

M272A-M272B. Topics in Applied Number Theory. (4) Lecture, four hours; laboratory, four hours; discussion, two hours; outside study, eight hours. Basic number theory, including congruences and prime numbers. Cryptography: public-key and discrete log cryptosystems. Attacks on crypto- graphic primitives. Use of cryptography in computer security; software protection; threshold cryptography; identity-based cryptography; private information retrieval; protection against man-in-the-middle attacks; voting protocols; identification protocols; digital signatures, lower bounds on use of crypto- graphic primitives, software obfuscation. May be repeated for credit with topic change. Letter grading.

276A. Probabilistic Programming and Relational Learning. (4) Lecture, four hours; outside study, eight hours. Enforced requisite: course 276A. Recommended: course 161. Introduction to areas. Subtitles of some current sections: Principles of Algorithms; Algorithms for Particular Application Areas; Graphs and Networks. May be repeated with change of topics.

280A-280ZZ. Algorithms. (4) Each course, four hours; outside study, eight hours. Requisite: course 180. Additional requisites for each offering announced in advance by department. Selections from design, analysis, optimization, and implementation of algorithms; computational complexity and general theory of algorithms; algorithms for particular application areas; modeling and simulation. Design and Analysis (280A); Distributed Algorithms (280D); Graphs and Networks (280G). May be repeated for credit with consent of instructor and topic change. Letter grading.

280AP. Approximation Algorithms. (4) Lecture, four hours; outside study, eight hours. Requisite: course 180. Background in discrete mathematics helpful. Theoretically sound techniques for dealing with NP-hard problems. Inability to solve these problems effi- ciently means algorithmic techniques are based on approximation—finding solution that is near to best possible in efficient running time. Coverage of approx- imation algorithms for covering problems, with algorithm design techniques that include primal- dual method, linear program rounding, greedy algo- rithms, and local search. Letter grading.

281A. Computation and Complexity. (4) Lecture, four hours; discussion, two hours; outside study, eight hours. Requisite: course 181 or compatible background. Concepts funda- mental to study of discrete information systems and theory of computing, with emphasis on regular sets of strings. Topics include regular expressions, finite automata, regular languages, closure properties, machine characterizations, nondeterminism, decidability, unsolvable problems, "easy" and "hard" problems, PTIME/NPTIME. Letter grading.

282A. Cryptography. (4) (Same as Mathematics M209A.) Lecture, four hours; outside study, eight hours. Introduction to theory of cryptography, cryptographic constructions, algorithms, and systems. Topics include notions of hardness, one-way func- tions, hard-core bits, pseudorandom generators, pseudorandom functions and pseudorandom permu- tations, semantic security, public-key and private-key encryption, secret-sharing, message authentication, digital signatures, interactive proofs, zero-knowledge proofs, collision-resistant hash functions, commitment protocols, key-agreement, contract signing, and two-party secure computation with static security. Letter grading.

M282B. Cryptographic Protocols. (4) (Same as Mathematics M209B.) Lecture, four hours; outside study, eight hours. Requisite: course M282A. Consider- ations for advanced cryptographic protocol design and analysis. Topics include noninteractive zero- knowledge proofs; zero-knowledge arguments; con- current zero knowledge; IP=PSpace proof; stronger notions of security for public-key encryption, including chosen-plaintext security; secure multiparty computation; dealing with dynamic adversary; nonmalleability and composability of secure protocols; software protection; threshold cryptography; identity-based cryptography; private in- formation retrieval; protection against man-in-the-middle attacks; voting protocols; identification protocols; dig- ital signatures, lower bounds on use of crypto- graphic primitives, software obfuscation. May be repeated for credit with topic change. Letter grading.

M283A-M283B. Topics in Applied Number Theory. (4) Lecture, four hours; laboratory, four hours; discussion, two hours; outside study, eight hours. Basic number theory, including congruences and prime numbers. Cryptography: public-key and discrete log cryptosystems. Attacks on crypto- graphic primitives. Use of cryptography in computer security; software protection; threshold cryptography; identity-based cryptography; private information retrieval; protection against man-in-the-middle attacks; voting protocols; identification protocols; dig- ital signatures, lower bounds on use of crypto- graphic primitives, software obfuscation. May be repeated for credit with topic change. Letter grading.

284A-284ZZ. Topics in Automata and Languages. (4) Each course, four hours; outside study, eight hours. Requisite: course 181. Additional requisites for each offering announced in advance by department. Selections from families of formal languages, grammars, machine models, context-free languages and their generalizations, parsing; multidimensional grammars, developmental systems; machine-based synthesis. Subtles of some current sections: Probabilistic Context-Free Languages. Letter grading.

CM286. Computational Systems Biology: Modeling and Simulation of Biological Systems. (5) (Same as Bioengineering CM286.) Lecture, four hours; labora- tory, three hours; outside study, eight hours. Dynamic computational models of biological systems, including metabolic and regulatory pathways, as well as various structural models applied to life sciences at multiple levels of organization. Control system, multicompartamental, predator-prey, pharma- cokinetics (PK), pharmacodynamics (PD), other structural modeling methods applied to life sciences problems at molecular, cellular (biochemical path- ways/networks), organ, and organismic levels. Both theory- and data-driven modeling, with focus on translating biomodeling goals and data into mathe- matics models and implementing them for simulation and analysis. Basics of numerical simulation algo- rithms, with modeling software exercises in Linux and PC laboratory assignments. Concurrently scheduled with course CM186. Letter grading.

CM287. Research Communication in Computational and Systems Biology. (4) (Same as Biome- dical Engineering CM287.) Lecture, four hours; outside study, eight hours. Requisite: course M182 or CM286 or Computational and Systems Biology M150. Closely directed, interactive, and real research experience in advanced, interdisciplinary, and contemporary research laboratories. Direction on how to focus on topics of current interest in scientific community, appropriate to student interests and capabilities. Critiques of oral presentations and written progress to proceed with search for research results. Major emphasis on effective research reporting, both oral and written. Concurrently scheduled with course CM187. Letter grading.

288S. Seminar: Theoretical Computer Science. (2) Seminar, two hours; outside study, six hours. Requi- sites: courses 280A, 281A. Intended for students un- dertaking thesis research. Discussion of advanced
CONSERVATION OF ARCHAEOLOGICAL AND ETHNOGRAPHIC MATERIALS

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Stella E. Nair, PhD (Art History)
Ellen J. Pearlstein, PhD (Information Studies)
Deepak Rajagopal, PhD (Environment and Sustainability)
Lothar von Falkenhausen, PhD (Art History)
Glenn Wharton, PhD (Art History)

Scope and Objectives
The UCLA/ Getty Conservation interdepartmental program provides an excellent platform for education and research in the conservation of material culture. It supports discovery and innovation through research that transcends the boundaries of traditional disciplines. It uniquely trains cultural property professionals in the best practices and methods of cultural heritage conservation through various pedagogical approaches including, but not limited to, core teaching and learning, independent research, and laboratory experience in museums and in the field. Finally, it positively impacts the community by engaging with a more informed public that would seek to protect cultural heritage from imminent threats.

The program offers two degree options: a practice-focused three-year MA degree in Conservation of Archaeological and Ethnographic Materials and a research-focused PhD degree in Conservation of Material Culture. Though the two degrees share a scholarly approach to the discipline and strong commitment to the advancement of the conservation profession, they provide distinctive competencies, preparing students for different careers in the cultural heritage section and beyond.

The aim of the program is to train the next generation of multidisciplinary researchers, heritage prac-

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Conservation of Archaeological and Ethnographic Materials

Lower-Division Courses

19. Fiat Lux Freshman Seminars. (1 Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in the areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Courses

C120. Field Methods in Archaeological Conservation: Readiness, Response, and Recovery. (4) Laboratory, four hours. Overview of risks (direct and indirect) and materials vulnerability in situ cultural heritage and movable archaeological materials in emergency situations (rescue excavations, disasters, conflicts), with emphasis on readiness, first aid response, and recovery. Readiness focuses on preparedness and preventive measures including security, triage, emergency plans, and training. Recovery is based on documentati


M210L. Cultural Materials Science Laboratory: Technical Study. (4) (Same as Materials Science M213L.) Laboratory, four hours. Requisites: course M215 or M216 and one course from 260 through 265. Corequisites: course M210 (or Materials Science C112 or CM112). Research-based laboratory course which develops the ability to work in multidisciplinary teams. The objectives of the program are to provide students with a solid educational base and practical training in the conservation of both archaeological and ethnographic materials, as well as an appreciation of the often complex issues related to significance, access, and use of these materials that can be very different from the criteria for conservation of fine art or historical materials. The special focus of the program and its interdisciplinary curriculum serves the archaeological, scientific, native, and cultural minority communities alike and offers a nexus at the boundaries of conservation, archaeology, ethnography, the natural sciences, and engineering. The partnership between UCLA and Getty is establishing the program ensures that both a major research university and an institution with a principal mandate for conservation of world cultural heritage are working to create rich and vibrant conservation training opportunities. The program helps students develop working relationships with a wide range of colleagues in the Getty Conservation Institute, the J. Paul Getty Museum, other local museums and cultural organizations, and different departments and programs at UCLA.

Graduate Study

Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Division website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Graduate Degrees

The Conservation of Archaeological and Ethnographic Materials Program offers a Master of Arts (MA) degree and Conservation of Archaeological and Ethnographic Materials, and a Master of Science (MS) and Doctor of Philosophy (PhD) degrees in Conservation of Material Culture.
servation of cultural materials, illustrating how cultural materials may have been treated differently according to those values. Letter grading.

222. Conservation and Ethnography. (4) Laboratory, four hours. Designed for graduate conservation students. Introduction to work as conservator, with an emphasis on taphonomic problems found in cultural materials. Students learn different models for tribal museums and cultural centers, and the importance of material selection and properties in baskets they are treating. Letter grading.

224. Issues in Preservation and Management of Archaeological and Cultural Sites. (4) Seminar, three hours. Designed to offer practical model of preservation and management for heritage sites in Arizona. Reflects real-case study scenarios. Adaptive management planning following iterative processes for sustainable heritage preservation addressing threats and challenges such as climate change and global warming, conflicts, and neglect. Consideration of significance and value of heritage sites and role of stakeholders. Investigation of methods of evaluation of physical condition and development of risk assessment to physical risks in site preservation management, including visitors’ organization, urban development, socioeconomic growth, and tourist development.


242. Conservation Laboratory: Rock Art, Paintings, and Murals. (4) Required of graduate conservation students. Treatment of organic materials used to produce ethnographic and archaeological cultural heritage: wood, bark, paper, bast fibers, grasses. Related materials, processing, and properties of natural materials using basic concepts from biology and chemistry. Structural stability and deterioration phenomena of these materials as found in cultural collections. Letter grading.


260. Structure, Properties, and Deterioration of Materials: Ceramics, Glass, Glazes. (2) Lecture, three hours. General introduction to different types of ancient ceramic and glass materials. Relationship between composition (chemistry), structure (crystals, molecular arrangement, and microstructure), and properties of ceramics, glasses, and glazes. Nature of fire and faience deterioration explained using basic concepts from physics and chemistry. Chemical, optical, and structural properties; phenomena; defects, and products of alteration of ceramics and vitreous artifacts. Hands-on examination of variety of samples and artifacts. Letter grading.


262. Structure, Properties, and Deterioration of Materials: Organics I. (2) Lecture, one hour; laboratory, one hour. General introduction to different types of ancient organic materials used to produce ethnographic and archaeological cultural heritage. Relationship between composition, processing, and properties of natural and manufactured materials used basic concepts from biology and chemistry. Structural stability and deterioration phenomena of these materials as found in cultural collections. Letter grading.

263. Structure, Properties, and Deterioration of Materials: Metals. (2) Lecture, three hours. General introduction to different types of ancient and ethnographic metals. Relationship between composition (chemistry), structure (crystals, molecular arrangement, and microstructure), and properties of metals explained using basic concepts from physics and chemistry. Chemical, optical, and structural properties. Deterioration phenomena, defects, and products of deterioration of metallic artifacts. Hammon analysis and examination of variety of samples and artifacts. Letter grading.

264. Structure, Properties, and Deterioration of Materials: Rock Art, Wall Paintings, Mosaics. (2) Same as Materials Science M214). Lecture, three hours. Required: recommended preparation: basic knowledge of general chemistry and materials science. Introduction to materials and techniques of rock art, wall paintings (including painted surfaces on cement and composite decorative architectural surfaces), and mosaics. Archaeological and ethnographic context, techniques, and materials. Pigments, colorants, and binding media. Chemical, optical, and structural properties. Relationship between composition (chemistry), structure (crystals, molecular arrangement, and microstructure), and properties explained using basic concepts from physics and chemistry. Intrinsic attributes and resistance to weathering. Chemical sources, and mechanisms of deterioration (physical, chemical, and biochemical). Letter grading.

265. Structure, Properties, and Deterioration of Materials: Organic Materials I. (2) Laboratory, one hour. Introduction to plant-based organic materials used to produce ethnographic and archaeological cultural heritage: wood, bark, paper, bast fibers, grasses. Related materials, processing, and properties of natural materials using basic concepts from biology and chemistry. Structural stability and deterioration phenomena of these materials as found in cultural collections. Letter grading.

280. Special Topics in Conservation. (2 or 4) Lecture, three hours; laboratory, one hour. Special topics on theoretical and practical subjects in conservation such as focused materials studies, new conservation approaches, advanced materials, or current special work by core program faculty or visiting scholars. If appropriate, field trips may be arranged. May be repeated for credit with topic or instructor change. Letter grading.

298. Conservation Program Internship. (6 or 12) Fieldwork, 20 or 40 hours. Open only to Conservation MA program graduate students who have completed first year of conservation program coursework. Supervised conservation-related professional and research-based training in field through participation in field projects (i.e., archaeological excavation, site management, innovative site conservation, and consultation), as well as in museum, library, archival, and collections conservation and science departments, regional and national laboratories, or at other similar venues. All internships must be arranged by program and developed in collaboration between student, faculty members, and host institution/agency. S/U grading.

595. Directed Individual Studies. (2 to 6) Tutorial, seven hours. Limited to graduate conservation students. Individual guided studies that may include conservation research and/or surveys or treatment projects carried out at Villa laboratories or at local collection or analytical facility. To be arranged with program faculty members, and supervision may be shared between faculty members and outside specialists. Letter grading.

597. Preparation for PhD Qualifying Examination. (2 or 12) Tutorial, to be arranged. May not be applied toward PhD course requirement. May be repeated for credit. S/U grading.

598. MA Thesis Preparation. (2 to 12) Tutorial, two hours. For MA students, one hour. Development of research paper on conservation topic or treatment-based investigation that can be theoretical in scope or practically oriented. Letter grading.

599. PhD Dissertation and Preparation. (2 to 12) Tutorial, to be taken twice. To be applied toward PhD course requirement. May be repeated for credit. S/U grading.
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DENTISTRY
School of Dentistry
AO-111 School of Dentistry
Box 951762
Los Angeles, CA 90095-1762

Dentistry
310-825-9789
Paul H. Krebsbach, DDS, PhD, Dean

Scope and Objectives
The UCLA School of Dentistry offers the following courses for general campus students. Dentistry 199 and 199H are individual special studies courses for UCLA undergraduates with definitive research interests and abilities applicable to dentistry. The subject areas include oral biology, clinical research, and dental health policy. Interested students should contact the associate dean of research at 310-825-6401 to obtain the names and areas of interest of participating School of Dentistry faculty members.

Dentistry
Lower-Division Courses
19. Fiat Lux Freshman Seminars. (1) Seminar; one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Courses
199. Individual Special Studies. (2 to 8) Tutorial, to be arranged. Studies in dentistry and related subject areas appropriate for training of particular students, with required reading assignments or laboratory work leading to final oral or written examination. May be repeated for maximum of 16 units. P/NP or letter grading.

199H. Individual Special Studies (Honors). (2 to 8) Tutorial, to be arranged. Studies in dentistry and related subject areas appropriate for training of particular students, with required paper submitted at end of course in addition to final examination (paper to be of publication quality as judged by course mentor). May be taken for maximum of 8 units. P/NP or letter grading.

Graduate Courses

441C. Introduction to Healthcare. (2) Lecture, two hours. Description and analysis of American dental care system from historical, ethical, and legal perspectives. Assessment of how dentistry fits within general provision of healthcare services in America, with comparisons to dental care provisions in other countries. S/U grading.

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Scope and Objectives
The Department of Design/Media Arts offers the Bachelor of Arts and Master of Fine Arts degrees. The BA degree focuses on visual communication design, with emphasis on digital media. The MFA degree focuses on media arts. These uniquely challenging programs invite students to balance aesthetic sensibility with logical reasoning, formal theories with practical application, and contemporary thought with historical perspective.

The undergraduate program begins with the study of basic design elements and processes: form, color, drawing, letterforms and typography, motion, and interactivity. Historical perspectives and social issues are also introduced. At the upper-division level, studio courses explore current uses of interactive media and new directions in visual communication design, including the study of time and motion, as well as virtual form and space in computer-generated environments. Through a balance of courses in theory, criticism, and practice, students develop an understanding of design principles. Most courses are taught as studios of no more than 22 students, which encourages individual growth and fosters a sense of community within the department.

The two-year Master of Fine Arts (MFA) program fosters mature, professional-quality work utilizing the most current technologies in the field of media arts. The program focuses on developing an individual thesis project that incorporates in-depth research and theoretical exploration of a topic, culminating in a final exhibition of work.

Facilities and equipment in the department enable students to create work in two, three, and four dimensions. They expand opportunities for students to develop interactive media applications in a networked environment and advanced computer graphics. The department equipment includes computer laboratories with high-end PC and Macintosh computers and relevant software for the creation of works for print, web, video, and other media, a fabrication laboratory with equipment ranging from table saws to three-dimensional printers to a CNC machine to create physical objects combined with electronics, and a print laboratory with high-quality printers.

The Department of Design/Media Arts reserves the right to hold for exhibition purposes examples of any work done in classes and to retain for the permanent collection of its galleries such examples as may be selected.

Undergraduate Study
The Design/Media Arts major is a designated capstone major. Students are required to complete an advanced project of their own that entails full engagement with the design process. Through their capstone work, students demonstrate their capacities for research, ideation/concept development, creative and design direction, communication strategy, design, production/fabrication, and critical analysis. Capstone courses focus on career choice, and final projects are showcased at the spring senior show.

Design | Media Arts BA
Capstone Major

Learning Outcomes
The Design/Media Arts major has the following learning outcomes:

• Deep understanding of the field through immersion
• Exploration and development of ideas through listening to and observation of patterns
• Definition of an event and its surroundings and mise-en-scène, and the ethos of the student’s idea
• Development of the specifics of a design

• Conceptualization of how an idea reaches its audience, how and when it launches, and how it stays relevant and vibrant
• Designed specifics of each element of the visual vocabulary—from graphic elements to photography, videography, and illustrations—including
definiton of spatial, material, and auditory elements

• Thorough research of appropriate and relevant production methods

• Analysis, review, and critique of others’ work

Preparation for the Major
Required: Design | Media Arts 8, 10, 21, 22, 24, 25, 28.

The Major
Required: Twelve upper-division courses:
Design | Media Arts 101, 104; six courses selected from 152, 153, 154, 156, 157, 161, 163; three courses selected from 160, 171, 172, 173; and one capstone course selected from 159A, 159B, or 159C.

It is recommended that students have each term’s program approved by the departmental adviser.

Note: Consult the Schedule of Classes for courses limited to majors only.

Graduate Study
Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Division website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Graduate Degree
The Department of Design | Media Arts offers the Master of Fine Arts (MFA) degree in Design | Media Arts.

Design | Media Arts Lower-Division Courses
1. Graphic Design. (2) Studio, 30 hours. Limited to high school students. Basic and advanced photography skills using digital cameras. Alteration/manipulation of photos using techniques from latest version of Adobe Photoshop. Uploading of images on Web or in print. Production of digital and print portfolio of student work. Field trips to surrounding West Los Angeles locales to shoot photos. May be repeated for credit without limitation. Offered only as part of Summer Institute. P/NP grading.

2. Web Design. (2) Studio, 30 hours. Limited to high school students. How Web design works: basic hand and can use for college applications. Offered only as part of Summer Institute. P/NP grading.

4. Audio Video Design. (2) Studio, 30 hours. Limited to high school students. Creation of storyboard for short documentary, commercial, or music video. Students shoot and edit their own work by learning fundamentals of preproduction and postproduction using latest digital software. Adobe Premiere and After Effects, to create their work. Burning of DVD of finished production. Visits from professional video producer to help guide students in creating their own videos. May be repeated for credit. Offered only as part of Summer Institute. P/NP grading.

5. Introduction to Design | Media Arts. (4) Studio, 40 hours. Limited to high school students. Two-week summer course designed to meet needs of students interested in exploring their creative potential within their own fields of design media arts, with focus on concepts of narrative and storytelling. Introduction to and exploration of various media such as graphic, web, game, and video design with goal of combining and integrating these media to express and realize their narrative projects. Students work with most current software and technology. Each discipline is developing diverse skill sets while cultivating conceptual capabilities around storytelling project, and with experienced instructors and professionals in field to develop projects utilizing this comprehensive and integrative approach. Culminates in portfolios that may be used for college applications. Possible field trips. May be repeated for credit without limitation. Offered only as part of Summer Institute. P/NP grading.

6. Art/Science and Technology Studio/Laboratory. (4) Studio/laboratory, 40 hours. Limited to high school students. Two-week summer course, including lectures, required screenings, laboratory visits, field trips, and projects. Exploration of creative communication of scientific research and innovation to gain broad understanding of impact of science on contemporary art and popular culture, with focus on new sciences of biotechnology and nanotechnology. Development of proposals and ideas that could serve as prototypes for either art projects or scientific research study. P/NP grading.

8. Media Histories. (5) Lecture, three hours; outside study, 12 hours. Synthetic overview of optical media and aesthetic movements covering past two centuries: photography and industrialization/Romanticism (1850 to 1900), cinema and modernism (1900 to 1950), television and postmodernism (1950 to 2000), and digital media and unimodernism (2000 to 2050). How such movements can inform generative work and how understanding these media becomes essential in emerging era of digital humanities. P/NP or letter grading.

9. Art, Science, and Technology. (5) Lecture, three hours; discussion, one hour; outside study, 11 hours. Exploration of creative and impact of scientific and cultural innovations, technology-driven art inspired by science, and art/science collaborative projects. Introduction to vast array of cutting-edge research taking place on campus; scientific guest lecturers. Emphasis on art projects that use technology and respond to new scientific concepts. P/NP or letter grading.

10. Design Futures. (5) Lecture, three hours; discussion, one hour; laboratory, 12 hours. Focus on understanding design process, with emphasis on development of visual language; study of historic, scientific, technological, economic, and cultural factors influencing design in physical environment. P/NP or letter grading.

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating pathways of study at UCLA. P/NP or letter grading.

21. Drawing and Color. (4) Studio, six hours; outside study, six hours. For drawing, exploration of relation between concept and image creation while focusing on development of hands and eye skills. Combination of painting and software to be predominant way of exploring and presenting ideas regarding color. P/NP or letter grading.

22. Forms. (4) Studio, six hours; outside study, six hours. Interrelation of two-dimensional surfaces and three-dimensional forms with traditional and experimental materials as foundation for creativity; origination and solution of problems. P/NP or letter grading.

24. Motion. (4) Studio, six hours; outside study, six hours. Production and integration of traditional design tools, camera, and digital technologies for application to visual thinking and fundamentals of design. P/NP or letter grading.

25. Typography. (4) Studio, six hours; outside study, six hours. Focus on three typographic basics: letter, text, and grid. Introduction to fundamentals of typography. Assignments designed to develop understanding of form, scale, and structure as single elements and as texture in layout. Emphasis on grid (structure and layout) and information hierarchy to create successful typographic messages. P/NP or letter grading.

28. Interactivity. (4) Studio, six hours; outside study, six hours. Requisites: courses 21, 22, 25. Introduction to concept of interactivity and field of media art that follows history of computer as media for artistic exploration. Exploration of computer as tool for print, animation, and interactivity. Discussion of potential and ideas related to interactivity, with focus on required skills for creating interactive work. Development of programming skills in service of creating examples of media art. Concepts and skills taught enhance student ability to excel in future courses about Internet, animation, interactive media, and game design. Discussion and readings on four themes—form/programming/interactivity/programmation, and interface. P/NP or letter grading.

38. Honors Seminars. (1 Seminar, three hours. Limited to 20 students. Development of fundamental skills to prepare students interested in exploring their creative potential within fields of design media arts, with focus on concepts of narrative and storytelling. Introduction to and exploration of various media such as graphic, web, game, and video design with goal of combining and integrating these media to express and realize their narrative projects. Students work with most current software and technology. Each discipline is developing diverse skill sets while cultivating conceptual capabilities around storytelling project, and with experienced instructors and professionals in field to develop projects utilizing this comprehensive and integrative approach. Culminates in portfolios that may be used for college applications. Possible field trips. May be repeated for credit without limitation. Offered only as part of Summer Institute. P/NP grading.

99. Student Research Program. (1 to 2 Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Courses
101. Media Arts: Introduction. (5) Lecture, three hours; outside study, 12 hours. Limited to and required of Design | Media Arts majors. Survey of media arts, their history, aesthetics, and cultural roles from late-19th century to present. Focus on varieties of media arts within broad historical and cultural framework. Discussion of parallels and links with other cultural forms, including history of technology and various art and design practices. P/NP or letter grading.

104. Design Futures. (5) Lecture, three hours; outside study, 12 hours. Preparation: completion of preparatory major courses. Open to nonmajors with consent of instructor. Critical examination of design practice and theory of 21st century, incorporating historical as well as speculative methodologies. Consideration of how various design practices and techniques related to each other across cultures and media, with strong emphasis on communication design. P/NP or letter grading.

152. Tangible Media. (5) Studio, six hours; outside study, nine hours. Requisites: courses 22, 28, and 101 or 104. Through weeks of experimenting, encountering, analyzing, and critiquing, reevaluation of role of desktop computers (and their mice, trackpads, keyboards, screens, and gamepads) plays in forming our understanding of what is technically possible, sensible, logical, foolish, magical, and intuitive.

153. Video. (5) Studio, six hours; outside study, nine hours. Preparation: completion of preparation for major courses. Requisite: course 101 or 104. Use of video technology (video systems, cameras, displays, editing, and storage) to integrate image, sound, time,
and media. Emphasis on expression, continuity, and sequential patterns for video communication. P/NP or letter grading.

154. Word + Image. (5) Studio, six hours; outside study, nine hours. Preparation: completion of preparation for major courses. Requires: courses 21, 22, 25, and 161 or 163; or faculty member approval. Exploration of electronic and print media and communication through the use of images as medium and tool. Experience with programming basics includes procedural and object-oriented programming, two- and three-dimensional graphics, file I/O, color models, and image processing. Letter grading.

252B. Programming Media 2. (3) Studio, three hours; outside study, six hours. Enforced requisite: course 252A. Limited to majors. Exploration of use of computer programming within context of interactive design, microcontroller programming, and building kinetic and interactive physical artworks. Letter grading.

163. Narrative. (5) Lecture, six hours; outside study, nine hours. Preparation: completion of preparation for major courses. Requires: course 101 or 104. Provides wider understanding of arts that parallels world of 20th-century visual languages. Study of threads that allow viewer to connect story of one art form to another in richer context. Letter grading.

171. Topics in Design and Media Arts. (5) Studio, six hours; outside study, nine hours. Completion of preparation for major and upper-division core courses required. Requires: courses 101 or 104, 153, or 156. Selected topics in video art and animation explored through variety of approaches that may include projects, readings, discussions, research papers, and oral presentations. Topics announced in advance. May be repeated for credit with consent of instructor. Letter grading.

172. Topics in Video and Animation. (5) Studio, six hours; outside study, nine hours. Completion of preparation for major and upper-division core courses required. Requires: courses 101 or 104, and 153 or 156. Selected topics in video and animation explored through variety of approaches that may include projects, readings, discussion, research papers, and oral presentations. Topics announced in advance. May be repeated for credit with consent of instructor. Letter grading.

173. Topics in Visual Communication and Image. (5) Studio, six hours; outside study, nine hours. Completion of preparation for major and upper-division core courses required. Requires: courses 24, 28, 101, 104, 153, or 154. Selected topics in visual communication and image explored through variety of approaches that may include projects, readings, discussion, research, re-search papers, and oral presentations. Topics announced in advance. May be repeated for credit with consent of instructor. Letter grading.

189. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to upper division core courses. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

195A-195B. Capstone Senior Project. (5-5-5) Studio, six hours; outside study, nine hours. Preparation: completion of preparation for major courses. Limited to seniors. Focus on creating final project that can be showcased at Senior Show. Students can take two different courses in different terms or the same course twice in different terms. Total units for courses 195A, 195B, and 195C may not exceed 10 units, with maximum of 5 units per term. Letter grading. 195A. Interdisciplinary and Games. Requires: courses 101 or 104, 157, 161, and 160, 171, 172, or 173, and 174. Interactive media, including game design, interactive installations, digital websites, creative coding, and electronics. 195B. Video and Animation. Requires: courses 24, 28, 101, 104, 153, 156, and 160, 171, 172, or 173. Linear media, including storytelling, video, animation, modeling, editing, postproduction, and lighting. 195C. Virtual and Immersive. Requires: courses 24, 28, 101, 104, 154, and 160, 171, 172, or 173. Visual communication, editorial design, photography, typography, branding, and narrative environments.

160. Special Topics in Design | Media Arts. (5) Studio, six hours; outside study, nine hours. Completion of preparation for major and upper-division core courses required. Requires: course 101 or 104. Selected topics in design and media arts explored through variety of approaches that may include projects, readings, discussion, research papers, and oral presentations. Topics announced in advance. May be repeated for credit with consent of instructor. Fifteen units may be applied toward area studies. Letter grading.

161. Network Media. (5) Studio, six hours; outside study, nine hours. Preparation: completion of preparation for major courses. Requires: courses 28, 154, 161, and 163. Exploration of creative, technical, and critical tools to realize Internet-based projects. Focus on students gaining deeper understanding of Internet as creative platform—tools and their applications, how do you make things for it, and what do you want to say? Technical workshops on HTML, CSS, JavaScript, and design support development of series of studio projects using variety of network tools. Examination through discussion of cultural, social, political, and philosophical implications of Internet. Consideration of roles of race, gender, sexuality, disability, class, and power in increasingly networked world, and strategies of response as artists and designers. Examination and challenging of structuring power relationships, inequities, and biases embedded within network tools, technologies, and media. Letter grading.

Graduate Courses

200. Design | Media Arts Faculty Seminar. (2) Seminar, two hours. Limited to graduate students, upper-division media arts students. Designed to familiarize new graduate students with departmental faculty members and their creative work and research to help students select their faculty advisers. S/U grading.

252A. Programming Media 1. (3) Studio, three hours; outside study, six hours. Limited to majors. Introduction to computer programming within context of art and design. Exploration of conceptual space enabled by electronic media through exercises, presentations, discussions, and critiques. Weekly exercise balance conceptual and technique to reveal potential of computer as medium and tool. Experience with programming basics includes procedural and object-oriented programming, two- and three-dimensional graphics, file I/O, color models, and image processing. Letter grading.

252B. Programming Media 2. (3) Studio, three hours; outside study, six hours. Enforced requisite: course 252A. Limited to majors. Exploration of use of computer programming within context of interactive design, microcontroller programming, and building kinetic and interactive physical artworks. Letter grading.

269. Graduate Seminar. (4) Seminar, four hours. Designed for graduate design | media arts students. Survey of critical theories in media art and design. Critical examination of student work by peers, faculty members, and expert guests. Must be taken twice for MFA degree. May be repeated for credit with consent of adviser. Letter grading.

272. Introduction to Art | Science. (5) Seminar, three hours. For past 50 years artists have increasingly been collaborating with scientists and engineers, and discovery to actually collaborating with scientists and even residing and working in science laboratories. History of science in relation to artists’ interpretation of science, artists’ relationship to technology, and artists’ orientation to development of new forms of artistic expressions. Letter grading.

289. Special Topics in Media Arts. (3) Seminar, nine hours; outside study, six hours. Focus on relationship of type to content, with scheduled meetings to be arranged between faculty member and student as needed. Topics announced in advance. May be taken for maximum of 15 units. Letter grading.

375. Teaching Apprentice Practicum. (1 to 4) Seminar, to be arranged. Preparation: apprentice personnel employment as teaching assistant, associate, or fellow. Teaching apprenticeship under active guidance and supervision of regular faculty member responsible for curriculum and instruction at UCLA. May be repeated for credit. S/U grading.

403. Graduate Critique. (2) Seminar, three hours; outside study, three hours. Limited to second-year departmental graduate students. Development of body of work while working toward MFA degree, with one-to-one interaction between students and faculty members. May be repeated for credit. Letter grading.

405. Teaching Assistant Training Practicum. (2) Seminar, three hours; outside study, three hours. Forum for first-year teaching assistants for discussion and exploration of teaching pedagogy and classroom mechanics. Problems and practices of teaching design at college level, as well as role of teaching assistants within department. Designed to help new teaching assistants develop teaching skills and to orient them to department and University policies and resources. May not be applied toward degree requirements. S/U grading.

596. Directed Individual Study or Research. (2 to 8) Tutorial, to be arranged. May be repeated for credit with consent of adviser. S/U or letter grading.

597. Preparation for MFA Comprehensive Examination. (4 to 8) Tutorial, to be arranged. Designed for second-year MFA students to prepare for comprehensive examination. May be repeated for credit with consent of adviser. S/U grading.
Digital Humanities
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College of Letters and Science

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Maria (Maite) T. de Zubiaurre, PhD (Germanic Languages, Spanish and Portuguese)
F. Tobias Higbie, PhD (History)
Christopher Johanson, PhD (Classics)
Christopher M. Kelty, PhD (Anthropology, Information Studies, Society and Genetics)
Peter B. Lunenfeld, PhD (Design/Media Arts)
David W. MacFadyen, PhD (Comparative Literature, Musicology)
Stephen D. Mamber, PhD (Film, Television, and Digital Media)
Miriam Posner, PhD (Information Studies)
Todd S. Presner, PhD (Comparative Literature, Germanic Languages)
Janice L. Reiff, PhD (History, Statistics)
Ashley Sanders Garcia, PhD (Minor Vice Chair)
Daniel S. Snelson, PhD (English)
Francis F. Steen, PhD (Communication)
Willeke Z. Wendrich, PhD (Near Eastern Languages and Cultures)

Scope and Objectives

The Digital Humanities minor is an interdisciplinary minor that studies the foundations and futures of the digital world. Digital humanities interprets the cultural and social impact of the new information age as well as creates and applies new technologies to answer cultural, social, and historical questions, both those traditionally conceived and those enabled by new technologies. The interdisciplinary curriculum draws on faculty members from more than 15 departments, five schools, and three research centers at UCLA. It places project-based learning at the heart of the curriculum, with students working in collaborative teams to realize digital research projects with real-world applications.

Students use tools and methodologies such as three-dimensional visualization, data mining, network analysis, and digital mapping to conceptualize and advance research projects. Students have the opportunity to make significant contributions to scholarship in fields ranging from archaeology and architecture to history and literature. By preparing students to be active participants in the design and production of new knowledge, the minor emphasizes the critical thinking skills, creativity, and collaborative methodologies necessary for success in the digital information age.

Undergraduate Study

Digital Humanities Minor

The Digital Humanities minor is intended to provide students with literacy in creating, interpreting, and applying the technologies of the digital world. It examines the cultural and social impact of new technologies and enables students to harness these technologies to develop their own research projects in a wide range of fields.

To apply for the minor, students must (1) have an overall grade-point average of 2.7 or better and (2) submit an application essay supporting their interest in pursuing the minor and enumerating any digital projects that they have already undertaken. On acceptance to the minor, students are expected to identify an academic area of digital humanities in which they intend to concentrate. Information about the minor is available on the minor website. To submit an application for the minor, see the website.


Required Upper-Division Courses (25 to 28 units): Digital Humanities 101, 150, 198 or 199, and three elective courses selected from Ancient Near East M101C, CM125, CM125C (or Architecture and Urban Design M125B), CM126 (or Architecture and Urban Design M125C), 162, 165, CM169 (or Anthropology CM110Q), Anthropology M116R (or Chinese M183), Architecture and Urban Design 132, Armenian C153, Art History C145A, C145B, Classics 164, 166B, Design/Media Arts 104, Digital Humanities 151, 195 or 196, English 118A, History 188, Korean 183, 187, Russian 121, 129, Scandinavian C129A, C171, Society and Genetics 133, 175, Spanish 130, 150, 170, Urban Planning 129, 141. Variable topics courses may be taken as topics apply. A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor.

Each minor course must be taken for a letter grade. Successful completion of the minor is indicated on the transcript and diploma.

Digital Humanities

Lower-Division Courses

19. Fiat Lux Freshman Seminars. (1 Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

30. Los Angeles Tech City: Digital Technologies and Spatial Justice. (5 Lecture, two and one half hours; studio, two hours. Investigation of spatial justice and injustice in multi-ethnic city of Los Angeles through lens of three thematic technologies that built and transformed Los Angeles into global metropolis: cars and highways, networking technologies culminating in Internet and World Wide Web, and film and broadcast media. Use of innovative forms of investigatory and communication, from digital mapping to video-sensing, to integrate interpretative and historical approaches of humanities with material and projective practices of design. Letter grading.

89. Honors Seminars. (1 Seminar, three hours. Limited to 20 students. Designed as adjunct to lower-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

89HC. Honors Contracts. (1 Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to lower-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

99. Student Research Program. (1 to 2 Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Courses

101. Introduction to Digital Humanities. (5 Lecture, four hours; discussion, one hour. Foundation course for students in Digital Humanities minor, providing theoretical and conceptual framework for understanding genesis of digital world. Use of contemporary cultural-historical methodology to focus on rise of new media and information technologies in 19th, 20th, and 21st centuries, such as photography, film, radio, television, Internet, and World Wide Web and their impact on how individuals, groups, and cultures experienced their worlds. Letter grading.


140. Coding for Humanities. (4) Seminar, three hours. Requisites: course 101. Introduction to coding with focus on Python. Study of basic structural elements such as lists, if statements, dictionaries, loops, functions, and classes. Consideration of how to apply these concepts to research in humanities and social sciences, and project-based learning. Students discover how to manage and display data with added impact. Content and goals are guided by freedom to restructure more effectively and freedom of speech. Letter grading.

150. Advanced Topics in Digital Humanities. (4) Seminar, three hours. Requisites: course 101. Introduction to coding with focus on Python. Study of basic structural elements such as lists, if statements, dictionaries, loops, functions, and classes. Consideration of how to apply these concepts to research in humanities and social sciences, and project-based learning. Students discover how to manage and display data with added impact. Content and goals are guided by freedom to restructure more effectively and freedom of speech. Letter grading.

151. Advanced Topics in Urban Humanities. (4) Seminar, three hours. Introduction to advanced research topics in urban humanities. Looking at specific subject matters related to nation of spatial equity in context of Los Angeles, exploration of how certain spatial technologies such as geographic information systems (GIS) cartography, mobile telephony, real-time data collection, social media, digital data, and active web platforms can be deployed to research and document urban experience. Familiariza-
tion with digital tools used to study urban issues, from affordable housing to access to public space and employment, to civic participation. Letter grading.

189. Advanced Honors Seminars. (1 Seminar) Three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

189HC. Honors Contracts. (1 Tutorial) Three hours. Limited to students in College Honors Program. Designed as adjunct to upper-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

195. Community or Corporate Internships in Digital Humanities. (4 Tutorial) Two hours; fieldwork, eight hours. Limited to juniors/seniors. Internship in supervised setting in community agency or business. Participants are arranged by instructor. Students meet on regular basis with instructor and provide periodic reports of their experience. May be repeated for credit. Individual honors contract with supervising faculty member required. Letter grading.

196. Research Apprenticeship in Digital Humanities. (4 Tutorial) Three hours per week per unit. Limited to juniors/seniors. Entry-level research apprenticeship for upper-division students under guidance of faculty mentor. May be repeated for credit. Individual contract required. P/NP grading.

198. Honors Research in Digital Humanities. (4 Tutorial) Three hours per week per unit. Limited to juniors/seniors. Entry-level research apprenticeship for upper-division students under guidance of faculty mentor. May be repeated for credit. Individual contract required. P/NP grading.

199. Directed Research in Digital Humanities. (2 to 4 Tutorial, one hour. Requisite: course 101. Limited to juniors/seniors. Development and completion of significant research project under direct supervision of faculty member. May be repeated for credit. Individual contract required. Letter grading.

192. Disability Studies Minor

Interdisciplinary Minor
College of Letters and Science
A316 Murphy Hall
Box 951430
Los Angeles, CA 90095-1430

Disability Studies
310-206-1667
E-mail contact
Victoria E. Marks, BA, Chair

Faculty Committee
Sallie Can Acikgoz, PhD (Anthropology), Juliann T. Aneis, PhD (Gender Studies), Bruce L. Baker, PhD (Psychology), Anurima Banerji, PhD (World Arts and Cultures/Dance), Helen Deutsch, PhD (English), Rachel C. Lee, PhD (English), Gender Studies, Society and Genetics, Victoria E. Marks, BA (World Arts and Cultures/Dance), Mary J. O’Connor, PhD (Psychiatry and Biobehavioral Sciences)

Scope and Objectives

The Disability Studies minor introduces undergraduates to the emerging interdisciplinary field of disability studies, offering a new lens for thinking about the body, society, and culture. The field reorients a marginalized phenomenon at the center of our experience, transforming what is often misconceived as an abnormality of daily life into one of its most basic realities. Faculty members from applied fields in the professional schools (e.g., education, law, medicine, nursing, public policy, and urban planning) collaborate with faculty from academic disciplines across the College of Letters and Science and the School of the Arts and Architecture (e.g., anthropology, English, history, linguistics, psychology, and world arts and cultures) to provide a critical framework for questioning and connecting topics related to disability in these established disciplines.

Through a core course, carefully selected electives, a required two-term internship or research apprenticeship, and a senior capstone project, students in the minor obtain both breadth and depth in their understanding of the concept and practical implications of disability.

Undergraduate Study
Disability Studies Minor

To enter the Disability Studies minor, students must (1) have an overall grade-point average of 2.7 or better and (2) submit an application essay supporting their interest in pursuing the minor. To help plan the internship and course schedule, students are expected to work closely with the minor’s academic adviser. Applications are available on the minor website and must be filed with College Academic Counseling, A316 Murphy Hall. For information and questions, contact the department adviser by e-mail or call 310-206-1667.

Required Upper-Division Courses (13 to 15 units): Disability Studies 101 or 101W and three courses selected from 102 through 187, American Sign Language M120, 121, Anthropology 159, Arts Education 101, Asian American Studies M117, College of Letters and Science 100, 132, Education 132, Gerontology M199Q, History 199A, Linguistics C133, Psychology M107, M190, 127A or 127B or 127C, 129C, 123A, 133, M140, Social Welfare M140, 162, Sociology M148, Spanish M165SL. Students may petition to apply a third term of Disability Studies 195CE toward the elective requirement.

Required Upper-Division Internship/Apprenticeship Courses (8 units): Two consecutive terms of internship or research apprenticeship (Disability Studies 195CE or 196) in a community-based agency that provides services or support for persons with disabilities or in an institution or agency at the local, state, or federal level responsible for policy on disability issues or collaboration on a research project focused on an area of disability studies scholarship. Internship credit for students participating in the UC Center Sacramento (UCCS) program or the Center for American Politics and Public Policy (CAPPP) program may be substituted by petition and is subject to approval by the faculty committee.

Required Upper-Division Capstone Courses (5 to 6 units): Disability Studies 191 or 198A and 198B or 199A and 199B. Prior to enrolling in any capstone option, students must complete Disability Studies 101 or 101W, two upper-division electives, and at least one term of an internship or apprenticeship.

The capstone experience for the minor requires an integrative final paper or project that incorporates the required curriculum and elective courses. Students complete the capstone experience by enrolling in a senior research seminar (Disability Studies 191) or by enrolling in two-term independent study courses (198A and 198B or 199A and 199B) under the guidance of a faculty sponsor. The faculty sponsor approves the proposed readings as well as the length and scope of the final paper or project based on guidelines developed by the faculty committee for the minor.

A minimum of 20 units applied toward the minor requirement must be in addition to units applied toward major requirements or another minor.

Each minor course must be taken for a letter grade, and students must have an overall grade-point average of 3.0 or better in the minor. Successful completion of the minor is indicated on the transcript and diploma.

Disability Studies
Lower-Division Courses

10. Intersections of Art History and Disability Studies: Disability in Modern Art. (5 Lecture, four hours. Broad overview of presence of disability and its manifestations through modern art in the 19th and 20th centuries. Introduction of historical development and
fundamental intellectual and ethical issues associated with representation of disability in arts and humanities. Investigation of complex relations between artistic and humanistic expression and this major facet of society and culture. Introduction of new methodology and language to build framework around how disability might fit into discourse of modern art as alternative way of knowing and how disability informs modern art by way of radical aesthetics of representation that challenges societal norms. Consideration of how disability aesthetics informs photography, performance art, outsider art, and curatorial practices. P/NP or letter grading.

M103. Studies in Disability Literatures. (5) (Same as English M103.) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisite: English Composition 3 or 3H. Discussion and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP or letter grading.

University of California

Department of Disability Studies

Upper-Division Courses

101. Perspectives on Disability Studies. (5) Lecture, one hour; discussion, two hours. Enforced requisite: English Composition 3 or English as a Second Language 36. Not open for credit to students with credit for course 101W. Creation of critical framework for understanding concept of disability from sampling of disciplinary perspectives. Overview of productive and critical approaches to representation in disability studies—between disability as lived subjective experience that is both individual and communal, and disability as objective, medical, legal, and sometimes stigmatized category. Students encouraged to make connections between units and to create their own perspectives on disability in field that defines itself by how it changes. Letter grading.

101W. Perspectives on Disability Studies. (5) Lecture, one hour; discussion, two hours. Enforced requisite: English Composition 3 or English as a Second Language 36. Not open for credit to students with credit for course 101. Creation of critical framework for understanding concept of disability from sampling of disciplinary perspectives. Organized around productive and central tension in disability studies—between disability as lived subjective experience that is both individual and communal, and disability as objective, medical, legal, and sometimes stigmatized category. Students encouraged to make connections between units and to create their own perspectives on disability in field that defines itself by how it changes. Satisfies Writing II requirement. Letter grading.

102. Disability and Violence. (4) Seminar, three hours. Relationship between disability and violence from three angles: (1) review of disproportionate incidence of violence committed against people with disabilities, whether specifically as form of hate crime or based on dependency and/or vulnerability that accompany some types of disability, (2) study of role of disability in intersection with other identities and social positions of criminality and violence, and (3) disablement or emergent disability (injuries, illnesses, and impairments created by social inequity) as consequence of intersecting forms of racial, gender, sexual, and class subordination, or as result of state or interpersonal violence. Consideration of possible coalition-based strategies for challenging systemic subordination and prospects for improving disability-consciousness across social movement efforts and campaigns. P/NP or letter grading.

M103. Studies in Disability Literatures. (5) (Same as English M103.) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisite: English Composition 3 or 3H. Discussion and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP or letter grading.

M114. Variable Topics in Performance and Disability Studies. (5) (Same as Theater M114.) Seminar, four hours. Exploration of identity as means of understanding people with disabilities in late 20th and early 21st century cinema and television to understand functioning of representation in popular culture. Development of critical media literacy skills. P/NP or letter grading.

129. Theory, Policy, and Practice of Special Education: Implications for Educators and Advocates. (4) Lecture, three hours. Examination of issues of disability in K-12 schooling and social and historical contexts of special education policy, as well as its implementation. Focus on equity-related legal and policy issues in education, special education associated with disability, race, language, and gender and how these intersect. Consideration of landmark court decisions such as Brown versus Board of Education (1954) and Bird v. Board of Education versus Regents of New Mexico (1963) as well as key legislation such as Americans with Disabilities Act (ADA) and Individuals with Disabilities Education Act (IDEA). P/NP or letter grading.

M130. Disability Policy and Services in Contempora­ry America. (4) (Same as Gerontology M136 and Social Welfare M165.) Lecture, three hours. Limited to juniors/seniors. Growing numbers of people of all ages with disabilities are leading active and productive lives in American communities and struggling to lead such lives. Who are people with disabilities in contemporary America? How has U.S. responded over time to various needs and aspirations of people with disabilities, young and old where have they been made over time by disability advocates? Who has government addressed demands of advocates for various disability populations? What do we know about extent to which public policies and programs are responsive to people in need? How do demographics, economics, and politics continue to influence evolving public policy responses? P/NP or letter grading.

131. Alternative Approaches to Language Acquisi­tion. (4) Seminar, four hours. Examination of everyday experience of language delay, disorder, difference, and disablement in disability, race, ethnicity, and social and cultural factors that shape ability and sexuality as basis for identity. Use of scholarly texts from disability studies, gender, gay, bisexual, and transgender studies, popular culture, performance, and film to investigate factors that shape ability and sexuality as basis for identity. May be repeated for credit with topic or instructor change. P/NP or letter grading.

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP or letter grading.

19HC. Honors Contracts. (1) Tutorial, three hours. Limited to seniors. (Same as Undergraduate Honors Program.) Enrolled in tutorial as adjunct to lower-division lecture course. Individual study with tutorial course instructor to explore topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in residence hall with lines in representation of maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

M125. Exploring Intersections of Ability and Sexu­ality. (4) (Same as Lesbian, Gay, Bisexual, Trans­gender, and Queer Studies M125.) Lecture, three hours. Exploration of identity as means of understanding people with disabilities in late 20th and early 21st century cinema and television to understand functioning of representation in popular culture. Development of critical media literacy skills. P/NP or letter grading.

M115. Enforcing Normalcy: Deaf and Disability Studies. (4) (Same as American Sign Language M115.) Lecture, three hours. Exploration of historical, medical, social, and cultural discourses of normalcy, and medical influences that have constructed categories of normcy, disability, and deafness. Building on writing of Michel Foucault and critical work in field of disability studies, inquiry into how that have reinforced standards of normcy throughout 19th and 20th centuries to present. Primary attention to role of medical authority in West, history of eugenics, and contemporary bioethics. May be repeated for credit with topic or instructor change. P/NP or letter grading.

M120. Special Topics on Race and Disability. (4) Lecture, four hours. Exploration of history, culture, and social construction of disability in race, ethnicity, religion, and power dynamics, and systems of visual representation in race, ability, and sexuality as categories. Use of scholarly texts from disability studies, gender, gender studies, performance, and film to investigate intersection of race, ability, and sexuality. May be repeated for credit with topic or instructor change. P/NP or letter grading.

M122. Bodies in Antiquity. (4) (Same as Classics M149.) Lecture, three hours. Investigation of individuals and groups that compose ancient Greek and Roman societies and relationship they have with larger social body, with particular focus on marginalized or minority groups such as women, citizens (resident aliens and provincials), slaves, children, elderly, and disabled. Examination of ways these groups contribute or detract from our understanding of ancient society as whole. May be repeated for credit with topic or instructor change. P/NP or letter grading.
sources from various fields and disciplines invested in autism, including psychology, neuroscience, arts and humanities, popular media, anthropology, activism, and critical autism studies. Students encounter and analyze multiple perspectives on autism and put them in conversation with one another. Attention paid to ways people on spectrum define, explain, and re-present their own experiences of autism and conversation of what ramifications of these multiple framings are in context of autism intervention strategy and disability policy today. Letter grading.

145. Mental Disability Law. (4) Lecture, three hours. Examination of definitions and some characteristics of those concerned systems, recent developments, and criticism of mental disabilities. Review of evolution of these definitions through U.S. and Western histories, with focus on role conceptions of mental illness has played in various racial, gender, and economic norms. Exploration of primary approaches U.S. legal system takes to address needs, vulnerabilities, and rights of people with disabilities and of people with mental disabilities. Discussion of some key challenges and controversies affecting policy and practice in this area and varying strategies for engaging those challenges. P/NP or letter grading.


M149. Disability Rights Law. (4) Same as Sociology M120). Lecture, four hours. Examination of disability-related issues impacting people of all ages across wide spectrum of settings in both public and private sectors—higher education, military to workplace, and from intensely urban environments to online and virtual worlds. Topics range from persistent and recurring disputes to novel controversies and new technologies and changing times. P/NP or letter grading.


M157. Rechoreographing Disability. (4) Same as Dance M157. Lecture, three hours. Theory of dance as range of performance by, featuring, or about people who identify as disabled, reading and discussion of range of writing about experiences of disability and process of making work about disability by artists and thinkers. Introduction to concept of choreography as political/cultural idea broadly defined as scored movement and organization and behavior of bodies, as well as choreography as poetic form for expression of ideas, creative tool, or product. Viewing and discussion of work, and embodying ideas through movement and dance-making. P/NP or letter grading.

M161. Sports, Normality, and Body. (4) Same as Gender Studies M161. Lecture, three hours. History of range of performance by, featuring, or about people who identify as disabled, reading and discussing of range of writing about experiences of disability and process of making work about disability by artists and thinkers. Introduction to concept of choreography as political/cultural idea broadly defined as scored movement and organization and behavior of bodies, as well as choreography as poetic form for expression of ideas, creative tool, or product. Viewing and discussion of work, and embodying ideas through movement and dance-making. P/NP or letter grading.

163A–163B. Autism Media Laboratory. (5-5) (Formerly numbered 163.) Lecture, two hours; discussion, one hour. Course 163A is requisite to course 163B. People with autism who are non-speaking face unique challenges fully participating in their communities. Exploration of documentary filmmaking as catalyst to educate greater community on importance of inclusion of people with disabilities. Students work together with community teachers, autistic self-advocates who are non-speaking or minimally speaking, to create documentary short films. Students explore issues related to autism and disability while gaining exposure to observational, interview-based, and participatory documentary shooting and editing techniques. Letter grading.

M164A. Documentary Production for Social Change: Mobility in Los Angeles. (5) Same as Urban Planning M164A. Seminar, three hours; fieldwork, two hours. Documentary film-making as catalyst for social change, using daily commute in Los Angeles as case study. Introduction to issues surrounding mobility and transportation, and discussions of experiences of commuting access to public transportation, and car-based versus alternative (bike and pedestrian) forms of commuting. Exposure to observational, interview-based, and participatory documentary shooting and editing techniques, as well as social marketing strategies that are vital to documentary production and distribution. Letter grading.

164B. Documenting Disability on Film. (4) Lecture, four hours. Exploration of digital media was used as contemporary form of investigation or research or is attached to research projects, built into websites, used in campaigns for social and political activism, and exhibited at documentary film festivals. Students appear more frequently on cable, public television, and Internet. Examination of how powerful documents still rely on well-told stories by passionate filmmakers. P/NP or letter grading.

M166. Future of Humanity: Bioethics of Health and Disability. (4) Same as Sociology and Genetics M166. Lecture, three hours; discussion, one hour. Should parents choose to have abortion if their fetus will likely have disability? Should we decide to end their life through physician-aided dying? Is disability form of human variation we can live with, disease we should eliminate, or mistake we should cut out of genetic code? Study disability with critical discussions of topics including human reproduction, genetic manipulation, and end-of-life treatment and care. Consideration of concepts such as freedom, kinship, dignity, advocacy, equal rights, and good life to challenge how we think of modern humanity, structure of our world, and how we live our lives. P/NP or letter grading.


M183. Being Human: Identity in Age of Genomics and Neuroscience. (5) Same as Honors M183 and Sociology and Genetics M183). Seminar, three hours. Exploration of relationship between identity and mental illness through different approaches to nature and treatment of mental health and disorders. Biomedical accounts of brain-based pathology (and identity) to Mad Pride movement emphasis on mental diversity. Enduring philosophical questions regarding personal identity and consciousness. Mind-body relations are investigated through consideration of conditions such as dissociative identity disorder, trauma, psychosis, autism, and depression. P/NP or letter grading.

187. Special Topics in Disability Studies. (4) Lecture, one hour; discussion, two hours (when scheduled). Variable topics in one area within disability studies. May be repeated for credit with topic change. P/NP or letter grading.

189. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

189HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designated as adjunct to upper-division lecture course. Individual study with lecture instructor exploring topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

191. Variable Topics Senior Research Seminars: Disability Studies. (5) Seminar, three hours. Enforced requisite course 101 or 101W. Designed for advanced junior/senior Disability Studies minors. In-depth study of major themes in disability studies research. Themes vary by instructor and term. Students pursue independent research-related to course theme, with guidance from instructor, then share and critique other student works in progress. May be repeated for credit with topic change. Letter grading.

M191F. Topics in Gender and Disability. (5) Same as Gender Studies M191F. Seminar, three hours. In-depth study of major themes in disability studies and gender studies. Themes vary by instructor and term. Students pursue independent research-related to course theme, with guidance from instructor, then share and critique other student works in progress. May be repeated for credit with topic change. Letter grading.

195C. Capstone Research Seminar. (2) Seminar, two hours. Enforced requisite: course 195CE. Required of students pursuing Disability Studies minor. Integration of off-campus work with academic theories and concepts within field of disability studies. Students report on their internship experiences and analyze relationship between their internship and issues of policy, ethics, systemic responses to community needs, or personal lived experience. Students identify one faculty mentor and develop proposal for required capstone research project. Letter grading.

195CE. Community and Corporate Internships in Disability Studies. (4) Tutorial, to be arranged; fieldwork, eight to 10 hours. Limited to juniors/seniors. Internship in corporate, governmental, or nonprofit setting coordinated through Center for Community Learning. Students complete weekly written assignments, attend weekly meetings with graduate student coordinator, and write final research paper. Faculty sponsor and graduate student coordinator construct series of reading assignments that examine texts related to internship, and grade for credit with consent of Center for Community Learning. Individual contract with supervising faculty member required. Letter grading.


198A–198B. Honors Research in Disability Studies. (5) Tutorial, one hour. Course 101 or 101W. Course 198A is enforced requisite to 198B. Limited to juniors/seniors. Required capstone course to Disability Studies minor for students pursuing College Honors. Development and completion of honors thesis or comprehensive research project under direct supervision of faculty member. May be repeated for credit. Individual contract required. In Progress (198A) letter grade only. (198B) pass/fail.

198C. Honors Research in Disability Studies. (2 to 8) Tutorial, one hour. Limited to juniors/seniors. Development and completion of honors thesis or comprehensive research project under direct supervision of faculty member. May be repeated for credit. Individual contract required. Letter grading.

199A–199B. Directed Research in Disability Studies. (2–4) Tutorial, one hour. Enforced requisite: course 101 or 101W. Course 199A is enforced requisite to 199B. Limited to juniors/seniors. Required capstone
course to Disability Studies minor. Supervised individual research or investigation under guidance of faculty mentor. Culminating paper or project required. May be repeated for credit. Individual contract required. In Progress (199A) and letter (199B) grading.

**Graduate Course**

375. Teaching Apprentice Practicum. (1 to 4) Seminar, to be arranged. Preparation: apprentice personnel employment as teaching assistant, associate, or fellow. Teaching apprenticeship under active guidance and supervision of regular faculty member responsible for curriculum and instruction at UCLA. May be repeated for credit. S/U grading.

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**EARTH, PLANETARY, AND SPACE SCIENCES**

*College of Letters and Science*

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**Associate Professors**

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Lingsen Meng, PhD (Leon and Joanne V.C. Knopoff Professor of Physics and Geophysics)
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Hilke E. Schlichting, PhD
Ulrike Selbit, PhD
Aradonna K. Tripathi, PhD

**Assistant Professors**

Mackenzie Day, PhD
Seugli Moon, PhD

**Adjunct Professors**

Robert C. Newton, PhD
Edward J. Rhodes, PhD

**Adjunct Assistant Professor**

Rosario Esposito, PhD

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**Scope and Objectives**

The disciplines of geology, geochemistry, geophysics, paleobiology, and space physics are concerned with the structure and evolution of the solar system, Earth, and life: essentially, the physical environment and its interaction with biota. These studies entail the application of fundamental physics and chemistry to a broad subject area stretching from astronomy to extreme to biology at the other. Areas that are emphasized in the Department of Earth, Planetary, and Space Sciences include isotope and trace element analyses, petrology and mineralogy, sedimentology, paleobiology and organic geochemistry, structural geology and tectonophysics, seismology, the Earth’s interior, planetary physics, and space plasmas.

The variety of techniques applied lead to several concentrations within the three main disciplines. Students completing their studies with a BS or MS degree usually are employed by industry. Many are employed in environment-related activities; others are involved in mineral or oil exploration or in construction. Students attaining the PhD degree are usually employed by universities or governmental and industrial research groups.

The Bachelor of Arts program in Earth and Environmental Science is intended to provide a broad background in Earth sciences that is especially appropriate for students intending to become K through 12 teachers in Earth, physical, or life sciences. It may also be of interest to students who plan careers in business, dentistry, environmental sciences, government, journalism, law, medicine, or public health. Those who intend to become professional geologists, geochemists, or geophysicists and/or to continue into graduate studies in Earth or space sciences are urged to pursue one of the BS degrees.

**Undergraduate Study**

All of the majors offered in the Earth, Planetary, and Space Sciences Department are designed capstone majors. While the specific nature of the capstone experience varies by major, students are required to use skill and knowledge sets from previous coursework to complete a field-based research project from conception to written report. Projects must be placed into context within the current state of understanding, and results are presented at a research symposium or published as a brief report.

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**Earth and Environmental Science BA**

**Capstone Major**

**Learning Outcomes**

The Earth and Environmental Science major has the following learning outcomes:

- Use of skills and knowledge set from coursework
- Definition of research methodology and data
- Placement of project into context of current state of understanding
- Completion of research project from conception to written report
- Oral presentation at a research symposium, or brief published report, of field experience results
- Preparation for the Major

Required: Earth, Planetary, and Space Sciences 1, 5 or 8 or 13 or 15 or 16 or 17 or 20, 51, 61; Chemistry and Biochemistry 14A, 14B, and 14BL, or 20A, 20B, and 20L; Life Sciences 1 or another introductory organismic biology course; Mathematics 3A and 3B, or 31A and 31B; Physics 1A or 5A. Each course must be passed with a minimum grade of C-.

**Transfer Students**

Transfer applicants to the Earth and Environmental Science major with 90 or more quarter units (60 semester units) must have completed one introductory Earth sciences course, two general chemistry courses with laboratory for majors, and one calculus course. One introductory biology course with laboratory and one calculus-based physics course with laboratory are recommended.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

**The Major**

Required: Three courses from Earth, Planetary, and Space Sciences 103A, 103B, 111, 112, 116, 119; one capstone 199 research course in the senior year; three additional upper-division courses from Earth, Planetary, and Space Sciences other than 100; two courses from Geography 101, M102, M103, 116, 120, M126, M131, 136.

**Engineering Geology BS**

**Capstone Major**

**Learning Outcomes**

The Engineering Geology major has the following learning outcomes:

- Use of skills and knowledge set from coursework
- Definition of research methodology and data
- Placement of project into context of current state of understanding
for admission.

Prepare for the Major
Required: Earth, Planetary, and Space Sciences 103A, 103B, 111, 112, M118 (or 136A); two courses from 103C, 116, and 133; two capstone field research courses (121, 121F); two additional 100-level department courses.

Geophysics BS

Capstone Major
Learning Outcomes
The Geophysics major has the following learning outcomes:
• Use of skills and knowledge set from coursework
• Definition of research methodology and data
• Placement of project into context of current state of understanding
• Completion of research project from conception to written report
• Oral presentation at a research symposium, or brief published report, of field experience results

Transfer Students
Transfer applicants to the Geophysics major with 90 or more quarter units (60 semester units) must have completed one introductory Earth sciences course, two general chemistry courses with laboratory for majors, and one year of calculus. A second year of calculus is recommended. Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

The Major
Required: Earth, Planetary, and Space Sciences 103A, 103B, 111, 112, M118 (or 136A); two courses from 103C, 116, and 133; two capstone field research courses (121, 121F); two additional 100-level department courses.

Honors Program
The honors program in geology or geophysics is intended to provide exceptional students an opportunity for advanced research and study under the tutorial guidance of a faculty member. Requirements for admission to candidacy are the same as those required for admission to the Honors Programs of the College of Letters and Science. Qualified students wishing to enter the program must submit a completed application form to the departmental honors committee near the end of their junior year. Honors in geology or geophysics are awarded at graduation to those students who have a cumulative grade-point average of 3.5, have completed at least 90 graded units at the University of California, and have completed a minimum of two terms (8 units) of Earth, Planetary, and Space Sciences 198 leading to the preparation of a satisfactory honors thesis. Students demonstrating exceptional ability are awarded highest honors.

Earth and Environmental Science Minor
In the Earth and Environmental Science minor students study the interaction of the solid Earth, oceans, and atmosphere with human activities. The minor provides background in Earth sciences that is especially appropriate for students intending to become K through 12 teachers in Earth, physical, or life sciences. It may also be of interest to students who plan careers in business, dentistry, environmental sciences, government, journalism, law, medicine, or public health.

To enter the minor, students must have an overall grade-point average of 2.0 or better.

Required Lower-Division Courses (8 units): Earth, Planetary, and Space Sciences 1, one course from 5, 13, 15, or 61.

Required Upper-Division Courses (20 units minimum): Five courses from Earth, Planetary, and Space Sciences 101, 112, C113, 139, 150, 153.

A minimum of 20 upper-division units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor.

Each minor course must be taken for a letter grade, and students must have an overall grade-point average of 2.0 or better in the minor. Successful completion of the minor is indicated on the transcript and diploma.

Geochemistry Minor
Geochemistry emphasizes use of minerals, magmas, elements, and isotopes to date events, determine rates, and track matter through its cycles in the planets and biosphere. These skills are valuable in environmental and natural-resource work and anthropology, as well as in studying the histories of the planets.

To enter the Geochemistry minor, students must have an overall grade-point average of 2.0 or better.

Required Lower-Division Courses (8 units): Earth, Planetary, and Space Sciences 1, 51.
Required Upper-Division Courses (20 to 26 units): Two courses from Earth, Planetary, and Space Sciences CI06, CI07, CI09; and three courses from 103A, 103B, 103C, CI06 or CI07 or CI09 (whichever course was not applied above), 152, 153. A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor.

Each minor course must be taken for a letter grade, and students must have an overall grade-point average of 2.0 or better in the minor. Successful completion of the minor is indicated on the transcript and diploma.

Geology Minor

Geology is the study of the surface of the Earth and the rocks and processes that created it. Field methods, interpretation of rocks, and modern plate-tectonic models are emphasized, with the goals of finding valuable or hazardous materials and inferring geologic history. These skills are valuable in engineering, urban planning, and environmental and resource studies.

To enter the Geology minor, students must have an overall grade-point average of 2.0 or better.

Required Lower-Division Courses (8 to 9 units): Earth, Planetary, and Space Sciences 1, 61.

Required Upper-Division Courses (22 units): Earth, Planetary, and Space Sciences 112, 119, and three courses from CI07, 116, 125, 133, 150, 171.

A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor.

Each minor course must be taken for a letter grade, and students must have an overall grade-point average of 2.0 or better in the minor. Successful completion of the minor is indicated on the transcript and diploma.

Geophysics and Planetary Physics Minor

Classical physics, supported by field data, mathe- matics, and computing, is used to understand di- verse processes from ocean circulation and earth- quakes to the formation of planets and the flow of particles and electromagnetic fields in space. These skills are valuable in environmental, engineering, and resource studies and more broadly in any kind of career that requires quantitative analysis.

To enter the Geophysics and Planetary Physics minor, students must have an overall grade-point average of 2.0 or better.

Required Lower-Division Courses (12 units): Earth, Planetary, and Space Sciences 1, 8, 9.

Required Upper-Division Courses (20 units): Earth, Planetary, and Space Sciences 136A, 171, and three courses from MW40, 152, 153, 154, 155.

A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor.

Each minor course must be taken for a letter grade, and students must have an overall grade-point average of 2.0 or better in the minor. Successful com- pletion of the minor is indicated on the transcript and diploma.

Graduate Study

Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Division website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Graduate Degrees

The Department of Earth, Planetary, and Space Sciences offers Master of Science (MS), Candidate in Philosophy (CPhI), and Doctor of Philosophy (PhD) degrees in Geochmistry, Master of Science (MS), Candidate in Philosophy (CPhI), and Doctor of Phil- osophy (PhD) degrees in Geology, and Master of Science (MS) and Doctor of Philosophy (PhD) degrees in Geophysics and Space Physics.

Earth, Planetary, and Space Sciences

Lower-Division Courses

1. Introduction to Earth Science. (5) Lecture, three hours; laboratory, two hours; field days. Not open to students with credit for or currently enrolled in course 100. Elements of Earth science, study of Earth mate- rials; nature and interpretation of geologic evidence; study of geologic processes; historical aspects of ge- ology. Mandatory field trips introduce students to solving of geologic problems in field. P/NP or letter grading.

2. Environmental Geology of Los Angeles. (4) Lecture, three hours; discussion, one hour; field days. Origin, evolution, distribution, and future of life on Earth and in universe, paralleling major scientific initiative of NASA. Course material pri- marily from planetary earth science, paleontology and biology, astronomy, chemistry, and physics, with relatively little from mathematics. P/NP or letter grading.

3. Astrobiochemistry. (5) Lecture, three hours; discussion, one hour; field days. Origin, evolution, distribution, and future of life on Earth and in universe, paralleling major scientific initiative of NASA. Course material pri- marily from planetary earth science, paleontology and biology. P/NP or letter grading.

4. Environmental Geology of Los Angeles. (4) Lecture, three hours; discussion, one hour; field days. Not open to students with credit for or currently enrolled in course 100. Elements of Earth science, study of Earth mate- rials; nature and interpretation of geologic evidence; study of geologic processes; historical aspects of ge- ology. Mandatory field trips introduce students to solving of geologic problems in field. P/NP or letter grading.

5. Environmental Geology of Los Angeles. (4) Lecture, three hours; discussion, two hours; field trips. Geologic hazards and natural resources of greater Los Angeles region. Topics include Los Angeles geologic hazards such as earthquakes, landslides, and floods; Southern California oil fields; gold and gem mining in region; local beach processes; and Los Angeles water resource problems. Field trips to San Andreas fault, California aqueduct, active landslides, and historic gold mines. P/NP or letter grading.

6. Perils of Space: Introduction to Space Weather. (4) (Formerly numbered 7.) (Same as Atmospheric and Oceanic Sciences 71.) Lecture, four hours. Con- cepts of plasma physics, Dynamic wind, solar wind, and Earth’s magnetosphere and ionosphere. Space storms and storms and their impacts on astron- auts, spacecraft, and surface power and communi- cation grids. P/NP or letter grading.

7. Geologic Maps. (4) Lecture, three hours; laboratory, one hour; one field day. Causes and effects of earth- quakes, Plate motion, frictional faulting, earthquake in- stability, wave propagation, earthquake da mage, and other social effects. Hazard reduction through earth- quake forecasting and earthquake-resistant design. P/ NP or letter grading.


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May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

89HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to lower-division lecture course. Individual study with faculty instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week. Prerequisite: junior/senior-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated; P/NP grading.

Upper-Division Courses

100. Principles of Earth Science. (4) Lecture, three hours. Designed for nonmajors. Not open to students with credit for course 1. Fundamentals of physical geology; Earth problems, such as continental drift and development of large-scale features of Earth; physical and biological evolution; principles of stratigraphy; geologic mapping of selected areas; preparation of geologic report. Letter grading.

111. Stratigraphic and Field Geology. (6) Lecture, two hours; laboratory, three hours; fieldwork, eight hours per week. Enforced requisites: courses 61, 112. Principles of stratigraphy; geologic mapping of selected areas; preparation of geologic report. Letter grading.

111G. Field Geology. (2 to 4) Lecture, two hours; laboratory, three hours; fieldwork, one day per week. Enforced requisites: courses 61, 112. Principles of stratigraphy; geologic mapping of selected areas; preparation of geologic report. Letter grading.

112. Structural Geology. (5) Lecture, three hours; laboratory, six hours; discussion, one hour. Recommended requisites: courses 1, 61. Recommended: course 51. Planar and linear structures at different scales in sedimentary, metamorphic, and igneous rocks. Faults and folds, their description, classification, and kinematic and dynamic analysis. Deformation, strength, and rheological properties of rocks. P/NP or letter grading.

C113. Biological and Environmental Geology. (4) Lecture, three hours. Requisites: Chemistry 1A4 and 1B4 (or 20A and 20B), Mathematics 3A, 3B, and 3C (or 4A, 4B, and 4C), and at least one lower-division Earth, planetary, and space sciences course. Intended for junior/senior life and physical sciences students. Study of chemistry of Earth's surface environment and interplay between biology, human activity, and geology. Introduction to origin and composition of Earth, including atmosphere, crust, and hydrosphere. Examines how reservoirs are affected by biological cycles and feedbacks to biological evolution and diversity. Local and global-scale movements of biologically important elements like carbon, nitrogen, and phosphorus. Concurrently scheduled with course C213. P/NP or letter grading.

CM114. Aquatic Geomicrobiology. (4) Same as Atmospheric and Oceanic Sciences CM114.) Lecture, three hours; discussion, one hour. Recommended requisites: course C107 or Atmospheric and Oceanic Sciences M105. Fundamental geomicrobiological metabolisms and biogeochemical reactions occurring in aquatic systems, how they impact their environment, and how they interact in complex ecosystems such as methane seeps, hydrothermal vents, coral reefs, microbial mats, or deep biosphere. Metabolisms include different photosynthetic, heterotrophic, and chemoautotrophic pathways. Examination of geochemical profiles and understanding of how microorganisms govern mineralization and element cycling in aquatic systems. Concurrently scheduled with course CM214. P/NP or letter grading.

116. Paleontology. (4) Lecture, three hours; laboratory, three hours; field trips. Requisite: Life Sciences 7A or 7B. Review of major groups of fossil organisms and their significance in geology and biology. P/NP or letter grading.

M118. Advanced Paleontology. (4) (Same as Ecology and Evolutionary Biology M145S.) Lecture, three hours. Requisite: course 116 or Ecology and Evolutionary Biology M100 or M117. The importance of major factors that have influenced history of life, including analytical approaches to analyzing patterns in fossil record, nature of rock record, and contribution of data from stable isotopes, functional morphology, phylogenetics, and molecular systematics. P/NP or letter grading.

119. Continental Drift and Plate Tectonics. (4) Lecture, three hours; computer laboratory/discussion, one hour. Requisites: courses 103, 110. Designed for junior/senior majors in physical sciences. Exploration of history and phenomenology of plate tectonics theory, with particular focus on observables and kinematics. Evidence supporting plate tectonics theory (magnetostratigraphy, seismology, gravity). Tectonic, igneous, and metamorphic processes at plate boundaries. Focus on plate kinematics both past and present and learn how to compute and plot velocity fields. Exploration of plate dynamics including driving mechanism and convection. P/NP or letter grading.

120. Rubey Colloquium: Major Advances in Earth, Planetary, and Space Sciences. (4) Lecture, three hours. Designed for junior/senior majors in Earth science, or Earth science offerings for students of the Harvey Mudd College or Claremont Graduate University, or other advanced students. Theoretical and practical discussion of written geologic reports. P/NP or letter grading.

121F. Advanced Field Geology. (4) Fieldwork, 20 hours. Advanced techniques in field geologic mapping and preparation of geologic maps and cross-sections, including igneous, metamorphic, and sedimentary terrains. P/NP or letter grading.

122. Introduction to Seismology. (4) Lecture, three hours; discussion, two hours. Enforced requisites: Mathematics 31A, 31B, 32A, Physics 1A (or 1AH), 1B (or 1BH). Recommended: course 103A. Detailed study of earthquake processes and instruments used for direct and indirect observation of Earth. P/NP or letter grading.

123. Geosciences Outreach. (4) Lecture, two hours; discussion, two hours; field days. Recommended requisites: at least three college-level life sciences or physical sciences courses. Introduction to pedagogical approaches and methods used in geosciences community to educate demographically diverse populations, including K-12 through higher-education audiences and general public. Focus on development of motivational and public communication skills and methods as practiced at outreach events and demonstrations, including communication of science in multicultural settings. Enrolled in participation of three-credit scheduled outreach events over course of term, providing perspective and basis for follow-up discussions on critical geosciences literacy at local, state, and national levels. Letter grading.

125. Volcanoes. (4) Lecture, three hours; laboratory, three hours; field trips (r). Requisite: course 1. Recommended: course 103A, Physics 1A or 1AH or 6A. Types of volcanism. Physics of magma chambers, volcanic plumbing, explosive and effusive eruptions illustrated by historical examples. Practical methods of volcano monitoring, with field trips. P/NP or letter grading.

C126. Advanced Petrology. (4) Lecture, three hours; laboratory, three hours; field trips. Enforced requisites: course 103A. Understanding genesis of igneous rocks based on geochemical, tectonostratigraphic, and other geological evidence and principles. Concurrently scheduled with course C226. P/NP or letter grading.

133. Historical and Regional Geology. (4) Lecture, three hours; discussion, two hours; field trips. Requisites: courses 103B, 111, 112. Principles of historical geology; Physical evolution of Earth, especially North America. One area of Earth to be investigated in detail, with emphasis on its geologic evolution through time. Letter grading.

136A. Applied Geophysics. (4) Lecture, three hours; laboratory, three hours; field trips. Requisite: knowledge of MATLAB. Enforced requisites: course 71, Mathematics 3A, 3B, and 3C, or 31A, 31B, and 32A, Physics 1A, 1B, 4AL, and 4BL, or 6A, 6B, and 6C. Seismic reflection and refraction, Fourier analysis and deconvolution, vibrosynths, seismographic methods, marine seismics, seismic interpretation, gravity and magnetic fields, inversion uniqueness and depth rules. P/NP or letter grading.

136C. Field Geophysics. (6) Lecture; three hours; discussion; one hour; laboratory; two hours; fieldwork; 10 hours. Enforced requisite: course 136A. Application of seismic, gravimetric, magnetic, electrical, and other geophysical methods to geologic and engineering problems, with emphasis on geophysical exploration, including planning, data collection, data reduction, and interpretation. Fieldwork on unsolved problems (week-long field trip). P/NP or letter grading.

137. Petroleum Geology. (4) Lecture; three hours. Enforced requisite: one of Geology 118A, 118B, 120A, or 120B. Petroleum geology of California, including exploration for and production of natural gas and petroleum; techniques of surface and subsurface geology; problems of petroleum geology. P/NP or letter grading.

139. Engineering and Environmental Geology. (4) Lecture; three hours; discussion; one hour. Requisite: course 1 or 100. Recommended: course 111. Principles and practice of soil mechanics and foundation engineering in light of geologic conditions, recognition, prediction, and control or abatement of subsidences, landslides, earthquakes, and other geologic aspects of urban planning and subsurface disposal of liquids and solid wastes. P/NP or letter grading.


C141. Basin Analysis. (4) Lecture; three hours; laboratory; three hours. Requisites: courses 103B, 111. Mechanisms of sedimentary basin development,flexural and thermal subsidence, isostasy, subsidence analysis, quantitative basin modeling, sediment provenance, tectonic settings. Concurrently scheduled with course C241. P/NP or letter grading.

C143. Advanced Physical Sedimentology. (4) Lecture; three hours; fieldwork; three hours. Requisites: courses 103A, 103B, 111, 114. Corequisite: Geology 118A or 118B. Emphasis on sedimentation related to sediments, sedimentary rocks, and information that can be extracted from each. Interpretation of depositional environment from complex sedimentary structures and textures. Includes field and lecture component and builds on previous sedimentology basics. Concurrently scheduled with course C243. P/NP or letter grading.


152. Physics of Earth. (4) Lecture, three hours; discussion; one hour. Requisite: Mathematics 3A, 3B, 3C, or 31A and 31B. Introduction to the physical sciences of the Earth, the solar system, and the universe. Emphasis on applications of physics in geology and oceanography, and of geology and oceanography in physics, including the planet Earth as a dynamic system in which geological processes are continuing and changing the Earth's surface and interior. P/NP or letter grading.

153. Oceans and Atmospheres. (4) Lecture, three hours; discussion; one hour. Requisites: Mathematics 3A, 3B, 3C, 10A, 10B, 14A, 14B, 14CH, 1CH. Note: This course is a thematic introduction to the oceanic and atmospheric sciences. P/NP or letter grading.

154. Solar Terrestrial Physics. (4) Lecture, three hours; discussion; one hour. Enforced requisite: one of Physics 1CH, 10A, 10B, 14A, 14B, 14C, or 14CH. Note: This course is a thematic introduction to the solar-terrestrial system. P/NP or letter grading.

155. Planetary Physics. (4) Lecture, three hours; discussion; one hour. Requisites: Mathematics 31A, 31B, 32A, Physics 1A, 1B, and 1C (or 1AH, 1BH, and 1CH). Formation of solar nebula; origin of planets and their satellites; comets, asteroids, and meteorites; celestial mechanics and dynamics; physics of planetary interiors, surfaces, and atmospheres. P/NP or letter grading.

156. Introduction to Space Plasma Physics. (4) Lecture, three hours; laboratory, one hour. Enforced requisite: Electrical Engineering 101A or Physics 110A. Senior-level introductory course on electrodynamics of ionized gases, with emphasis on fundamental processes relevant to laboratory, space, and astrophysical plasmas. Examples mostly from space, planetary, and astrophysical plasmas, stellar winds, planetary magnetospheres, and radiation belts. Other applications include atmospheric, space, and laboratory plasmas; generation of coherent radiation, particle beams, and fusion energy production. Letter grading.

C160. Field Seminar. (2 to 6) Seminar; three hours; discussion; one hour; fieldwork; five to 20 days. Requisite: course 61. Field-based teaching and discussion forum that varies in focus from general geology through structure and tectonics, sedimentology, igneous and metamorphic petrology, volcanology, or other subdisciplines as prescribed. May be repeated for credit. Concurrently scheduled with course C260. P/NP or letter grading.

C162. Application of Remote Sensing in Field. (4) Fieldwork, five hours; laboratory, two hours. Requisites: courses 150. Application of remote-sensing techniques to field situations. Digital analysis and interpretation of near-infrared, thermal-infrared, and microwave data from satellites and aircraft. Field observation of study site in course 151 of physical and chemical processes, including bedrock weathering, soil formation, hillslope transport, and river and glacial erosion. How tectonics, climate, and underlying lithology may influence those processes in landscapes. P/NP or letter grading.

165. Tectonic Geomorphology. (4) Lecture; three hours; laboratory; two hours. Enforced requisite: course 1 or 8. Recommended: courses 61, 119, Mathematics 31A. Interactions between tectonic, climate, and surface processes shape landscapes over days to millennia. Course will use geomorphic processes to study local and surface processes interact to govern landscape evolution. How landscapes can provide insights into regional and global scale processes, including tectonic and climatic processes, and bedrock weathering, soil formation, hillslope transport, and river and glacial erosion. How tectonics, climate, and underlying lithology influence those processes in landscapes. P/NP or letter grading.

CM173. Earth Process and Evolutionary History. (4) Same as Ecology and Evolutionary Biology C173.) Lecture; four hours; laboratory; three hours. Requisites: Chemistry 14A, 14B (or 20A, 20B), Life Sciences 1, 2, 3, 4, or 7A, 7B, 7C (or 7A and 7B) and Introduction to Geology 14A or 14CH. Exploration of relationship between physical processes, such as tectonics and climate, and how they affect surface and impact biology of Earth. Study of evolution of universe, Earth, and life, with integration of history of science, including Darwinian evolution and plate tectonics revolutions. Study of formation of matter offers tools to understand geologic process of climate and evolution of Earth. This course will outline expected future human-influenced climate. Consideration of major events in history of life on Earth. Data and methods from geology, genetics, and geochemistry are integrated to reconstruct past events. This reveals how Earth processes shaped life and how life shaped Earth. Concurrently scheduled with course CM174.

C179. Search for Extraterrestrial Intelligence: Theory and Applications. (4) Lecture; two hours; laboratory, two hours. Enforced requisite: Mathematics 31B, Physics 1B. Recommended: course 71, Computer Science 31, Physics 110A, Program in Computing 10A. Search for extraterrestrial intelligence (SETI) is based on number of astronomical, mathematical, statistical, and computational principles. Coverage of fundamental concepts in these disciplines in context of SETI abundance and architecture of extrasolar planetary systems; radio astronomy, including wave propagation and dispersion; signal processing, including sampling theory and Fourier transforms; random processes, including Gaussian and Poisson statistics, and algorithm development. Design of observational program, acquisition of telescopic data, development of algorithms to analyze data, and writing report on results. Concurrently scheduled with course C279. P/NP or letter grading.

188. Special Topics in Earth, Planetary, and Space Sciences. (4) Lecture/lab/oratory, to be arranged. Dependent upon sponsored or temporary courses, such as those taught by visiting faculty members. P/NP or letter grading.

189. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. Letter grading.


C194. Research Topics in Earth, Planetary, and Space Sciences. (1) Research group meeting, one to three hours. Designed for departmental students participating in research group. Discussion of current research literature in research area selected by faculty member teaching course. May be repeated for credit. Concurrently scheduled with course C296. P/NP grading.

198. Honors Research in Earth, Planetary, and Space Sciences. (4) Tutorial, two hours. Limited to seniors. Individual research designed to broaden and deepen students’ knowledge of some phase of Earth, planetary, and space sciences. Development and completion of honors thesis or comprehensive research project under direct supervision of faculty mentor. May be repeated for maximum of 16 units. Individual contract required. Letter grading.

199. Directed Research or Senior Project in Earth, Planetary, and Space Sciences. (2 to 8) Tutorial, two hours. Limited to juniors/seniors. Supervised individual research or investigation under guidance of faculty mentor. May be repeated for maximum of 16 units. Individual contract required. Letter grading.

Graduate Courses

200A. Introduction to Geophysics and Space Physics I: Solid Earth and Planets. (4) Lecture; three hours; laboratory, four hours; field trip, two hours. Enforced requisite: Physics 105A, 110A, 112, 131. Geochemistry, cosmochemistry, and petrology; geotectonics; gravity field; seismology; heat transfer and thermal and mechanical evolution of mantle; core and geodynamo; lunar and planetary interiors. S/U or letter grading.

200B. Introduction to Geophysics and Space Physics II: Oceans and Atmospheres. (4) Lecture; three hours. Enforced requisite: Physics 105A, 110A, 112, 131. Evolution, chemistry, and heat balance of oceans and at-
mospheres: molecular spectra, radiative transfer, and planetary observations; dynamics of oceans and atmospheres. S/U or letter grading.


200D. Planetary Science. Lecture, three hours. Introduction to basic physical processes (both exogenic and endogenic) shaping solid surfaces in solar system and description of their optical and thermophysical properties, with emphasis on simple physical-based approach. Discussion of current literature. S/U or letter grading.

200E. Planetary Origins and Evolution. (4) Lecture, four hours. Designed for graduate students who are interested in origins of planetary systems and history of solar system. Open to advanced undergraduate students with consent of instructor. Provides background needed to understand and/or participate in research regarding formation and evolution of solar system and of other planetary systems. Description of star/planet formation process and subsequent evolution of planetary systems by integrating observations and theory. Emphasis on interdisciplinary knowledge communication between Departments of Earth and Space Sciences and Physics and Astronomy graduate students and faculty members. S/U or letter grading.


206. Physical Geochemistry. (4) Lecture, three hours. Requisite: course 51. Basic principles of physical chemistry for geologic applications. Thermodynamics of reactions among minerals, natural waters, and magmas; construction and interpretation of phase diagrams; single crystals of important geochimical and environmental issues. Concurrently scheduled with course C107. Additional independent research project and oral presentation required of graduate students. S/U or letter grading.

207. Geochemistry. (4) Lecture, three hours; discussion, one hour. Designed for junior/senior and graduate physical sciences students. Origin and abundance of elements and their isotopes; distribution and chemistry of elements in Earth and its environment. Concurrently scheduled with course C107. Additional independent research project and oral presentation required of graduate students. S/U or letter grading.

209. Isotope Geochemistry. (4) Lecture, three hours; discussion, one hour. Designed for junior/senior and graduate physical and biological sciences stu-

234. Petrologic Phase Equilibria. (4) Lecture, three hours; discussion, three hours. Requisites: course 51, Chemistry 110B. Principles governing homogeneous and heterogeneous equilibria, with selected applications to mineral stability relations in igneous and metamorphic rocks (fractional crystallization, partial melting, hydrothermal solutions, element partitioning in coexisting phases). S/U or letter grading.

235A-235B-235C. Current Research in Geochemistry. (1–1–1) Seminar, one hour. Limited to graduate Earth, planetary, and space sciences students. Seminars presented by staff, outside speakers, and graduate students stressing current research in Earth and planetary chemistry. May be repeated for credit. S/U grading.

236. Metamorphic Petrology. (4) Lecture, three hours; laboratory, six hours. Preparation: one introduction to Earth or physical geology course. Description of metamorphic rocks in light of observation, theory, and experiment. Geological relations, petrographic evidence, metamorphic zoning, thermodynamic and kinetic principles, disassociations, chemical analyses, mineral stability relations, use of piezobirefringent haloes, Rayleigh depletion model, isotopic fractionation, environmental factors of metamorphism. Laboratory study of representative metamorphic rocks and suites of rocks selected to illustrate topics discussed in lectures. S/U or letter grading.

240. Space Plasma Physics. (4) Lecture, three hours. Requisite: course 200C or Physics 210A. A review of plasma physics and plasmas charged treatments based on magnetohydrodynamics and kinetic theory. Applications to solar or planetary winds, steady-state magnetospheres, magnetospheric convection, substorm processes, magnetic merging, field-aligned currents and magnetosphere/ionosphere coupling, ring current dynamics, and wave particle instabilities. S/U or letter grading.


242. Sandstone Petrology. (4) Lecture, two hours; laboratory, four hours. Requisite or corequisite: course C141. Petrographic study of sandstones, with emphasis on provenance, petrofacies, and paleoectectonic reconstructions. S/U or letter grading.

243. Advanced Physical Sedimentology. (4) Lecture, three hours; fieldwork, three hours. Requisites: courses 103B, 111, or equivalent. Advanced topics related to sediments, sedimentary rocks, and information that can be extracted from each. Interpretation of depositional environments from complex sedimentary structures and textures. Includes field and lecture component and builds on previous sedimentology background. S/U or letter grading.


245A-245B. Current Research in Tectonics. (1–1–1) Seminar, one hour. Limited to graduate Earth, planetary, and space sciences students. Seminars presented by staff, outside speakers, and graduate students on current research in tectonics. May be repeated for credit. S/U grading.

246. Advanced Structural Geology. (4) Lecture, three hours; discussion, two hours. Requisite: course 111. Principles governing fracture, folding, and flow of rocks; solutions of structural problems at various scales; regional tectonic problems. S/U or letter grading.

251. Seminar: Mineralogy. (4) Seminar, three hours. Examination of groups of rock-forming minerals (e.g., feldspars), integrating such aspects as crystal structure, chemical equilibria, and petrogenesis. S/U or letter grading.

252. Seminar: Geochemistry. (4) Seminar, two hours; discussion, two hours. Phase equilibria under crustal conditions, chemistry of ocean waters, recent and ancient sedimentary systems of upper mantle, geochronology, cosmochemistry, and cosmochemistry. S/U or letter grading.

253. Seminar: Petrology. (4) Seminar, three hours. Problems of igneous or metamorphic petrology: methods of evaluating physical conditions of metamorphism; diffusion in mineralogic systems; origin of ultramafic rocks and problems of mantle; element fractionation among coexisting phases; other subjects in field. S/U or letter grading.

255. Seminar: Structural Geology and Tectonics. (4) Seminar, three hours. Flow and fracture in Earth's crust from microscopic to continental scale and in experiments. Examples may include metamorphic terranes, glaciers, and continental collision processes or unconsolidated sediments. Modern concepts of oceanic basins; processes leading to segregation of continental-type rocks. S/U or letter grading.

257. Seminar: Paleontology. (4) Seminar/discussion, three hours. Advanced topics in paleobiology, biostatigraphy, paleoecology, and paleobiogeography, with emphasis on relations to other disciplines. S/U or letter grading.

260. Field Seminar. (2 to 6) Lecture, one hour; discussion, one hour; fieldwork, five to 20 days. Requisite: course 61. Field-based teaching and discussion forum that varies in focus from general geology through structure and tectonics, sedimentology, igneous and metamorphic petrology, volcanology, or other subdisciplines as prescribed. May be repeated for credit. Concurrently scheduled with course C160. S/U or letter grading.

261. Topics in Magnetospheric Plasma Physics. (4) Lecture, four hours. Lectures, discussions, and exercises on specific advanced topics in magnetospheric plasma physics. Previous courses examined magnetic storms, geomagnetic storms, solar wind, equatorial electrojet, substorms, and adiabatic particle motion in Earth's radiation belts. S/U or letter grading.


263A. Solar System Magnetohydrodynamics. (4) (Same as Astronomy and Oceanic Sciences M250A) Lecture, three hours. Requisite: Atmospheric and Oceanic Sciences C205A, Derivation of MHD equations with two fluid aspects, generalized Ohm's law, small-amplitude oscillations, shock waves, and instabilities. Applications to statics and dynamics of solar and planetary magnetospheres and to solar wind/magnetosphere/ionosphere coupling. S/U or letter grading.

263B. Solar System Magnetohydrodynamics. (4) (Same as Astronomy and Oceanic Sciences M250A) Lecture, three hours. Requisite: Atmospheric and Oceanic Sciences C205A. Derivation of MHD equations with two fluid aspects, generalized Ohm's law, small-amplitude oscillations, shock waves, and instabilities. Applications to statics and dynamics of solar and planetary magnetospheres and to solar wind/magnetosphere/ionosphere coupling. S/U or letter grading.

265. Instrumentation, Data Processing, and Data Analysis in Space Physics. (4) Lecture, three hours. Preparation: Phys 210A. Design and operation of magnetometers and other instruments; data processing/display and archiving. Time-series analysis techniques, including filtering. Fourier series, eigenanalysis, and power spectra. S/U or letter grading.

270A-270B-270C. Seminars: Climate Dynamics. (2 to 4 each) (Same as Atmospheric and Oceanic Sciences M272A-M272B-M272C and Geography M270A-M270B-M270C.) Seminar, two hours. Archaeological, historical, and palaeoclimates and other subdisciplines as prescribed. May be repeated for credit. S/U or letter grading.

272A. Seminar: Geophysics. (4) Seminar, three hours. Focus varies from general geology through structure and tectonics, sedimentology, igneous and metamorphic petrology, volcanology. S/U or letter grading.

272B. Search for Extraterrestrial Intelligence: Theory and Applications. (4) Lecture, two hours; laboratory, two hours. Enforced requisites: Mathematics 125 or Physics 112A. Theoretical and practical aspects of SETI, including sampling theory and Fourier transforms; random processes, including Gaussian and Poisson statistics, and algorithm development. Design of observing program, strategies for propagation, development of algorithms to analyze data, and writing of report on results. Concurrently scheduled with course C179. S/U or letter grading.

272C. Seminar: Geophysics. (4) Seminar, two hours; discussions two hours. Enforced requisites: Mathematics 125 or Physics 112A. Focus varies from general geology through structure and tectonics, sedimentology, igneous and metamorphic petrology, volcanology. S/U or letter grading.
342 / East Asian Studies

Graduate Study

The East Asian Studies Program offers the Master of Arts (MA) degree in East Asian Studies.

East Asian Studies

Lower-Division Course

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

Graduate Courses

291A-291B, Variable Topics in East Asian Studies. (4–4) Seminar, three hours. Selected topics on East Asia. May be repeated for credit with topic change. S/U or letter grading.

ECOLOGY AND EVOLUTIONARY BIOLOGY

College of Letters and Science

101 HERSHEY HALL

195426

Los Angeles, CA 90095-7246

Graduate Study

Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Division website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Scope and Objectives

The Master of Arts degree in East Asian Studies offers an interdisciplinary and highly flexible program of study. With opportunities to take a range of advanced courses in the social sciences and humanities, students are able to tailor their programs to emphasize particular methodological and disciplinary approaches and to focus in depth on the region as a whole and on its dynamics in particular countries. Coursework and language offerings range from the ancient to the contemporary and allow students to prepare for a broad range of individual needs and career interests with a thorough grounding in the history and culture of the region.

Information on the undergraduate major in Asian Studies and minor in East Asian Studies can be found in the International and Area Studies section.
Professors Emeriti
Clifford F. Brunk, PhD
Joseph Cascara, PhD
Martin L. Cody, PhD
Franz Engelmann, PhD
Arthur C. Gibson, PhD
Elena González, PhD
Malcolm S. Gordon, PhD
Patricia A. Gowaty, PhD
William M. Hamner, PhD
Henry A. Hespenheide, PhD
Stephen P. Hubbell, PhD
Kenneth A. Nagy, PhD
Stephen P. Hubbell, PhD

Henry J. Thompson, PhD
Richard W. Siegel, PhD
Park S. Nobel, PhD
Peter M. Narins, PhD
Pamela L. J., PhD
Rachel Prunier, PhD
Jonathan D. Marcot, PhD
Brenda J. Larison, PhD
Gary M. Bucciarelli, PhD
Christy A. Brigham, PhD
Adjunct Associate Professors
Shane C. Campbell-Staton, PhD
Nandita R. Garud, PhD
Colin T. Kremer, PhD
Felipe Zapata, PhD
Adjunct Professors
Jon E. Keeley, PhD
Barbara J. Natterson, MD
Adjacent Associate Professors
Seth D. Riley, PhD
Xiaoming Wang, PhD

Adjunct Assistant Professors
Christy A. Brigham, PhD
Gary M. Buccicariello, PhD
Rachel L. Kennison, PhD
Brenda J. Larison, PhD
Jonathan D. Marcot, PhD
Rachel Prunier, PhD
Debra M. Shier, PhD

Scope and Objectives
Organismic biology touches every aspect of modern life, and understanding how living organisms are adapted to their environments is the major challenge of the discipline. To meet this challenge, the Department of Ecology and Evolutionary Biology offers undergraduate and graduate instruction at all levels of biology—from regulatory and physiological processes within organisms through the natural ecology and behavior of living organisms and to the population and community dynamics of multiple species. All of these subject areas address practical problems facing the world today, and all influence human decisions on matters ranging from conservation of the environment to advancement of medical science.

The Bachelor of Science degree combines essential instruction and strong preparation for employment or subsequent graduate study in the respective disciplines. Two of the majors offered in the department are designated capstone majors: Ecology, Behavior, and Evolution and Marine Biology. In both programs students apply theory and technique learned through four years of classroom and laboratory experience to their own independent projects. The major purpose of the capstone is to provide a unique field experience that involves designing and executing research projects. Students are aided in the scientific process of learning about a new ecosystem, developing relevant questions, designing conceptually based projects, troubleshooting and completing the work, and writing a publication-ready manuscript. They are also expected to exhibit strong teamwork, problem-solving, and communication skills.

Biology BS
The Biology major is designed for students with a broad interest in biology who desire to pursue careers in a wide range of biological and related fields. It provides students with excellent background preparation for postgraduate training in medicine and other health sciences, in tracks leading to academic and public service careers in biology, in biological industries, and even in nonbiological careers such as business, agriculture, and law. Emphasis is on breadth of training to expose students to all levels of modern biology.

Learning Outcomes
The Biology major has the following learning outcomes:

- Ability to critically evaluate scientific concepts presented in diverse media, from scientific articles to the popular press

Preparation for the Major

Life Sciences Core Curriculum

Required: Chemistry and Biochemistry 1A, 1B, 14B, 14BL, 14C, and 14D, or 20A, 20B, 20L, 30A, 30AL, and 30B; Life Sciences 30A, 30B, and 40 or 40S or 40T, or Mathematics 31A or 31AL. Life Sciences 40 or Statistics 13; or Mathematics 31A or 31AL, 31B, 32A, and Life Sciences 40 or Statistics 13; Physics 1A, 1B, 1C, 4AL, and 4BL, or 5A, 5B, and 5C.

Students must also complete one of two life sciences sequences—either Life Sciences 1, 2, 3, 4, and 23L, or 7A, 7B, 7C, and 23L. They may not substitute courses in either sequence.

Each core curriculum course must be passed with a grade of C– or better, and all courses must be completed with an overall grade-point average of 2.0 or better. Students receiving a grade below C– in two core curriculum courses, either in separate courses or repetitions of the same course, are subject to dismissal from the major.

Transfer Students

Transfer applicants to the Biology major with 90 or more units must complete the following introductory courses prior to admission to UCLA: one year of general biology with laboratory for majors, preferably equivalent to Life Sciences 1 and 2, or 7A, 7B, and 7C, one year of calculus, one year of general chemistry with laboratory for majors, and one semester of organic chemistry with laboratory. A second semester of organic chemistry or one year of calculus-based physics is strongly recommended but not required for admission.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

The Major

Students must take two courses from each principle:


Information Flow: Anthropology 124P, 128P, Chemistry and Biochemistry C100, 133A, 166, Ecology and Evolutionary Biology 100, 100L, 116, 120 (not open for credit to students with credit for course 185), 121, 122, 125, C126, 129, 132, 134B, C135, 136, 137, 153, 156, 162, 162L, 170 (not open for credit to students with credit for Physiology 166), 171, C172, C174, 176, M178, C179, 180A, 180B, 183, Life Sciences 107, Microbiology, Immunology, and Molecular Genetics 100L and 101 (must be taken together to satisfy requirement), 103AL, 103BL, 109AL, 109BL, 123, 122,
Transformations of Energy and Matter:

- 170, 167, 173, 174, M176, 177, M180A, M180B, M180C
- Structure Function: Chemistry and Biochemistry
- C105, 138, 153D, 153L, Earth, Planetary, and Space Sciences
- 116, Ecology and Evolutionary Biology
- 171, 174, 181, 184, Geography 106, 107, 108, Microbiology, Immunology, and Molecular Genetics 100L and 101 (must be taken together to satisfy requirement).
- 171, 174, 175, 176, 177, 178, 179, 180A, 180B, Molecular, Cell, and Developmental Biology 100, M106, 107, 108, 111A, 111B, 120, 121, 122, CM123, 124, C126, C127, 128, C130, M135, 136, 138, M140, C144, M145, 146, 147, 149, C152, 153, 154, 155, 165, 166 (not open for credit to students with credit for Ecology and Evolutionary Biology 170), 167, 173, 174, 175, 176, 177, 180A, M180B, M180C.

Each Life Sciences core curriculum course must be passed with a grade of C– or better, and all courses must be completed with an overall grade-point average of 2.0 or better. Students receiving a grade below C– in three core curriculum courses, either in separate courses or repetitions of the same course, are ineligible for the Biology major.

A minimum of five upper-division courses for the major must be taken within the Ecology and Evolutionary Biology Department.

A minimum of two laboratory courses must be taken, including a minimum of one upper-division ecology and evolutionary biology laboratory course.

Courses applied to major requirements may be applied to one core principle only. Courses listed in multiple principles may not be applied simultaneously.

Field quarter instructors determine to which core principle courses apply (four requirements).

A maximum of 8 units of the Ecology and Evolutionary Biology 198 series or 4 units of Ecology and Evolutionary Biology 199 may be applied toward the major. The principal investigator determines to which principle the course applies, after the student’s work and quarter are complete.

The Ecology, Behavior, and Evolution major has the following learning outcomes:

- Demonstrated broad knowledge of fundamentals of ecology, behavior and evolution, or marine biology acquired through coursework
- Development of skills in library research, data interpretation, synthesis, and scientific writing
- Use of current primary scientific literature, including database searches, identification of appropriate sources, and reading and understanding papers
- Understanding of key questions and hypotheses, interpretation of results and conclusions, and discrimination of quality through critique
- Use of knowledge gained for conception and execution of student project that includes self-developed questions and hypotheses, design of appropriate theoretical or empirical/experimental approach, execution of that approach, and analysis and interpretation of data
- Communication of original scientific work to colleagues and mentors through capstone scientific paper
- Demonstrated communication skills through oral or poster presentation at a symposium
- Display of strong teamwork and problem-solving skills

Preparation for the Major

**Life Sciences Core Curriculum**

Required: Chemistry and Biochemistry 14A, 14B, 14B1, 14C, and 14D; or 20A, 20L, 30A, 30AL, and 30B; Life Sciences 30A, 30B, and 40 or Statistics 13, or Mathematics 3A, 3B, 3C, and Life Sciences 40 or Statistics 13, or Mathematics 31A or 31AL, 31B, 32A, and Life Sciences 40 or Statistics 13; Physics 1A, 1B, 1C, 4AL, and 4BL, or 5A, 5B, and 5C.

Students must also complete one of two life sciences sequences—either Life Sciences 1, 2, 3, 4, and 23L, or 7A, 7B, 7C, and 23L. They may not substitute courses in either sequence.

Each core curriculum course must be passed with a grade of C– or better, and all courses must be completed with an overall grade-point average of 2.0 or better. Students receiving a grade below C– in two core curriculum courses, either in separate courses or repetitions of the same course, are subject to dismissal from the major.

**Ecology, Behavior, and Evolution BS**

**Capstone Major**

The Ecology, Behavior, and Evolution major is appropriate for students preparing for graduate study in ecology, behavior, and evolution or for employment in areas such as environmental biology, animal behavior, conservation, teaching, museum work, and governmental positions dealing with environmental issues of wide importance and impact. A strong field component involving study in terrestrial and marine locales such as coastal, desert, and mountain environments in California and the Southwest and in the Neotropics is required.

**Learning Outcomes**

The Ecology, Behavior, and Evolution major has the following learning outcomes:

- Demonstrated broad knowledge of fundamentals of ecology, behavior and evolution, or marine biology acquired through coursework
- Development of skills in library research, data interpretation, synthesis, and scientific writing
- Use of current primary scientific literature, including database searches, identification of appropriate sources, and reading and understanding papers
- Understanding of key questions and hypotheses, interpretation of results and conclusions, and discrimination of quality through critique
- Use of knowledge gained for conception and execution of student project that includes self-developed questions and hypotheses, design of appropriate theoretical or empirical/experimental approach, execution of that approach, and analysis and interpretation of data
- Communication of original scientific work to colleagues and mentors through capstone scientific paper
- Demonstrated communication skills through oral or poster presentation at a symposium
- Display of strong teamwork and problem-solving skills

**Transfer Students**

Transfer applicants to the Ecology, Behavior, and Evolution major with 90 or more units must complete the following introductory courses prior to admission to UCLA: one year of general biology with laboratory for majors, preferably equivalent to Life Sciences 1 and 2, or 7A, 7B, and 7C; one year of calculus, one year of general chemistry with laboratory for majors, and one semester of organic chemistry with laboratory. A second semester of organic chemistry or one year of calculus-based physics is strongly recommended but not required for admission.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.
The Major
Students must complete the following courses:

1. At least 4 morphology and systematic units (one course) from Ecology and Evolutionary Biology 101, 103, 105, 110, 111, 112, 113A, 113AL, 114A, 115, 117, 130, M157, or 184

2. At least 4 physiology units (one course) from Ecology and Evolutionary Biology M157, 162, 162L, 170, Physiological Science 165, or 166. Students with credit for Ecology and Evolutionary Biology 170 cannot also take Physiological Science 166

3. At least 12 ecology, behavior, and evolution units (three courses) from Anthropology 128P, Ecology and Evolutionary Biology 100, 103A, 113AL, 116, 117A, 117B, 120, 121, 122, 125A, 128, 129, 130, 133, 135, 136, 137, 142, 144, 151A, 152, 153, 154, 155, M157, 161, 162, CM173 (or Earth, Planetary, and Space Sciences CM173), C174, 175, M178 (or Bioengineering CM186 or Computational and Systems Biology M186 or Computer Science CM186), 183, 184, 185, 186, Life Sciences 107 (students with credit for Life Sciences 4 cannot take Life Sciences 107). Students with credit for Ecology and Evolutionary Biology 120 cannot also take course 185

4. One capstone field quarter consisting of 12 to 16 units from the Field Biology Quarter (FBQ), Marine Biology Quarter (MBQ), or preapproved equivalent (see undergraduate adviser)

5. At least 8 units (two courses) from Anthropology 128P, chemistry (except Chemistry and Biochemistry 188SA through 199; Chemistry and Biochemistry 153A and 153L are strongly recommended), Earth, Planetary, and space sciences (geology only; except Earth, Planetary, and Space Sciences 188 through 199), ecology and evolutionary biology (except Ecology and Evolutionary Biology 188SA through 196), geography (except Geography 188SA through 199), Life Sciences 107 (students with credit for Life Sciences 4 cannot take Life Sciences 107), mathematics (except Mathematics 10SA, 10SB, 10SC, 10A, 188SA through 199), microbiology, immunology, and molecular genetics (except Microbiology, Immunology, and Molecular Genetics 192A through 199), Molecular Cell, and Developmental Biology 172, physics (except Physics 188SA through 199); recommended: taxon-oriented courses in ecological, behavioral, and evolutionary processes such as Ecology and Evolutionary Biology 111, 112, 113A, 113AL, 114A, 115

A maximum of 8 units of the Ecology and Evolutionary Biology 198 series or 4 units of Ecology and Evolutionary Biology 199 may be applied toward the major. Credit for 199 courses from other departments may not be applied. Courses offered as part of the Field Biology Quarter (FBQ) are open to all qualified students, but strict priority is given to students who are Ecology, Behavior, and Evolution majors, are graduating seniors, have taken a broad range of ecology, behavior, and evolution coursework, and have maintained a good grade–point average.

With consent of the instructors and department, students may enroll in 200-level courses and apply them toward major requirements.

Each course applied toward requirements for preparation for the major and the major must be taken for a letter grade. Ecology, Behavior, and Evolution majors must earn a C– or better in each course taken as preparation for the major, and at least a 2.0 C overall average in all courses applied toward the major. Courses applied to upper-division major requirements must have a minimum of 4 units. A 6-unit course counts as one course on the requirements for the major.

As requisites for the Marine Biology Quarter, students must have a 3.0 overall grade-point average and have taken Statistics 13 or equivalent. Preference for the Marine Biology Quarter is given to Ecology, Behavior, and Evolution and Marine Biology majors. It is strongly recommended that students complete Ecology and Evolutionary Biology 109 and 109L prior to applying for the Marine Biology Quarter. Contact the Undergraduate Advising Office for all requirements for the Marine and Field Biology quarters.

Marine Biology BS
Capstone Major
The Marine Biology major is designed for students who wish to specialize in the area of marine sciences. Completion of this major provides students with both an excellent background in biology and specialization in various disciplines such as oceanography, subtidal and intertidal ecology, and physiology of marine organisms. Graduates are well prepared for postgraduate opportunities in the marine sciences, many other areas of biology, and medicine. The major provides valuable field experience with concomitant individual research opportunities in marine biology.

Learning Outcomes
The Marine Biology major has the following learning outcomes:

- Demonstrated broad knowledge of fundamentals of ecology, behavior and evolution, or marine biology acquired through coursework
- Development of skills in library research, data interpretation, synthesis, and scientific writing
- Use of current primary scientific literature, including database searches, identification of appropriate sources, and reading and understanding papers
- Understanding of key questions and hypotheses, interpretation of results and conclusions, and discrimination of quality through critique
- Use of knowledge gained for conception and execution of student project that includes self-developed questions and hypotheses, design of appropriate theoretical or empirical/experimental approach, execution of that approach, and analysis and interpretation of data
- Communication of original scientific work to colleagues and mentors through capstone scientific paper
- Demonstrated communication skills through oral or poster presentation at a symposium
- Display of strong teamwork and problem-solving skills

Preparation for the Major
Life Sciences Core Curriculum
Required: Atmospheric and Oceanic Sciences 1 or Earth, Planetary, and Space Sciences 15; Chemistry and Biochemistry 14A, 14B, 14BL, 14C, and 14D, or 20A, 20B, 20L, 30A, 30AL, and 30B; Life Sciences 30A, 30B, and 40 or Statistics 13, or Mathematics 3A, 3B, 3C, and Life Sciences 40 or Statistics 13, or Mathematics 31A or 31AL, 31B, 32A, and Life Sciences 40 or Statistics 13; Physics 1A, 1B, 1C, 4AL, and 4BL, or 5A, 5B, and 5C.

Students must also complete one of two life sciences sequences—either Life Sciences 1, 2, 3, 4, and 23L, or 7A, 7B, 7C, and 23L. They may not substitute courses in either sequence. Each core curriculum course must be passed with a grade of C– or better, and all courses must be completed with an overall grade-point average of 2.0 or better. Students receiving a grade below C– in two core curriculum courses, either in separate courses or repetitions of the same course, are subject to dismissal from the major.

Transfer Students
Transfer applicants to the Marine Biology major with 90 or more units must complete the following introductory courses prior to admission to UCLA: one year of general biology with laboratory for majors, preferably equivalent to Life Sciences 1 and 2, or 7A, 7B, and 7C, one year of calculus, one year of general chemistry with laboratory for majors, and one semester of organic chemistry with laboratory. A second semester of organic chemistry or one year of calculus-based physics is strongly recommended but not required for admission.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

The Major
Students must complete the following courses:

1. Ecology and Evolutionary Biology 109 and 109L

2. At least 4 laboratory units (one course) from Ecology and Evolutionary Biology 101, 105, 110, 112, 136, 170, or 181

3. At least 4 units of marine organismic biology or physiology (one course) from Ecology and Evolutionary Biology 101, 105, 110, 112, 136, 170, or 181

4. At least 4 units of ecology and behavior (one course) from Anthropology 128P, Ecology and Evolutionary Biology 100, 116, 117A, 117B, 122, 125A, 128, 129, M131 (or Geography M110), 133, 136, 137, 142, 151A, 152, 154, 155, M157, 161, 162, 170, 172, 174, and Physiological Science 166. Students with credit for Ecology and Evolutionary Biology 170 cannot also take Physiological Science 166

5. At least 4 evolution units (one course) from Anthropology M128S (or Society and Genetics M142), Ecology and Evolutionary Biology 116, 120, 121, 130, 133, C13S, 144, CM173 (or Earth, Plan-
etary, and Space Sciences CM173), C174, 175, 184, 185, 186, or Life Sciences 107 (students with credit for Life Sciences 4 cannot take Life Sciences 107). Students with credit for Ecology and Evolutionary Biology 120 cannot also take course 185.

6. One capstone field quarter consisting of 12 to 16 units from the Marine Biology Quarter (MBQ) or preapproved equivalent (see undergraduate adviser)

7. One additional physical, chemical, or geological oceanography course from Atmospheric and Ocean Sciences 102, 103, 104, M105 (or Ecology and Evolutionary Biology M139), 130, Chemistry and Biochemistry 103, 132A, Earth, Planetary, and Space Sciences 100, 116, 119, C141, 153, Ecology and Evolutionary Biology M131 (or Geography M110), 153, 198, 199, Geography 101, M118 (or Atmospheric and Oceanic Sciences M106), 123, 130, 169, Mechanical and Aerospace Engineering 103, or 150A, Molecular, Cell, and Developmental Biology 172

Credit for 199 courses from other departments may not be applied.

With consent of the instructors and department, students may enroll in 200-level courses and apply them toward major requirements.

Each course applied toward requirements for preparation for the major and the major must be taken for a letter grade. Marine Biology majors must earn a C– or better in each course taken as preparation for the major, and at least a 2.0 (C) overall average in all courses applied toward the major. Courses applied to upper-division major requirements must have a minimum of 4 units. A 6-unit course counts as one course on the requirements for the major.

As requisites for the Marine Biology Quarter, students must have a 3.0 overall grade-point average and have taken Statistics 13 or equivalent. Preference for the Marine Biology Quarter is given to Ecology, Behavior, and Evolution majors, and Marine Biology majors. Students must complete Ecology and Evolutionary Biology 109 and 109L prior to participating in the Marine Biology Quarter. Contact the Undergraduate Advising Office for all requirements for the Marine and Field Biology quarters.

### Field Biology

The department offers two quarter-long programs of advanced courses in field biology: the Field Biology Quarter (FBQ) and the Marine Biology Quarter (MBQ). These programs focus on the biology of organisms living in their natural environments, emphasize independent student research projects, and take place at field sites away from the UCLA campus. The course composition varies somewhat from year to year, but each program always carries 16 units of course credit. The Field Biology Quarter involves some combination of Ecology and Evolutionary Biology 103, 113B, 114B, 115, 119, 119L, 124A, 124B, 125, C126, 132, 134B, and 151B. The Marine Biology Quarter includes some combination of Ecology and Evolutionary Biology 102, 104, 123A, 123B, 147, 148, 163, 164, and 165, and 182. The Field and Marine Biology quarters may occur during fall, winter, or spring quarter, depending on location and faculty participation. To participate, students must enroll in all courses in the respective program. Participants in both programs are selected by personal interview. Information and applications are available in the Undergraduate Advising Office.

### Honors Program

An overall grade-point average of 3.4 and a 3.4 in the major are required for graduation with honors. Highest honors are awarded to majors who have a GPA of 3.6 overall and a 3.6 in the major at graduation and who have successfully completed Ecology and Evolutionary Biology 198A and 198B. Students do not need to apply for departmental honors. All students are reviewed for honors.

### Computing Specialization

Majors in Biology, Ecology, Behavior, and Evolution, and Marine Biology may select a specialization in Computing by (1) satisfying all the requirements for a bachelor’s degree in the specified major, (2) completing Program in Computing 10A, 10B, 10C, 30, and 60, and (3) completing one course from Computer Science CM186, Psychology 186A, or 186B. A grade of C– or better is required in each course, with a combined grade-point average in the specialization of at least 2.0. Students must petition for admission to the program and are advised to do so after completing Program in Computing 108 (petitions should be filed in the Undergraduate Advising Office). Students graduate with a bachelor’s degree in their major and a specialization in Computing.

### Conservation Biology Minor

The Conservation Biology minor is designed for students who wish to augment their major program of study with courses addressing issues central to the conservation and sustainability of biodiversity and natural ecosystem processes. The minor seeks to provide students with a greater depth of experience and understanding of the role that science can play in developing conservation policy.

To enter the minor, students must (1) be in good academic standing (2.0 grade-point average or better), (2) have completed Life Sciences 1 or 7B, Ecology and Evolutionary Biology 100, and 120 or 185 with minimum grades of C or better, and (3) submit a petition through Message Center to the Undergraduate Advising Office. All degree requirements, including the specific requirements for this minor, must be fulfilled within the unit maximum set forth by the College of Letters and Science.

Non-life sciences majors wishing to minor in Evolutionary Medicine should be aware that preparation courses in chemistry, life sciences, mathematics, and physics are requisites to some of the upper-division courses accepted for the minor.

### Evolutionary Medicine Minor

The Evolutionary Medicine minor is designed for students who wish to augment their major program of study with courses that combine the disciplines of ecology and evolutionary biology, anthropology, psychology, and zoology with medicine to create new paradigms for investigating and understanding disease. The minor provides students with a greater depth of experience and understanding of the integration of evolutionary biology and medical education.

To enter the minor, students must (1) be in good academic standing (2.0 grade-point average or better), (2) have completed Life Sciences 1 or 7B, Ecology and Evolutionary Biology 100, and 120 or 185 with minimum grades of C or better, and (3) submit a petition through Message Center to the Undergraduate Advising Office. All degree requirements, including the specific requirements for this minor, must be fulfilled within the unit maximum set forth by the College of Letters and Science.

Non-life sciences majors wishing to minor in Evolutionary Medicine should be aware that preparation courses in chemistry, life sciences, mathematics, and physics are requisites to some of the upper-division courses accepted for the minor.

### Required Lower-Division Course (5 units): Life Sciences 1 or 7B.

Graduate Study

Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Division website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Graduate Degrees

The Department of Ecology and Evolutionary Biology offers Master of Science (MS), Candidate in Philosophy (CPHIL), and Doctor of Philosophy (PhD) degrees in Biology.

Ecology and Evolutionary Biology

Lower-Division Courses

10. Plants and Civilization. (4) Lecture, three hours; demonstration, one hour. Designed for nonmajors. Or-igin of crop plants; man’s role in development, distri-bution, and modification of food, fiber, medicinal, and other plants in relation to their natural history. P/NP or letter grading.

11. Biomedical Research Issues in Minority Communities. (5) Discussion, four hours. Limited to 30 students. Discussions and student presentations on biomedical research as it affects minority communities, with emphasis on methodology, design, conse-quences, and ethics of current research. Discussion leaders provide information on preparation and training for research careers. P/NP or letter grading.

12. Biodiversity and Extinction: Crisis and Conser-vation. (4) Lecture, three hours; discussion, one hour. Examination of ecological and evolutionary principles necessary to understand nature and importance of worldwide environmental crisis. Research by students of specific conservation issues and presentation of re-sults to class. P/NP or letter grading.


18. Why Ecology Matters: Science Behind Environmental Issues. (5) Lecture, three hours; laboratory, one hour; computer laboratory, one hour. Development of scientific method, and ecological basis for local and global envi ronmental issues. Major challenges to be faced in this century, including need to find interdisciplinary and collaborative solutions to world’s worsening environmen tal problems (e.g., global climate change, bio-divi-ersity loss, deforestation, pollution, declining water resources, declining fisheries). Environmental literacy equips students to become leaders in growing green economy and to help forge solutions to current and fu ture environmental crises that threaten natural re source base. P/NP or letter grading.

19. Flat Lush Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

21. Field Biology. (4) Lecture, three hours; discus-sion, two hours, or field trips, three to four hours. Rec-ommended preparation: Life Sciences 15. Not open for credit to students with credit for course 122 or Life Sciences 1. Introduction to natural history of Western North America, especially Southern California. Classi-fi-cation, distribution, and ecology of common plants and animals. P/NP or letter grading.

25. Living Ocean. (5) Lecture, three hours; labora- tory, one or two hours, or field trips, three to four hours. Not open for credit to students with credit for Earth, Planetary, and Space Sciences 15. Physical and chemical processes that take place in oceans, with emphasis on their ef-fects on organisms. P/NP or letter grading.

50. Desert Life. (4) Lecture, three hours; laboratory, two hours. Introduction to fundamental structural, physiological, and behavioral features of desert organ-isms, with special emphasis on deserts of Western North America, especially Southern California. Pre-pares students for more intensive, related upper-divi-sion science course. Guided Saturday field trips or in-dependent trips. Letter grading.

97. California’s DNA: Field Course. (1) Lecture, one hour; fieldwork, four hours (every other week). Limited to freshmen. Students join CALLEODNA community sci ence program and do fieldwork to sample local and sediments in California. Collaboration with University of California natural resource spanning coast to wood-land, and desert to mountains. Analysis of samples for DNA to capture snapshot of local biodiversity. Pre-pares students for more intensive, related upper-divi-sion science course. Guided Saturday field trips or in-dependent trips. Letter grading.

97XC. AAP Freshman Seminar: Succeeding in Science Majors and Careers. (1) Seminar, one hour. Limited to science majors in Academic Advancement Program (AAP) who took Mathematics 1 in fall term. Series of lectures, workshops, and discussions designed to enhance student success in sciences by developing critical academic survival skills, ac-quiring students with practice of science, and high-lighting opportunities available to participate in research as undergraduate students. P/NP grading.

97XB. PEERS Sophomore Seminar: Pathways in Science. (1) Seminar, one hour. Limited to students in Program for Excellence in Education and Research in Sciences (PEERS). Series of lectures and workshops to enhance student success in sciences by ac-quirng students with practice of science, opportunities available to participate in research as under-graduate students, and careers available to students with science degrees. P/NP grading.

Upper-Division Courses

100. Introduction to Ecology and Behavior. (4) Lecture, three hours; discussion, one hour. Requisite: Life Sciences 1 or 7B. Not open for credit to students with credit for course 118, 122, 124A, 124B, 125, C126, 129, 132, 134B, 136, or 151B. Introduction to methods and topics in ecology and behavior. Growth and regulation of populations, organization of commu-nities and ecosystems. Evolutionary theory of animal behaviors. Animals use to find food, choose mates, and interact in social groups. Letter grading.

100L. Introduction to Ecology and Behavior Labo-ratory. (4) Laboratory, four hours. Requisites: course 100 (may be taken concurrently). Life Sciences 1 or 7B. Introduction to research methods in ecology and behavior, resulting in independent research proposals and to gain understanding of scientific method, critical evaluation of research papers, and development of scientific writing skills. Involves work outside and off-campus meetings. To apply this course to the Biology major, a minor in a laboratory course, the corre-sponding lecture must be completed with a passing grade. Letter grading.

101. Marine Botany. (6) Lecture, four hours; labora-tory, six hours; three to four field trips. Requisite: Life Sciences 1 or 7B. Introduction to biology and ecology of marine plants, including algae, sea grasses, and...
or letter grading.

102. Biology of Marine Invertebrates. (4) Five-week intensive course. Lecture, five hours; laboratory, 15 hours. Requisite: Life Sciences 1 or 7B. Introduction to systematic, evolutionary, natural history, morphology, behavior, physiology, and ecology of marine invertebrates. Letter grading.

103. Plant Diversity and Evolution. (5) Lecture, three hours; laboratory, three hours; field trip. Requisites: Life Sciences 1 and 4, or 7A and 7B. Introduction to green plant tree of life, with emphasis on using phylogenetic principles to understand macroevolution of land plants, vascular plants, seed plants, and currently ecologically dominant flowering plants. Introduction to phylogenetics, providing overview of theory and methodology to reconstruct and use phylogenetic trees to study organismal evolution. Exploration of 700 million years of plant evolution, with emphasis on morphological, functional, ecological, and biogeographical perspectives. Letter grading.

105. Biology of Invertebrates. (6) Lecture, three hours; laboratory/field trips, six hours. Requisite: Life Sciences 1 or 7B. Introduction to systematic, evolutionary, natural history, and physiology of invertebrates. P/NP or letter grading.

106. Experimental Marine Invertebrate Biology. (4 or 6) Lecture, two hours; laboratory, 12 hours. Requisites: course 105, Physiological Science 166 (may be taken concurrently). Offered either as 8-unit quarter-long course or as 4-unit Marine Biology Quarter course. Advanced course of natural history, physiology, biochemistry of invertebrates, with emphasis on independent laboratory and field investigations. P/NP or letter grading.

107. Evolution, Development, and Function of Invertebrate Animals. (8) Lecture, three hours; laboratory, three hours; field trips. Requisites: course 105 or completion of Marine Biology Quarter course. Advanced invertebrate biology course exploring evolutionary relationship of animal groups and evolution of marine species, comparative development and developmental genetics of invertebrate form, and function as they relate to marine invertebrates. Letter grading.

108. Biodiversity in Age of Humans. (5) Lecture, two and one half hours; laboratory, one hour; field trips, six to eight hours. Students learn how to use scientific method, ask and answer questions about eDNA, analyze literature, and develop professional skills applicable to a major in marine biology. Series of bioinformatics videos, interactive worksheet sets, and short lectures outside of class set baseline knowledge for problem solving and applied learning in classroom. Letter grading.

109. Introduction to Marine Science. (4) Lecture, three hours; discussion, one hour. Requisite: Life Sciences 1 or 7B. Strongly recommended for prospective Marine Biology majors and all students. Introduction to physical and biological world of 70 percent of planet: oceans. Designed to be integrative, with focus on geological evolution of seas, physical and chemical properties of water, physical and biological processes that shape and evolve our marine organisms and environments. Letter grading.

109L. Introduction to Marine Science Laboratory. (4) Laboratory, three hours; four field trips. Requisites: course 109 (may be taken concurrently). Life Sciences 1 or 7B. Introduction to marine environments and methods used to study them. Exploration of variety of concepts in marine science, ranging from oceanography to marine biology, with laboratory work on marine biodiversity, with emphasis on experimental design and scientific writing. To apply this course to the Biology upper-division major laboratory requirement, the corresponding lecture must be completed with a passing grade. Letter grading.

110. Vertebrate Morphology. (6) Lecture, three hours; laboratory, five hours. Requisites: Life Sciences 1, 2, and 3, or 7A and 7B. Study of vertebrate morphology, function, and evolution from viewpoint of comparative anatomy of adult forms, biomechanics, development, and paleontology. Laboratory study of selected vertebrates. Letter grading.

111. Biology of Vertebrates. (5) Lecture, three hours; laboratory, three hours; four one- to two-day field trips. Requisite: Life Sciences 1 or 7B. Adaptations, behavior, physiology, and taxonomy. Letter grading.

112. Ichthyology. (8) Lecture, three hours; laboratory, six hours; field trips. Requisite: Life Sciences 1 or 7B. Highly recommended: courses 110, 111. Biology of freshwater and marine fishes, with emphasis on their evolution, systematics, morphology, zoogeography, and ecology. Field trips to examine fishes of Southern California shoreline, tidepools, and coastal streams. Letter grading.

113A. Herpetology. (4) Lecture, three hours; discussion, one hour. Requisite: Life Sciences 1 or 7B. Recommended requisite: course 120. Exploration and summarization of evolution, ecology, life history, and conservation biology of world’s reptile and amphibian fauna. Topics include conservation assessments both globally and in California, discussion sections focused on student-led critical evaluations of current literature, and in-class meetings with professional herpetologists to share their professional experiences and job opportunities. Letter grading.

113AL. Herpetology Laboratory. (4) Laboratory, six hours; field trips. Corequisite: course 113A. Primary focus on documenting reptile and amphibian ecology, and natural history of world’s reptile and amphibian fauna, with special focus on California species. Field trips to observe living species in field, including one extended three-day trip. Letter grading.

113B. Field Herpetology. (8) Requisite: Life Sciences 1, Recommended: courses 100, 111. Two weeks of off-campus research projects followed by two-week lecture course and offered only as part of Field Biology Quarter. Biology, particularly ecology and behavior, of reptiles and amphibians in their natural habitat. Students carry out supervised research projects, then write up and present their results in seminar fashion. Letter grading.

114A. Ornithology. (5) Lecture, three hours; laboratory/field trips, three hours. Requisite: Life Sciences 1 or 7B. Recommended: course 100. Systematics, distribution, physiology, behavior, and ecology of birds. Letter grading.

114B. Field Ornithology. (8) Requisite: Life Sciences 1. Recommended: course 100. Two to three weeks of off-campus research projects followed by lecture course and offered only as part of Field Biology Quarter. Biology, particularly ecology and behavior, of birds in their natural habitat. Letter grading.

115. Mammalogy. (5) Lecture, three hours; laboratory, three hours. Requisite: Life Sciences 1 or 7B. Topics in mammalian biology, including evolution, ecology, behavior, functional morphology, systematics, physiology, and biogeography. Letter grading.

116. Conservation Biology. (4) Lecture, three hours; discussion, two hours. Requisite: Life Sciences 1 or 7B. Recommended: course 100. Not open for credit to students with credit for Environment 121. Study of ecological and evolutionary principles as they apply to preservation of genetic, species, and ecosystem diversity. Discussion sections focus on interactions of science, policy, and economics in conserving biodiversity. Oral and written student presentation on specific conservation issues. Letter grading.

117. Evolution of Vertebrates. (5) Lecture, three hours; laboratory, three hours. Requisite: course 110. Recommended: one general geology course. Fossil record of evolution of vertebrates, with emphasis on paleobiology and morphology of tetrapods. P/NP or letter grading.

118. Plant Adaptations. (8) Lecture, one hour; field trip, 10 hours. Requisite: course 100. Five-week course offered on campus in the spring or on campus/field in the fall. Field-oriented introduction to mechanisms by which vascular plants adapt themselves to their abiotic and biotic environments using community, population, and ecophysiological levels of integration. Letter grading.

C119A. Mathematical and Computational Modeling in Ecology. (4) Lecture, three hours; discussion, one hour. Requisite: Life Sciences 30B or Mathematics 3B or 31A. Recommended: courses 100, 122, Life Sciences 1 or 7B, Mathematics 3C. Introduction to modeling dynamic ecological systems, including formulation and analysis of mathematical models, basic techniques of scientific programming, probability and stochastic modeling, and methods to relate models to experiments. Examples taken from ecological and evolutionary principles applicable throughout life and physical sciences. Concurrently scheduled with course C219A, P/NP or letter grading.

C119B. Modeling in Ecological Research. (4) Lecture, two hours; discussion, two hours. Recommended requisite: course C119A. Advanced techniques in mathematical and computational modeling of ecological dynamics and other population dynamic problems. Independent research projects developed by students. Topics include model formulation, stochastic models, fitting models to data, sensitivity analysis, and advanced numerical methods and other topics from current literature. Concurrently scheduled with course C219B, P/NP or letter grading.

120. Evolution. (4) Lecture, three hours; discussion, two hours. Requisites: Life Sciences 1, 2, 3, 4, and 29, or 7A, 7B, 7C, and 29A or 31A (or Life Sciences 30B). Not open for credit to students with credit for course 185. Designed for departmental majors specializing in environmental and evolutionary biology. Introduction to evolutionary concepts and processes of evolution, with emphasis on natural selection, population genetics, speciation, evolutionary rates, and patterns of adaptation. P/NP or letter grading.

121. Molecular Evolution. (4) Lecture, three hours; discussion, one hour. Requisites: Life Sciences 3, 4, and 23L, or 7A and 23L. Molecular biology, with emphasis on evolutionary aspects. DNA replication, RNA transcription, protein synthesis, gene expression, and molecular evolution. Letter grading.

122. Ecology. (4) Lecture, three hours; discussion, two hours. Requisites: course 100, Life Sciences 1 or 7B, Mathematics 3B or 31A or Life Sciences 30B. Highly recommended: Mathematics 31B, 32A. Designed for departmental majors specializing in environmental and population biology. Introduction to population and community ecology, with emphasis on models of population growth and distributions of populations, interactions between species, and structure, dynamics, and functions of communities and ecosystems. P/NP or letter grading.

123A-123B. Field Marine Ecology. (4 or 8 each) Lecture, five hours; laboratory, 15 hours. Recommended requisites: courses 100, 122. Offered either as 4- or 8-unit five-week intensive course given off campus as part of Marine Biology Quarter or as four weeks of current topics in marine ecology, including analysis of primary research literature combined with field study of ecology of marine organisms, populations, communities, and ecosystems. Original research project required. Letter grading. 123A. In residence at research station located outside continental U.S. 123B. In residence at research station located within U.S., including Alaska and Hawaii. Letter grading.

124A-124B. Field Ecology. (4 or 8 each) Lecture, five hours; laboratory or field trip, 15 hours. Requisites: course 100, Life Sciences 1 or 7B. Recommended: courses 111, 120, 122. Offered as part of Field Biology Quarter. Field and laboratory research in ecology; collection, analysis, and write-up of numerical data, with emphasis on design and execution of field studies. Letter grading. 124A. In residence at research station located outside continental U.S. 124B. In residence at research station located within U.S., including Alaska and Hawaii, for part of or for duration of term. Letter grading.

125. Basic Methods in Communication. (4 or 8 each) Lecture, three hours; discussion, two hours. Requisites: course 100, Life Sciences 1 or 7B. Offered either as 4- or 8-unit quarter-long course or as 8-unit Field Biology Quarter course. Animal communication, vertebrate morphology, and biogeography of asexual vertebrates, and evolution of information processing systems. Eight-unit course covers same basic lecture material in five or six intensive weeks.
followed by extended field trips where students do individual projects in animal communication. Letter grading.

C126. Behavioral Ecology. (4 or 8) Lecture, three hours; discussion, two hours. Requisites: course 100, Life Sciences 1 or 7B, Mathematics 3C or 32A, Life Sciences 101L, 102L, 105L, 106L, 133L, course 129. Offered either as 4-unit quarter-long course or as 8-unit Field Biology Quarter course. Evolutionary perspective of behavioral ecology, with extended consideration of selfish DNA, conflict with genomes, natural selection and coevolution, kin selection and diversity in group functioning and cooperation, social learning, game theory, individual performance, populations, and human behavioral ecology. Eight-unit course covers several major areas in animal behavior more broadly, including foraging, sexual selection and predator-prey interactions in five intensive weeks, followed by extended field trip where students do individual projects. Concurrently scheduled with course C242. Letter grading.


128. Plant Physiological Ecology. (5) Lecture, three hours; laboratory, three hours; one two-day field trip. Requisites: course 100, Life Sciences 1 or 7B, Physical and Biological Sciences 1A or 1B, 2A or 2B. Study of plant behavior, including foraging strategies, social competition, sexual selection, mating systems, cooperation, and social organization. Letter grading.


M131. Ecosystem Ecology. (4) Same as Geography M110.) Lecture, three hours; field trips. Requisite: Geography 1 or Life Sciences 7B. Designed for juniors/seniors. Development of principles of ecosystem ecology, with focus on understanding links between ecosystem structure and function. Emphasis on energy and water balances, nutrient cycling, plant-soil-microbe interactions, landscape heterogeneity, and human disturbance of ecosystems. P/N or letter grading.

132. Field Behavioral Ecology. (8) Lecture, two hours; laboratory/field trip, 10 hours. Requisites: course 100, Life Sciences 1 or 7B, recommended. course 129. Five-week course offered only as part of Field Biology Quarter. Field research in behavioral ecology, emphasizing animal communication, design and execution of long and short term field projects during extended field trip. Letter grading.

133. Elements of Theoretical and Computational Biology. (4) Lecture, three hours; discussion, one hour. Requisites: Life Sciences 1, 2, 3, 4, 5, 6, 10, 11, 12, 31A, 31B, and 32B, or Life Sciences 30B. Strongly recommended: elementary statistics course. Introduction of basic core mathematical ideas and models necessary to understand contemporary ecology and evolutionary biology. Population ecology and growth, community ecology, population genetics, natural selection. P/N or letter grading.

134B. Field Physiological Ecology of Desert Animals. (8) Fieldwork, 15 hours. Requisite: Life Sciences 1 or 7B. Recommended: course 100. Two weeks of off-campus research lectures, one two-week field course (four hours per day) and offered only as part of Field Biology Quarter. Consideration of physiological, behavioral, morphological, and ecological mechanisms that allow organisms to survive in arid habitat. Students carry out supervised research projects, then write up and orally present their results in 134A. Letter grading.

C135. Population Genetics. (4) Lecture, three hours; discussion, one hour. Enforced requisite: Life Sciences 4 or 7A. Strongly recommended: course 100, Mathematics 31A, and 31B or Life Sciences 30B. Basic principles of genetics of population, dealing with genetic structure of natural populations and mechanisms of evolution. Equilibrium conditions and forces altering gene frequencies, polygenic inheritance, molecular evolution, and best management practices when reorienting landscape. Students learn to identify classic symptoms of unhealthy ecosystem and important metrics to determine ecosystem recov- ering. Students evaluate Stone Canyon Creek at UCLA. Students develop site and vegetation maps, conduct soil and water tests, and assess overall health of any recommended restoration plans on restoring plan. Mandatory all-day field trips. Letter grading.

136. Ecological Restoration. (6) Lecture, two and one half hours, laboratory, three hours; three field trips. Requisites: course 100, Life Sciences 1 or 7B. Study of ecosystems damaged by overuse or unsustainable extraction of natural resources, foundation of restoration ecology including historical knowledge, reference sites, soil preparation, biological and chemical restoration, methods of monitoring, and evaluation of outcomes. P/N or letter grading.

137. Chemical Communication. (4) Lecture, three hours; discussion, two hours. Requisites: Biochemistry 14A, 14B, 14BL, 14C, 14CL, and 14D, or 20A, 20B, 30A, 30AL, and 30BL, Life Sciences 1, 2, 3, 23L. Chemical signals are most important means by which organisms communicate. Exploration of how chemical signals are produced, transported, and influence behavior of microbes, plants, and animals. Synthet-ic approach, with emphasis on applications to cell biology, physiology, ecology, and P/N or letter grading.

M139. Introduction to Chemical Oceanography. (4) Same as Atmospheric and Oceanic Sciences M150.) Lecture, three hours; discussion, one hour. Introduction of fundamental concepts of marine sciences, and engineering majors interested in oceanic environment. Chemical composition of oceans and nature of physical, chemical, and biological processes governing this composition in past and present. Focus on processes of major and minor oceanic constituents, with focus on those that are most important for life (i.e., carbon, nitrogen, phosphorus, silicon, and oxygen). Investigation of primary productivity, export production, remineralization, dia- genesis, air-sea gas exchange processes. Letter grading.

142. Aquatic Communities. (4) Lecture, three hours; discussion, one hour. Requisite: Life Sciences 1 or 7B. Overview of species and communities in marine and freshwater environments. Exploration of interactions of biological factors that shape commu- nities and how scientists test hypotheses. Emphasis on processes of predation, competition, and reproduction. Letter grading.

144. Prehistoric California. (5) Lecture, three hours; laboratory, three hours; field trips. Requisite: Life Sciences 1 or 7B. Recommended: course 100. Survey of prehistory of the United States, and California, and California, and California, and California, and California, and California. Examination of major groups of organisms from oceans and on land that can be found in fossil record of California. Emphasis on how faunas have changed over time especially during periods of diversification and extinction. Influence of major events of geologic, climatic, and environmental change on living organ- isms related to environmental change on human timescales. Emphasis on how scientists collect and evaluate fossil data through understanding of living or- ganisms. Letter grading.

M145. Advanced Paleontology, (4) Same as Earth, Planetary, and Space Sciences M111.) Lecture, three hours. Requisites: course 100 or Earth, Planetary, and Space Sciences 116. Consideration of major factors that have influenced history of life, including analytical approaches to analyzing patterns in fossil record, nature of rock record, and contribution of data from space to understanding of life on Earth. Letter grading.

147. Biological Oceanography (4) Five-week intensive course. Lecture, five hours; laboratory, 15 hours. Requisites: Chemistry 1A, 1B, 14B, or 20A, 20B, 20L, and 30AL, Life Sciences 1, 3, 23L. Lectures include physical, chemical, and biological factors a- ffecting abundance and distribution of organisms in marine environment. Laboratory includes experimental studies of local marine organisms, with emphasis on primary and secondary production and nutrient flux. Letter grading.


151A. Tropical Ecology. (4) Lecture, one hour; dis- cussion, two hours. Requisite: Life Sciences 1 or 7B. Tropical forests are major source of biodiversity, both ous and ecosystem function of tropical forest habitats. Discussion of such themes as biogeography, forest structure, plant growth forms, animal communities, biogeochemistry, and disturbance regimes. P/N or letter grading.

151B. Field Tropical Ecology. (8) Lecture, three hours; fieldwork, five hours. Requisites: course 100, Life Sciences 1 or 7B. Two weeks of off-campus re- search projects followed by two-week lecture course and offered only as part of Field Biology Quarter. Intro- duction to biodiversity, community structure, and dy- namics and ecosystem function in tropical forest hab- bitat. Letter grading.

152. World Vegetation Ecology and Ecophysiology. (4) Lecture, three hours; discussion, one hour. Requi- sites: Life Sciences 1 or 7B. Diversity of physiological adaptations of continents, and world, ex- plaining distribution and dynamics of world vegetation types. Focus on processes across scales from cells to ecosystem to globe, instrumentation for environ- ments, and ecophysiological measurements, and ex- periments used to make discoveries about plant ad- aptation. Letter grading.

153. Physics and Chemistry of Biotic Environment- es. (4) Lecture, three hours. Requisites: Chemistry 1A, 14A, 14BL, or 20A, 20B, and 30AL, Life Sciences 1, 3, 23L, 7B, 101. Recommended: course 100. Introduction to structure, biodiversity, and dynamics of Cali-
forria ecosystems, with focus on Southern California, and impact of human activities on these systems. P/ NP or letter grading.

Community Ecology. (4) Lecture, three hours; discussion, one hour. Requisite: Life Sciences 1 or 7B. Recommended concurrent or prior to 222. Community Ecology is an introduction to biodiversity in ecological communities and the global community. Topics include plant form and function, seed dormancy and population dynamics, life histories, disturbance and succession, community structure and dynamics, and global change. P/ NP or letter grading.

Physiology. (4) Lecture, three hours; discussion, two hours. Requisite: Life Sciences 1 or 2, 3, 3L, or 7A, 7B, 7C, 7D, 23B or Mathematics 3C or 32A, Physics 1C and 4BL or 5B or 6C or 6CH. Not open for credit to students with credit for Physiological Science 166. Designed for Ecology, Phylogenetics, and Comparative Biology 178, and advanced courses in evolutionary biology (function) of animal organs and organ systems, with emphasis on environmental interactions and ecosystems. Letter grading.

171. Coming of Age on Planet Earth. (4) Lecture, three hours; discussion, one hour. Across phylogenetically broad range of species, individuals in same developmental stage of life share vulnerabilities and similarities. Focus on the way in which human facing animals as they transition from juveniles to mature adults through integration of behavioral ecology, neuroscience, life history theory, and phylogenetic, behavioral, and evolutionary approaches are appropriate for different types of research questions and critically evaluate their output. All statistical analysis conducted in R. Concurrently scheduled with course CM220. P/ NP or letter grading.

171F. Earth Process and Evolutionary History. (5) Same as Geology and Geophysics 171F. Lecture, four hours; laboratory, two hours. Enforced requisite: Life Sciences 1 or 7B. Recommended: course C202. P/ NP or letter grading.

171CM. Earth Process and Evolutionary History. (5) Same as Earth, Planetary, and Space Sciences 171CM. Lecture, four hours; laboratory, three hours. Requisites: Chemistry 14A, 14B (or 20A, 20B), Life Sciences 1, 2, 3, 4, and 7A, 7B, 7C and 7A (or 7B). Focus on the way in which human facing animals as they transition from juveniles to mature adults through integration of behavioral ecology, neuroscience, life history theory, and phylogenetic, behavioral, and evolutionary approaches are appropriate for different types of research questions and critically evaluate their output. All statistical analysis conducted in R. Concurrently scheduled with course C220. P/ NP or letter grading.

172. Advanced Statistics in Ecology and Evolutionary Biology. (4) Lecture, two hours; laboratory, two hours. Enforced requisite: Life Sciences 40 or Statistics 10 or 13. Overview of and application of advanced statistical methods that go beyond linear models and mean comparison, including bootstrapping, permutations, Bayesian statistics, mixed models, clustering, and network analysis. At course end students should be able to explain which statistical approaches are appropriate for different types of research questions and critically evaluate their output. All statistical analysis conducted in R. Concurrently scheduled with course CM220. P/ NP or letter grading.

175. Evolutionary Dynamics of Sex. (4) Lecture, three hours; discussion, one hour. Requisite: Life Sciences 1 or 7B. Fitness dynamics of reproduction when
183. Finding Ecological Solutions to Environmental Problems. (4) Seminar, two hours; discussion, two and one half hours. Requisite: course 100. Ecological practice in which students work in teams with client (e.g., non-profit, governmental) to research and propose solutions to selected problems. Students learn practical skills to apply ecological science to solving of diverse and interdisciplinary environmental problems, in intimate and participatory environment. Students credited for high-quality academic work at professional level. Letter grading.

184. Evolution, Development, and Disease. (4) Lecture, three hours; laboratory, six hours. Requisite: Life Sciences 7B. Recommended requisite: course 103, 110, 120, M157, C174, or 185. Exploration of developmental mechanisms underlying evolution of animal design, including impacts of environment on these mechanisms. Exploration of what happens to animal form, including that of humans, when these developmental mechanisms are disrupted by environmental and genetic factors. Letter grading.

185. Variable Topics in Ecology and Evolutionary Biology. (4) Lecture, two and one half hours; discussion, one hour. Requisite: Life Sciences 1 or 7B. Not open for credit to students with credit for course 120. Designed for departmental majors specializing in population and physiology biology and in medicine. Introduction to mechanics and processes of evolution, with emphasis on natural selection, population genetics, speciation, evolutionary rates, and patterns. Coverage of the functional and structural principles of evolution, with special focus on medicine and human health. P/NP or letter grading.

186. Evolutionary Medicine: Clinical Perspective on Medical, Surgical, and Psychiatric Disorders. (4) Lecture, three hours; discussion, one hour. From breast cancer and heart failure to self-injury, obsessive-compulsive and eating disorders, all contemporary medical issues have evolutionary roots. Undergraduate application of an evolutionary framework to issues faced by physicians, veterinarians, psychologists, and other healthcare providers. Development of awareness and understanding of evolutionary roots of these disorders provides future health-care providers with expanded perspective that enhances their practice and benefits their patients in whatever field they enter. Letter grading.

187. Variable Topics in Ecology and Evolutionary Biology. (4) Lecture, three hours; discussion, one hour. Requisite: Life Sciences 1, 2, 3, 4, 23L. Investigation and discussion of current issues in the field of ecology and evolutionary biology. Contact Undergraduate Advising Office for current topics. May be repeated for credit. P/NP or letter grading.

188. Special Courses in Ecology and Evolutionary Biology. (4, 8) Seminar, two hours; discussion, two hours. Enforced prerequisite: course 189. Advanced Honors Seminars. (1) Tutorial, to be arranged. Enforced corequisite: Honors Course 198A. Designed for departmental majors. May be repeated for credit. P/NP or letter grading.

190A-190B. Seminars: Biology and Society. (2–4) Seminar, two hours (course 190A) and four hours (course 190B). Investigations and discussions of current socially important issues involving substantial biological, ethical, and social considerations, either or both as background for policy and as consequences of policy. May be repeated once for credit with instructor change. Letter grading.

191. Variable Topics Research Seminars: Ecology and Evolutionary Biology. (1) Seminar, two hours. Requisite: Life Sciences 1, 3, 4, 23L or 25. Designed to encourage participation and introduction to current research in the field of ecology and evolutionary biology. Students meet on regular basis for more information. Students meet on regular basis for more information. May not be applied toward departmental major. May be repeated for credit. P/NP grading.

192A-192B. Undergraduate Assistant in Ecology and Evolutionary Biology. (4–2) Seminar, 12 hours (course 192A) and six hours (course 192B). Limited to juniors/seniors. Training and supervised practicum for advanced undergraduate students in assisting with courses related to biology. Students assist in preparation of materials and development of innovative programs with guidance of faculty members in small course settings. Consult Undergraduate Advising Office for further information. May not be applied toward course requirements for departmental majors. May be repeated for credit. P/NP grading.


194A. Research Group or Internship Seminars: Access to Research Careers. (2) Seminar, six hours. Enforced prerequisite: one course from 188A through 198D or 199. Designed to encourage participation and stimulate progress in specific research areas for undergraduate students who are part of departmental research groups or internships. Development of use of specific research methods and current literature in field of research of faculty members or students. May be repeated for credit. P/NP or letter grading.
203. Marine Botany and Physiology. (4) Lecture, two hours; discussion, one hour; laboratory, six hours; experimental project. Designed for graduate students. Structure, reproduction, life histories, and biology of marine algae, with emphasis on physiological ecology and biochemical, ecological, and biological investigation of algae. Given off campus at marine science center. S/U or letter grading.

204. Advanced Biology of Algae. (4) Lecture, four hours; discussion, one hour. Consideration of current research in experimental phyology. Topics include discussion of appropriate aspects of chemical and physical oceanography and limnology; algal physiology; biochemical, physiological, and ecological processes in ocean and freshwater habitats. S/U or letter grading.

205. Marine Invertebrate Biology. (4) Lecture, four hours; discussion, one hour. Functional morphology, life histories, and systematics of marine invertebrates of all major and most minor taxa; emphasis on living animal and its habitat. Given off campus at marine science center. S/U or letter grading.

206. Advanced Ichthyology. (4) Lecture, three hours; laboratory, three hours. Requisite: course 111 or 112. Advanced study of various aspects of fish biology. Theme varies from year to year. May be repeated for credit. S/U or letter grading.

208. Advanced Vertebrate Morphology. (4) Lecture, two hours; laboratory, eight hours. Requisite: course 110. Emphasis on functional approach to evolution of vertebrate locomotor, feeding, and circulatory systems. Laboratory includes comparative and experimental analyses of morphological adaptation. Independent project required. May be repeated once for credit. S/U or letter grading.

209. Behavior of Arthropods. (4) Lecture, three hours; discussion, one hour. Advanced study of topics in behavior of terrestrial arthropods, including communication, feeding, reproductive, and social behavior. Emphasis on the adaptive significance and functional approaches toward understanding behavior. Independent project required. S/U or letter grading.

210. Advanced Ornithology. (4) Lecture, two hours; laboratory, two hours; fieldwork, two hours. Requisite: course 114A. Advanced study of topics in modern avian biology. Emphasis on experimental approaches to investigations of phylogeny (energetics, nutrition, osmoregulation), ecology (population and community organization), and behavior (foraging, breeding, sociality). S/U or letter grading.


C219A. Mathematical and Computational Modeling in Ecology and Evolution. (4) Lecture, six hours; discussion, six hours. Requisite: Life Sciences 30B or Mathematics 3B or 31A. Recommended: courses 100, 122, Life Sciences 1 or 7B, Mathematics 3C. Introduction to modeling dynamics of ecological systems, including formulation and analysis of mathematical models, basic techniques of scientific programming, probability and stochastic modeling, and methods to relate models to data. Examples from population dynamics, stock recruitment, competition, and predation. Concepts and principles applicable throughout life and physical sciences. Concurrently scheduled with course C119A. S/U or letter grading.

C219B. Modeling in Ecological Research. (4) Lecture, two hours; discussion, two hours. Requisite: course C219A. Advanced techniques in mathematical computation and modeling of ecological dynamics and other population dynamic problems. Independent research projects developed by students. Topics include model formulation, stochastic models, fitting models to data, sensitivity analysis, presentation of model results, and other topics from current literature. Concurrently scheduled with course C119B. S/U or letter grading.

220. Conservation Science: Theory and Practice. (3) Lecture, three hours. Limited to graduate students. Conceptual foundations of conservation science and its applications to real-world conservation problems. Introduces students to how basic conservation researchers and experienced conservation professionals approach complex issues and want to be exposed to cutting-edge theory and thinking to tackle today's complex conservation challenges. May be repeated for credit. S/U grading.

224. Marine Molecular Biology. (8) Lecture, three hours; laboratory, eight hours. Preparation: background in marine biology. Marine microbiology, molecular ecology, and bioinformatics. Ten-week intensive course designed to train marine biologists in advanced techniques of cell and molecular biology. Topics include DNA isolation, polymerase chain reaction, and reverse transcriptase. Topics of advanced techniques in molecular biology. Ten-week intensive course designed to train marine biologists in advanced techniques of cell and molecular biology. Topics include DNA isolation, polymerase chain reaction, and reverse transcriptase.

225. Global Health Measures for Biological Emergencies. (4) Same as Epidemiology M226.) Lecture, four hours; discussion, one hour. Requisite: Epidemiology M121. Mitigation of bioterrorism falls outside traditional public health programs and public health graduate education. Because of seriousness of such threats, it is important that individuals trained in public health can understand responses. Letter grading.

228. Earth Process and Evolutionary History. (8) Same as Earth, Planetary, and Space Sciences CM273.) Lecture, four hours; laboratory, three hours. Preparation: background in geology. Emphasis on the effects of the Earth's history on human evolution. Consideration of major events in history of life on Earth. Data and methods from paleontology, geology, and geochemistry are integrated to reconstruct past events. This requires a working knowledge of Earth processes and geological time. Formulation of hypothesis is an integral part of the process. Letter grading.
 theorize, quantitative genetics and phenotypic evolution, and advances made in field in last decade. May be repeated for credit. Letter grading.

233. UCLA/La Kretz Workshop in Conservation Genomics. (2) Lecture; two hours; discussion, one hour; laboratory, two hours. Five-day field experience at La Kretz Center and Santa Monica Mountains. Conservation biology and genetics have had long and intimate relationship and constitute one key application of evolutionary analysis to real-world impacts of population genetics, phylogenetics, and phylolgeography have been particularly striking for conservation biology and have helped solve some of most pressing problems in biological conservation. Annual workshop to provide training environment for small group of motivated graduate students to explore how conservation problems best be addressed with genomic-level data. Hand's-on experience on efficient collection, troubleshooting, and analysis of large datasets for conservation-relevant problems. Active participation from members of several U.S. government agencies at forefront of endangered species protection and management, providing forum for exploring relevant aspects of conservation genomics to managers. S/U or letter grading.

C234. Practical Computing for Evolutionary Biologists and Ecologists. (4) Lecture; three hours; laboratory, two hours. Requisite: Life Sciences 1 or 7B. Introduction to fundamental skills needed for manipulation, analysis, and presentation of large data sets. Basic programming and scripting in Python as well as working in shell, regular expressions, and related topics. Concurrently scheduled with course C177. Letter grading.


237. Communicating Science to Informal Audiences. (5) Lecture; three hours; discussion, one hour; laboratory or fieldwork, two hours. Requisite: one course from course 25, Atmospheric and Oceanic Sciences 20A, 20B, Earth, Planet, and Space Sciences 1, 15, Environment M10, Life Sciences 1 or 7B. Designed for juniors/seniors. Combined instruction in inquiry-based teaching methods and learning from six weeks of supervising teaching experience at Santa Monica Pier Aquarium. Students practice communicating scientific knowledge and receive mentoring on how to improve their presentations to develop ocean science literacy at all levels and to encourage broad public understanding of science and environmental stewardship. Need for young scientists to learn how to communicate about their science to audiences is especially critical when considering that Americans are expected to comprehend and respond to increasingly complex issues, such as global climate change, with limited understanding of how the world works. Concurrently scheduled with course C179. Letter grading.

M238. Ocean Biogeochemical Dynamics and Climate. (4) (Same as Atmospheric and Oceanic Sciences M238.) Lecture, three hours. Interaction of ocean biogeochemical processes with physical climate system. Biogeochemical processes controlling carbon dioxide and oxygen in oceans and atmosphere over time-scales from few million years to several years. Anthropogenic perturbation of global carbon cycle and climate. Response of ocean ecosystems to past and future global changes. Use of isotopes to study ocean biogeochemical cycles and climate. Interactions between biogeochemical cycles on land and in ocean. S/U or letter grading.

240. Physiology of Marine Animals. (4) Lecture; four hours; discussion, one hour. Designed for graduate students. Lecture and laboratory studies on cellular, tissue, organ, and animal physiology; regulatory biology; metabolic characteristics of cells, energy transformations. Graduates in department. S/U or letter grading.

C242. Behavioral Ecology. (4) Lecture; three hours; discussion, two hours. Requisites: course 100, Life Sciences 1 or 7B, Mathematics 3C or 32A or Life Science 1 or 7B. Evolutionary perspective of behavioral ecology, with extended consideration of selfish DNA, conflict with genomes, natural selection and evolution of cooperation, social learning, game theory and alternative life histories, and human behavioral ecology. Concurrently scheduled with course C126. Letter grading.

243. Animal Communication. (4) Lecture, three hours; discussion, one hour. Requisites: Mathematics 3C or 32A, and Physics 1C and 4BL, or 6C or 6CH. Physical properties of animal signals and physiological mechanisms underlying their generation and reception. Lectures treat signal analysis, signal transmission, and receptor design in light of constraints placed on each sensory modality. Examples of communication systems utilizing sound, chemical, visual, tactile, and magnetic cues, with emphasis on biological adaptations for efficiently signaling species-specific information. S/U or letter grading.

244. Advanced Insect Physiology. (4) Lecture; two hours; discussion, one hour. Detailed discussion of current problems in insect physiology, with advanced laboratory. S/U or letter grading.

247. Advanced Plant Biology. (4) Lecture; three hours; discussion, one hour. Requisites: course 162 or Molecular Cell and Developmental Biology C141. Open to undergraduates with consent of instructor. Designed to expose first-year graduate students to topics of current interest in plant biology. Subjects include plant gene expression, growth and development, organ structure, development and function, and plant-specific metabolic processes (photosynthesis, nitrogen fixation, metabolism of small molecules). S/U or letter grading.

250. Professional Skills for Biological Research. (2 to 3) Seminar, two hours. Preparation, writing, and submission of research proposals. Collection and maintenance of laboratory and library data, preparation of scientific presentations, review of literature, and publishing strategies. Optional field trip offered during some years for 1 extra unit. S/U or letter grading.

251. Seminar: Systematics. (2) Seminar, two to four hours. Requisite: course from course 25, Atmospheric and Oceanic Sciences 20A, 20B, Earth, Planetary and Space Sciences 1, 15, Environment M10, Life Sciences 1 or 7B. Designed for juniors/seniors. Combined instruction in inquiry-based teaching methods and learning from six weeks of supervising teaching experience at Santa Monica Pier Aquarium. Students practice communicating scientific knowledge and receive mentoring on how to improve their presentations to develop ocean science literacy at all levels and to encourage broad public understanding of science and environmental stewardship. Need for young scientists to learn how to communicate about their science to audiences is especially critical when considering that Americans are expected to comprehend and respond to increasingly complex issues, such as global climate change, with limited understanding of how the world works. Concurrently scheduled with course C179. Letter grading.

255. Seminar: Invertebrate Zoology. (2) Seminar, two hours. S/U or letter grading.

259. Seminar: Herpetology. (2) Seminar, three hours. Seminar on current approaches to herpetology. Main theme varies from year to year. Prerequisites: course from course 25, Atmospheric and Oceanic Sciences 20A, 20B, Earth, Planetary and Space Sciences 1, 15, Environment M10, Life Sciences 1 or 7B. Designed for juniors/seniors. Combined instruction in inquiry-based teaching methods and learning from six weeks of supervising teaching experience at Santa Monica Pier Aquarium. Students practice communicating scientific knowledge and receive mentoring on how to improve their presentations to develop ocean science literacy at all levels and to encourage broad public understanding of science and environmental stewardship. Need for young scientists to learn how to communicate about their science to audiences is especially critical when considering that Americans are expected to comprehend and respond to increasingly complex issues, such as global climate change, with limited understanding of how the world works. Concurrently scheduled with course C179. Letter grading.


266. Seminar: Biology of Terrestrial Vertebrates. (2) Seminar, two hours. S/U or letter grading.

267. Seminar: Biophysical Plant Ecology. (2) Seminar, two hours. Requisite: course M286. Seminar, three hours. Advanced study of specific topics in animal ecology and related fields. Theme varies from year to year, but usually emphasizes areas such as behavior, ecology, and evolution. S/U or letter grading.

269. Seminar: Animal Ecology. (2) Seminar, three hours. Advanced study of specific topics in animal ecology and related fields. Main theme varies from year to year, but usually emphasizes areas such as behavior, ecology, and evolution. S/U or letter grading.

270. Seminar: Environmental Physiology. (2) Seminar, two hours. S/U or letter grading.


273. Seminar: Entomology. (2) Seminar, two hours. Discussion of specific topics in entomology and related fields. Main theme varies from year to year, but usually emphasizes areas such as behavior, ecology, and evolution. S/U or letter grading.


276. Seminar: Plant Cell Biology. (2) Seminar, two hours. Requisite: course 111 or 112. Seminar, two hours. Seminar on current approaches to plant physiology and related topics. Theme varies from year to year. May be repeated for credit. S/U or letter grading.


290. Seminar: Comparative Physiology. (2) (Same as Physiological Science M290.) Seminar, two and one half hours. Discussion of specific topics in comparative physiology of animals. Topics vary from year to year, with emphasis on systems physiology, neu-roendocrinology, or behavioral physiology. S/U or letter grading.

291. Seminar: Physiology and Biochemistry of Arthropods. (2) Seminar, two hours. S/U or letter grading.

296. Seminar: Ecology and Evolutionary Biology. (1 to 4) Seminar, three hours. Advanced study and analysis of current topics in cellular, organismic, and population biology. Discussion of current research and literature in research specializations, faculty member teaching course. S/U or letter grading.

297. Selected Topics in Ecology and Evolutionary Biology. (1 to 4) Seminar, one to three hours. Advanced study and analysis of selected special topics in ecology and evolutionary biology. Consult Schedule of Classes for topics and instructors. May be repeated for credit with consent of instructor. S/U or letter grading.
ECONOMICS

College of Letters and Science

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Economics 310-825-1011

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Ichiro Obara, PhD, Graduate Vice Chair
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Professors

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Andrew G. Atkeson, PhD (Stanley M. Zimmerman Endowed Professor of Economics and Finance)
Simon A. Board, PhD
Moshe Buchinsky, PhD
Anel T. Burstein, PhD
Dora L. Costa, PhD (Kenneth L. Sokoloff Professor of Economic History)
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Pablo D. Fajgelbaum, PhD (Qubchansky Endowed Professor of Economics)
Jinyong Hahn, PhD
Gary D. Hansen, PhD
Hugo A. Hopenhayn, PhD
Oleg Itskhoki, PhD (Vesu and Ana Kotamaraju Endowed Professor of Economics)
Edward E. Leamer, PhD (Chauncey J. Medbery Professor of Management)
Adriana Lleras-Muney, PhD
Rosa L. Matzkin, PhD (Charles E. Davidson Endowed Professor of Economics)
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Ichiro Obara, PhD
Lee E. Ohanian, PhD
Peter E. Rossi, PhD (James A. Collins Professor of Management)
Andres Santos, PhD
Aaron Tornell, PhD
Jonathan E. Vogel, PhD
Till M. von Wachter, PhD
Pierre-Olivier Weill, PhD
William R. Zame, PhD

Professors Emeriti

William R. Allen, PhD
Masanari Aoki, PhD
Costas Azariadis, PhD
Harold Demsetz, PhD
Bryan C. Elickson, PhD
Roger E. Farmer, PhD
Arnold C. Harberger, PhD
Benjamin Klein, PhD
Deepak K. Lal, DPhil (James S. Coleman Professor Emeritus of International Development Studies)
Naomi R. Lamoreaux, PhD
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Associate Professors

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Jay Y. Lu, PhD
Maurizio Mazzocca, PhD
Moritz Meyer-ter-Vehn, PhD
Suile O‘Zier, PhD

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Seki Bigio, PhD
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Michela Giorelli, PhD
Felipe M. Goncalves, PhD
Daniel Haanwinckel, PhD
Martin B. Hackmann, PhD
Juliana Londoño-Vélez, PhD
Rodrigo R.A. Pinto, PhD
Michael Rubens, PhD
Tommas M. Sadzik, PhD
Yotam Shem-Tov, PhD
Shuyang Sheng, PhD
Bernardo S. Silveira, PhD

Lecturer

Edward P. McDevitt, PhD

Adjunct Associate Professor

Randall R. Rojas, PhD

Adjunct Assistant Professors

Patrick D. Convery, MBA, PhD
Olivia I. Osei-Twumasi, PhD
William E. Simon, Jr., JD, PhD
Christopher J. Surro, PhD

Scope and Objectives

The Department of Economics undergraduate program is designed for students who wish to gain a thorough understanding of both empirical and theoretical approaches to economics. Emphasis is on economic principles applied to resolving interpersonal conflicts of interest and coordinating productive activity in a world of scarce resources. Because students must gain a thorough theoretical and technical competence before extensive study of the applied specializations in the discipline, the analytic core of the major in Economics is closely structured. Some courses are appropriate for nonmajors, but the curriculum is most suitable for students who wish to make the study of economics the primary focus in their undergraduate education.

The undergraduate major provides students with analytical training in reference to socioeconomic phenomena and provides an excellent theoretical background for those pursuing graduate education in economics, law, management, public administration, journalism, social welfare, architecture and urban planning, and education.

The graduate program is designed primarily for students pursuing the PhD degree. The doctorate is awarded to those students who have achieved the level of study and training required for a professional economist. The degree recognizes students’ ability to make scholarly contributions in their fields of specialization and to undertake advanced research in those areas.

Undergraduate Study

Economics BA

Learning Outcomes

The Economics major has the following learning outcomes:

• Application of economic analyses to everyday life, and visualization of economics in real-world situations
• Application of learning to policy-relevant issues
• Ability to understand current events
• Ability to assess the likely impact of specific policies put forth by government entities
• Evaluation of the role played by assumptions in arguments made for and against economic and policy issues
• Use of quantitative evidence and economic models to assess the validity of economic and policy-relevant arguments
• Understanding of statistical methodology and interpretation of statistical evidence
• Use of data to construct quantitative economics arguments, and to understand the statistical problems associated with interpreting the results
• Understanding of the role of sample selection/endogeneity in affecting results, and how to correct for these issues
• Formulation of written arguments that state assumptions and hypotheses, and evaluation of their pros and cons based on evidence
• Oral presentation of a carefully reasoned economic argument, and response to related questions
• Graphic presentation of a carefully reasoned economic argument by means of graphs, figures, charts, and presentation software
• Working knowledge of information databases, and knowledge of how to use the Web in gathering reliable information
• Location and use of primary data sources such as surveys
• Use of knowledge gained to understand and evaluate current economic events and new economic ideas

Admission
Application for the Economics major should be filed at the undergraduate counselors office in 2263 Bunche Hall. To apply, students must have completed at least 72 quarter units (but no more than 135 quarter units), one 12-unit term in residence in regular session at UCLA, and all courses listed under preparation for the major. Grades for preparation for the major courses must be reflected on the transcript prior to submission.

Premajor
While students are completing the lower-division preparation courses for the major, they may be classified as Economics premajors.

Preparation for the Major
Required: Economics 1, 2, 11, 41; one Writing II course or English Composition 129B; Mathematics 31A, and 31B or 31E. Each course must be taken for a letter grade. A 2.0 (C) grade is required in each premajor course. To enter the major, students must have a minimum 2.5 grade-point average in the economics and mathematics preparation courses and a GPA of at least 2.0 in any upper-division courses taken for the major before applying.

Repetition of more than one preparation course or of any preparation course more than once, including equivalent courses taken elsewhere, results in automatic denial of admission to the major.

Transfer Students
Transfer applicants to the Economics major with 90 or more units must complete the following introductory courses prior to admission to UCLA: one microeconomics course, one macroeconomics course, two calculus courses from the mathematics/physical sciences sequence, and one English critical reading and writing course. Transfer students must successfully complete all premajor requirements within their first three registered terms at UCLA.

Transfer students are required to take Economics 41 at UCLA rather than prior to transfer.

Transfer credit for any of the above is subject to department approval; consult with an undergraduate counselor before enrolling in any courses for the major.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

The Major
Required: Twelve upper-division economics courses as follows: Economics 101, 102, 103, 103L, 104, 104L, and six Economics Department upper-division elective courses. No more than two of the elective courses may also be selected from Management 120A, 120B, 122, 127A, 130A, 180 (real estate finance only).

Each course must be taken for a letter grade. Former courses 100, 110, and 120 may not be included among the 10 upper-division courses. Transfer credit is subject to department approval; consult with an undergraduate counselor before enrolling in any courses for the major. Laboratory courses are required for all upper-division economics courses when they are offered and listed as mandatory co-requisite.

To graduate, students must have at least a 2.0 grade-point average in their upper-division major courses, with grades of C– or better in Economics 101, 102, 103, 103L, 104, and 104L.

Business Economics BA
The Business Economics BA program offers a major for students seeking a business orientation in their study of economics. It does not replicate the traditional undergraduate business school curriculum. Instead, it offers a more tightly focused curriculum that is guided by the rigorous logic and integrative perspective of economics. It is designed to prepare students for graduate education in business, economics, and law. The program requires students to include specific courses offered by the department and the John E. Anderson Graduate School of Management (see the major).

Learning Outcomes
The Business Economics major has the following learning outcomes:

• Understanding, through application of microeconomics, of the interaction of individuals and organizations in markets; and of the role of public policy in shaping those interactions
• Understanding, through application of macroeconomics, of the functioning of market economies at regional, national, and global levels; and of the role of public policy in shaping those interactions
• Understanding and application of accounting principles to analysis of business problems
• Acquisition and use of data to evaluate hypotheses with tables, charts, and statistical analyses
• Use of appropriate analytical perspectives and approaches to frame problems involving the interaction of people, organizations, markets, and society; identify effective strategic approaches to problem solving; and gather and organize key information to facilitate problem solving

Admission
Enrollment in the program is limited. Applications for admission are handled exclusively by the Department of Economics. Applications should be submitted online. To apply, students must have completed at least 72 quarter units (but no more than 135 quarter units), one 12-unit term in residence in regular session at UCLA, and all courses listed under preparation for the major. Applications are available on the undergraduate economics Moodle website and are accepted during the first three weeks of each quarter, including summer session A. In addition, they must (1) be enrolled in UCLA regular session at the time of application, (2) have a 2.0 (C) minimum grade in each preparation course, (3) have a minimum 3.0 (B) overall average in all preparation courses except the writing course, and (4) have a minimum 2.0 (C) grade-point average in their upper-division courses taken for the major before applying (Economics 101 applies on the major preparation grade-point average).

The requisite grade-point averages plus completion of the preparation for the major courses do not guarantee admission to the program. Admission is on a competitive basis, using the above qualifications as minimum standards for consideration.

Premajor
While students are completing the preparation courses for the major, they may be classified as Business Economics premajors.

Transfer Students
Transfer students who wish to enter UCLA as Business Economics premajors must meet the admission screening requirements. For information, contact Undergraduate Admission.

Preparation for the Major
Required: Economics 1, 2, 11, 41; one Writing II course; Management 1A, 1B; Mathematics 31A, and 31B or 31E. Each course must be taken for a letter grade.

Repetition of more than one preparation course or of any preparation course more than once, including equivalent courses taken elsewhere, results in automatic denial of admission to the major.

The Major
Required: Economics 102, 103, 103L, 104, 104L, and at least two courses from the 106 series; English Composition 131B; five upper-division elective courses in economics and management (no more than three management courses from Management 108, 120A, 120B, 122, 123, 124, 126, 127A, 127B, 130A, 140 may be applied toward the elective requirement). In addition to Economics 103 and 103L, and 104 and 104L, at least two economics courses with laboratories must be completed and may be selected from either the Economics 106 series or an economics elective.

Each upper-division major course must be taken for a letter grade. Transfer credit for any of the major courses is subject to department approval; consult with an undergraduate counselor before enrolling in any courses for the major. Laboratory courses are
required for all upper-division economics courses when they are offered and listed as mandatory corequisite.

To graduate, students must have a minimum 2.0 grade-point average in their upper-division major courses, with at least a C- in each course. (Economics 101) applies on the preparation for the major, therefore requiring a minimum grade of C-.

Mathematics/Economics BS

See the Mathematics/Economics interdepartmental program section for a description of the major.

Honors Program

The departmental honors program is open to majors in Economics and Business Economics who have a cumulative grade-point average of at least 3.5 in the major and in all courses taken at UCLA prior to application.

To qualify for departmental honors at graduation, students must (1) select at least seven of the required upper-division economics courses from the approved list designated for departmental honors, (2) complete a two-term senior thesis acceptable to the departmental honors committee in Economics 198A and 198B, and (3) complete the major requirements with at least a 3.5 grade-point average in the economics courses. Highest honors are awarded at the discretion of the departmental honors committee based on grade-point average and quality of the senior thesis.

Economics 198A and 198B, the courses required for thesis preparation, may be counted as upper-division courses toward the field in which the thesis is written (for purposes of satisfying the requirements for the major). More information and application forms are available from an undergraduate counselor in 2263 Bunche Hall.

Graduate Study

Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Division website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Graduate Degrees

The Department of Economics offers Master of Arts (MA), Candidate in Philosophy (CPhil), and Doctor of Philosophy (PhD) degrees in Economics and a self-supporting Master of Applied Economics (MAE) degree.

Economics

Lower-Division Courses

1. Principles of Economics. (4) Lecture, three hours; discussion, one hour. Enforced requisite: course 1. Not open to students with credit for former course 100. Introduction to principles of economic analysis, economic institutions, and issues of economic policy. Emphasis on allocation of resources and distribution of income through price system. P/NP or letter grading.

2. Principles of Economics. (4) Lecture, three hours; discussion, one hour. Enforced requisite: course 1. Not open to students with credit for former course 100. Introduction to principles of economic analysis, economic institutions, and issues of economic policy. Emphasis on allocation of resources and distribution of income through price system. P/NP or letter grading.

3A. Introduction to Investments. (2) Lecture, two hours. Introduction to investments. No previous financial, economic, or math background required. Students learn organizing framework with which to understand investing landscape with highlight on key concepts and functionality related to businesses and personal investments. Topics include exchange rates and economics, financial statements, value creation, interpreting financial ratios, power of compound interest and understanding present value, diversification, Capital Asset Pricing Model, Sharpe ratio, and understanding asset’s Beta, hedge funds. Serves as excellent introduction to career paths in finance and for those who want to increase their financial literacy. P/NP grading.

3B. Introduction to Investments. (2) Lecture, two hours. Requisite: course 3A. Broad introduction to investments. No previous financial, economic, or math background required. Students learn organizing framework with which to understand investing landscape with highlight on key concepts and functionality related to businesses and personal investments. Topics include exchange rates and economics, financial statements, value creation, interpreting financial ratios, power of compound interest and understanding present value, diversification, Capital Asset Pricing Model, Sharpe ratio, and understanding asset’s Beta, hedge funds. Serves as excellent introduction to career paths in finance and for those who want to increase their financial literacy. P/NP grading.

4. Introduction to Investments. (4) Lecture, two hours. Broad introduction to investments. No previous financial, economic, or math background required. Students learn organizing framework with which to understand investing landscape with highlight on key concepts and functionality related to businesses and personal investments. Topics include exchange rates and economics, financial statements, value creation, interpreting financial ratios, power of compound interest and understanding present value, diversification, Capital Asset Pricing Model, Sharpe ratio, and understanding asset’s Beta, hedge funds. Serves as excellent introduction to career paths in finance and for those who want to increase their financial literacy. P/NP grading.

5. Economics for everyone. (5) Lecture, three hours; discussion, one hour. Introduction to models and tools used by economists in practical real-world context. Study of important topical issues such as inequality, health care, and environmental policies. Students learn about available data sources and become better equipped to understand current events. May not be used to fulfill entrance requirements for any Economics Department major. P/NP or letter grading.

11. Microeconomic Theory. (4) Lecture, three hours; discussion, one hour. Enforced requisites: courses 1, 2, Mathematics 31A, 31B, with grades of C or better. Laws of demand, supply, returns, and costs; price and output determination in different market situations. P/NP or letter grading.

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many pathways of discovery at UCLA. P/NP grading.

41. Probability and Statistics for Economists. (4) Lecture, three hours; discussion, one hour. Enforced requisites: Mathematics 31A, 31B, with grades of C or better. Not open to students with credit for former Statistics 11. Introduction to theory and practice of mathematical statistics with emphasis on its use in economic analysis. Introduction of basic statistical concepts such as random variables, probability distributions, estimation, confidence intervals, and hypothesis testing. Letter grading.

89. Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to lower-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

89HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to lower-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

97. Economic Toolkit. (4) Lecture, three hours. Coverage of essential mathematical and programming skills needed for study of Economics. Review of calculus (first derivatives, partial derivatives, elementary integral calculus), Excel (handling data, using simple arithmetical, mathematical, and financial functions, use of Solver), and extended introduction to statistical language and/or Stats. Consult instructor for specific software. Offered in summer only. P/NP grading.

99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week. Entry is restricted to upper-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Courses


103. Introduction to Econometrics. (4) Lecture, three hours; discussion, one hour. Enforced requisites: courses 11, 41 or Mathematics 170E and 170S or Statistics 100A and 100B. Enforced corequisite: 103L. Introduction to theory and practice of univariate regression analysis with emphasis on its use in economics. Introduction to method of least squares, Gauss-Markov theorem, confidence intervals and hypothesis tests in univariate regression context, and standard errors in case of heteroscedasticity and serial correlation. Emphasis on applications with real data and computer software (R programming language) to implement discussed methods. P/NP or letter grading.

103L. Econometrics Laboratory. (1) Lecture, one hour; laboratory, one hour. Requisites: courses 11, 41 or Mathematics 170E or 170S or Statistics 100A or 100B. Enforced corequisite: 103L. Research Center. May be repeated. P/NP grading.

103HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to lower-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.


106A. Economics in Practice. (4) Seminar, three hours. Enforced requisites: courses 11, 101, 102. Enforced corequisite: course 106AL. Students, in groups of four, address three small problems and one large and more complex problem. Discussion of student proposed solutions to problems in their groups, with small-group discussions to student presentations of results. Discussion of problems, objectives, and feedback by MBA students on student analysis and presentations. Final written and oral presentations required. P/NP or letter grading.

106AL. Economics in Practice Laboratory. (1) Lecture, one hour; laboratory, one hour. Requisites: courses 11, 101, 102. Enforced corequisite: course 106A. Case-based analysis requiring students to apply material from course 106A to real-world problems regarding issues such as economic theory and empirical methods. Hands-on data collection and problem solving and presentation of student analyses both orally and in writing. P/NP or letter grading.

106D. Designed Markets. (4) Lecture, three hours; discussion, one hour. Enforced requisites: courses 101, 103. Enforced corequisite: course 106DL. Discussion of markets and market institutions that are purposefully designed, mostly by economists. Choices designers face when creating markets. Markets and risk, such as online auctions, two-sided markets, matching markets, and prediction markets. Hands-on data collection and problem solving and presentation of student analyses both orally and in writing. P/NP or letter grading.

106DL. Designed Markets Laboratory. (1) Lecture, one hour; laboratory, one hour. Requisites: courses 11, 101. Enforced corequisite: course 106D. Case-based analysis requiring students to apply material from course 106D to real-world problems regarding topics such as matching between medical residents and hospitals, matching between high school students and New York area universities, kidney transplants, college admission, online auctions, eBay auctions, and prediction markets. Hands-on data collection and problem solving and presentation of student analyses both orally and in writing. P/NP or letter grading.

106E. Economics of Entrepreneurship. (4) Lecture, three hours. Requisite: course 101. Enforced corequisite: course 106E. Enrollment priority to Business Economics majors. Introduction to basic ideas of game theory and strategic thinking. Discussion of ideas such as dominance, backward induction, Nash equilibrium, cooperation, credibility, asymmetric information, and signaling, with application to examples from economics, politics, business, and other real-life situations. Letter grading.

106G. Introduction to Game Theory. (4) Lecture, three hours; discussion, one to two hours (when scheduled). Requisite: course 101. Enforced corequisite: course 106G. Case-based analysis requiring students to apply theory from course 106G to real-world problems regarding topics such as portfolio management, two-sided markets, matching markets, and prediction markets. Hands-on data collection and problem solving and presentation of student analyses in writing with possible oral presentations. P/NP or letter grading.

106I. Organization of Firms. (4) Lecture, three hours. Enforced requisites: courses 11, 101. Enforced corequisite: course 106I. Enrollment priority to Business Economics majors. Role of firms in traditional economic theories and in the operation of markets and other institutions that were purposefully designed, mostly by economists. Choices designers face when creating markets. Hands-on data collection and problem solving and presentation of student analyses in writing with possible oral presentations. P/NP or letter grading.

106M. Financial Markets and Financial Institutions. (4) Lecture, three hours; discussion, one hour. Requisites: courses 11, 101, 102. Enforced corequisite: course 106M. Application of analytical tools of economics and financial theory to link models students have learned in prior courses to patterns observed in financial markets and to understand when it is that further theoretical refinement is required to better account for certain observed patterns. Development of understanding of potential effects of monetary and regulatory policies on financial markets. Topics include bond market, stock market, equity exchange market, financial crises, and financial regulation. Analysis and discussion of lessons of subprime crisis and European sovereign debt crisis. P/NP or letter grading.


106P. Pricing and Strategy Laboratory. (1) Lecture, one hour; laboratory, one hour. Requisite: course 101. Enforced corequisite: course 106P. Case-based analysis requiring students to apply theory from course 106P to real-world problems involving linear programming and shadow pricing, peak load pricing, two-part pricing, strategic pricing, and auctions and bidding. Hands-on data collection and problem solving and presentation of student analyses in writing. P/NP or letter grading.

106T. Economics of Technology and E-Commerce. (4) Lecture, three hours; discussion, one hour. Introduction to Basic ideas of game theory and strategic thinking. Discussion of ideas such as dominance, backward induction, Nash equilibrium, cooperation, credibility, asymmetric information, and signaling, with application to examples from economics, politics, business, and other real-life situations. Letter grading.

106V. Case-based analysis requiring students to apply theory from course 106V to real-world problems regarding issues such as portfolio management, online auctions, two-sided markets, matching markets, and reputation mechanisms. Hands-on data collection and problem solving and presentation of student analyses both orally and in writing. P/NP or letter grading.

106VL. Investments Laboratory. (1) Lecture, one hour; laboratory, one hour. Requisite: course 102. Recommended: course 106F. Enforced corequisite: course 106VL. Enrollment priority to Business Economics majors. Introduction to principles of investment and portfolio theory. Topics include optimal portfolio construction, fixed income analysis, option pricing theory, and active portfolio management. P/NP or letter grading.


111. Theories of Development. (4) Lecture, three hours. Requisites: courses 11, 101, 103. Recommended: course 111L. Application of theoretical and empirical tools from microeconomics to provide insights into problems confronting low-income countries today and to evaluate policies that are likely to be effective in improving well-being of poorest on globe. P/NP or letter grading.

111L. Theories of Development Laboratory. (1) Lecture, one hour; laboratory, one hour. Requisites: courses 111L, 101, 103. Case-based analysis requiring students to apply material from course 111L to real-world problems involving development. Topics and analysis include measures of development, sources of growth, impediments to development, and policy prescriptions. P/NP or letter grading.

112. Policies for Economic Development. (4) Lecture, three hours. Requisites: course 102 or 111. Suggested strategies for economic development, such as control of inflation, balanced growth, industry versus agriculture, import substitution, export-oriented expansion, foreign aid, and others. Selected case studies. P/NP or letter grading.
113. Globalization and Gender. (4) Lecture, three hours. Requisite: course 11. Examination of gender dimensions of economic development and globalization from a feminist economics perspective. This perspective implies foregrounding labor, broadly defined to include paid and unpaid work; examining gender differences in work; access to resources; and well-being outcomes; and how these are affected by macroeconomic policies and how gender inequalities are relevant for sustainable development. Early 1990s, economic globalization has been based on common set of macroeconomic policies pursued in industrial and developing countries alike. These policies frame both internal impacts of policy initiatives that are implemented to reduce inequalities between men and women. Examination of impact of these policies on gender inequalities in developing countries. P/NP or letter grading.

121L. International Trade Theory. (4) Lecture, three hours; discussion, one hour. Requisite: course 101. Corequisite: course 121L. Not open to students with credit for former course 120. Examination of international trade: bases, direction, terms, volume, and gains of trade. Effects of tariffs, quantitative restrictions, and international integration. Effects of free and restricted trade on economic welfare and political stability. P/NP or letter grading.

121L. International Trade Theory Laboratory. (1) Lecture, one hour; laboratory, one hour. Requisite: course 101. Corequisite: course 121L. Case-based analysis and empirical data analysis course 121L to real-world problems involving international trade. Topics and analysis include theory of international trade: bases, direction, terms, volume, and gains of trade; effects of tariffs, quantitative restrictions, and international integration; effects of free and restricted trade on economic welfare and political stability. P/NP or letter grading.

122L. International Finance Laboratory. (1) Lecture, one hour; laboratory, one hour. Requisite: course 102. Corequisite: course 122L. Not open to students with credit for former course 120. Emphasis on interpretation of balance of payments and adjustment to national and international imbalances through changes in price levels, exchange rates, and net national income. Other topics include making international payments, determination of exchange rates under various monetary standards, capital movements, exchange controls and international monetary organization. P/NP or letter grading.

M123. Foreign Exchange Market and Exchange Rate Forecasting. (8) Same as Honors Collegium M109.) Seminar, four hours. Introduction to forecasting of exchange rates. Theory linked with real-world data through use of powerful computer platform called Tradestation in computer laboratory. Analysis of how foreign exchange market works, what financial instruments are used in market, and what market-determined determinants of exchange rates are. Generation of exchange rate forecasts by combining theoretical concepts with real-world data using concepts and techniques from finance, linguistics, statistics, and more. How to write simple codes to generate exchange rate forecasts and to evaluate accuracy of student forecasts. P/NP or letter grading.

C126A-C126B-C126C. Seminars: International Economics. (4–4–4) Lecture, three hours per term. Requisites: courses 11, 101, 102. Limited to seniors. Overview of most current developments in international economics for advanced undergraduate and graduate students. Introduction to graduate-level research in this field. Different topics each week, with presentation and discussion of new papers. Research in progress presented, discussed, and critiqued by visiting experts, UCLA faculty members, and advanced graduate students. Concurrently scheduled with courses C296A-C296B-C296C. P/NP or letter grading.
143. Behavioral Economics. (4) Lecture, three hours. Enforced requisite: course 101. Behavioral economics is emerging subfield of economics that incorporates insights from psychology and other social sciences into economics to improve realism of economic models. Also incorporates elements of psychology—such as aversion for losses, problems with self-control, or concerns for others and thereby improve economic analyses. Review of some standard assumptions made in economic models based on evidence on how human behavior systematically departs from these assumptions. Investigation of attempts to explore alternative models of decision making and assessment to determine which alternative models help improve economic analyses. P/NP or letter grading.


150L. Labor Economics Laboratory. (1) Lecture, one hour; laboratory, one hour. Requisites: courses 11, 101, 103. Enforced corequisite: course 150L. Laboratory exercises using computer software. Concurrently scheduled with course 150. P/NP or letter grading.

151. Topics in Labor Economics. (4) Lecture, three hours. Requisites: courses 101, 150. Selected topics in labor theory; income distribution; business cycles and unemployment; investments in human capital and life cycle; migration; human fertility; marriage and divorce, etc. P/NP or letter grading.

C156A-C156B-C156C. Seminars: Labor Econom- ics. (4–4–4) Seminar, three hours. Requisites: courses 11, 101, 102. Limited to seniors. Overview of most current developments in labor economics for advanced undergraduate and graduate students. Instructor to graduate-level research in this field. Discussion of practical and theoretical problems in labor economics. Topics include labor supply decisions, household production decisions, life-cycle aspects of labor supply, short-run and long-run labor demand, labor market, quits, turnover, job matches, and human rights—has contributed to America’s economic growth. Quantitative course, with analysis of how different features of capitalist economies impact economic growth, investment, consumption, and technological change. Case studies based on prominent historical examples. P/NP or letter grading.

165L. History of Capitalism in American Economy Laboratory. (1) Lecture, one hour; laboratory, one hour. Requisites: courses 11, 101, 103. Enforced corequisite: course 165L. Case-based analysis requiring students to interpret historical and economic data from 165 to 2015 and analyze how macroeconomic policies impact economic activity. Hands-on data collection and problem solving and presentation of student analyses in writing. P/NP or letter grading.

C166A-C166B-C166C. Seminars: Monetary Eco- nomics/Macroeconomics. (4–4–4) Seminar, three hours. Requisites: courses 101, 102. Enforced corequisite: course 165. Selected topics in monetary theory and policy. General problem of relationship between money and economic behavior, nonprice competition with and without entry, monopoly power within economy and different ways that that manifests across firm conduct and industrial settings. Particular attention to topics in antitrust policy, with some exploration of interaction between economics and law. Topics include in-depth analysis of cases involving mergers and antitrust and specifics of analytical approaches deployed in enforcement by Department of Justice and Federal Trade Commission. P/NP or letter grading.

173A-173B. Introduction to Social Entrepreneur- ship. (4) Lecture, three hours; seminar meeting, two hours. Course 173A is requisite to 173B. Full-scale immersion into world of social entrepreneurship. Introduction to basics of business planning for social enterprises. Students are assigned in teams to work with participating social enterprises in Los Angeles area to implement new revenue-generating business plan for social enterprises to which they are assigned. Teams receive support from MBA student volunteers as advisers on how to work effectively together and how to resolve issues that arise with staff of assigned social enterprise. Courses 173A and 173B must be taken in consecutive terms. In Progress (173A) and P/ NP or letter (173B) grading.

174. Economics of Sports. (4) Lecture, three hours. Enforced prerequisites: courses 11, 41, 101. Recommended precourse: course 103. Topic: economics that employs both theoretical and empirical tools to analyze wide range of topics related to sports industry. Topics include history of labor relations in professional sports, history and analysis of player salaries in professional sports, market for professional sports franchises and sports broadcast rights, league expansion and relocation decisions, understanding of role of economic impact studies (cost-benefit analysis) and public/private partnerships in facility financing, relationship between academics and athletics in collegiate sports, racial discrimination in sports, labor market of professional athletes, economic tools to analyze wide range of topics related to sports industry. Topics include history of labor relations in professional sports, history and analysis of player salaries in professional sports, market for professional sports franchises and sports broadcast rights, league expansion and relocation decisions, understanding of role of economic impact studies (cost-benefit analysis) and public/private partnerships in facility financing, relationship between academics and athletics in collegiate sports, racial discrimination in sports, labor market of professional athletes, economic tools to analyze wide range of topics related to sports industry. Topics include history of labor relations in professional sports, history and analysis of player salaries in professional sports, market for professional sports franchises and sports broadcast rights, league expansion and relocation decisions, understanding of role of economic impact studies (cost-benefit analysis) and public/private partnerships in facility financing, relationship between academics and athletics in collegiate sports, racial discrimination in sports, labor market of professional athletes, economic tools to analyze wide range of topics related to sports industry.


183L. Development of Economic Institutions in U.S. Laboratory. (4) Lecture, one hour; laboratory, one hour. Requisite: course 11. Enforced corequisite: course 183. Empirical analysis requiring application of material from course, directed toward career-related research project. Students prepare research project under direct supervision of faculty member. Individual contract required. P/NP or letter grading.

188A. Individual Studies for USIE Facilitators. (1) Tutorial, to be arranged. Enforced corequisite: Honors Colloquium 101E. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to discuss selected USIE seminar topic, conduct preparatory research, and begin preparation of syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.


188C. Individual Studies for USIE Facilitators. (2) Tutorial, to be arranged. Enforced corequisite: course 188B. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor while facilitating USIE course. Individual contract with faculty mentor required. May not be repeated. Letter grading.

189. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to upper-division lecture course. Students apply material from course 183 to selected historical issues in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

189HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to upper-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of three units. Individual contract required. Honors content noted on transcript. Letter grading.


192. Undergraduate Practicum in Economics. (3) Seminar, two hours. Limited to juniors/seniors. Training and supervised practicum for advanced undergraduate students. Students assist in preparation of course materials and innovative programs with guidance of faculty members. P/NP or letter grading.

195A-195B. Community or Corporate Internships in Economics I, II. (2–4) Tutorial, to be arranged. Requisites: courses 11, 101. Limited to junior/senior Economics, Business Economics, Economics/International Area Studies majors. Internship to be supervised by Economics Department. Further supervision to be provided by business or entity for which student is doing internship. Students meet on regular basis with instructor and provide periodic reports of their experience. May not be applied toward major requirements. Only units from courses 195A and 195B may be applied toward undergraduate degree. Individual contract with supervising faculty member required. P/NP grading.

195C. Community and Corporate Internships in Economics. (4) Tutorial, to be arranged; fieldwork, eight to 10 hours. Requisites: courses 11, 101. Limited to juniors/seniors. Internship in corporate, governmental, or nonprofit setting can be supervised by Economics Department. Students complete weekly written assignments, attend biweekly meetings with graduate student coordinator, and write final research paper. Facility for community and corporate volunteer mentors. P/NP or letter grading.

198A. Honors Research in Economics I. (4) Tutorial, three hours. Requisites: courses 11, 101, 102. Limited to junior/senior departmental honors program students. First-term of two-term sequence in which students develop honors thesis or comprehensive research project under direct supervision of faculty member. Individual contract required. In Progress grading (credit to be given only on completion of course 188B).

198B. Honors Research in Economics II. (4) Tutorial, three hours. Requisite: course 188A. Limited to departmental honors program students. Second term of two-term sequence in which students complete honors thesis or comprehensive research project under direct supervision of faculty member. Individual contract required. Letter grading.

199A. Directed Research in Economics. (4) Tutorial, three hours. Requisites: courses 11, 101, 102. Limited to juniors/seniors. Supervised individual research or investigation under guidance of faculty mentor while preparing paper or project required. May be repeated twice but may be applied only once toward major requirements. Individual contract required. P/NP or letter grading.

199B. Directed Research in Economics/International Area Studies. (4) Tutorial, four hours. Requisites: courses 103, and 121 or 122. Limited to senior Economics/International Area Studies majors. Students prepare research papers under guidance of faculty mentor and on economy or issue of specialization. May be repeated. Credit for individual contract required. Letter grading.

Graduate Courses

Foundations of Economics

200. Mathematical Methods in Economics. (4) Lecture, three hours. Should be taken prior to enrollment in course 210A. Examination of mathematical methods used in graduate-level courses in microeconomics, macroeconomics, and quantitative methods. Topics include real analysis, linear algebra and matrices, calculus of many variables, static optimization, convex analysis, and dynamics and dynamic optimization. S/U grading.

200B. Mathematical Methods in Economics II. (4) Lecture, three hours; laboratory, two hours. Should be taken prior to or concurrently with course 210B. Linear algebra and its application to linear difference equations. Basic real analysis, normed vector space/ Banach space, Hahn/Banach theorem, Schauder fixed point theorem, and theory of correspondences. S/U grading.


201C. Game Theory with Asymmetric Information and Applications. (4) Lecture, three hours. Perfect Equilibrium, Bayesian Nash equilibrium, mechanism design. Applied topics such as adverse selection, signaling, moral hazard, bidding, price discrimination, and public good provision. S/U or letter grading.

control, programming and contract theory, stochastic dynamics, determinacy of equilibrium, descriptive, optimal, and overlapping generations models of accumulation, stochastic growth theory. Increasing returns and applications to economic development. S/U or letter grading.


203A. Introduction to Econometrics I. (4) Lecture, three hours; discussion, one hour. Introduction to empirical methods and statistical techniques used in economics. Topics include regression analysis, hypothesis testing, identification, sampling, estimators, asymptotic properties. S/U or letter grading.

203B. Introduction to Econometrics II. (4) Lecture, three hours; discussion, one hour. Estimation and testing. Basic linear regression model, tests of hypotheses, generalized least squares, heteroskedasticity, multicollinearity, error-in-variables, and qualitative dependent variables. S/U or letter grading.

203C. Introduction to Econometrics III. (4) Lecture, three hours; discussion, one hour. Econometrics methods for time-series econometrics, including theory and applications. Topics include time-series techniques, unit root theory, cointegrated system approach, autocorrelation robust inference, Wold and Beveridge and Nelson (BN) decompositions, model selection, nonlinear nonstationary models, spatial density asymptotics and semi-parametric time-series models. S/U or letter grading.

M204A-M204Z. Applications of Economic Theory. (4 each) Lecture, three hours. S/U or letter grading.

M204A-M204B-M204C. California Population Research Topics. (4–4–4) (Same as Sociology M225A) Seminar, three hours. Examination of issues such as demography, health, aging, labor, and broad array of topics concerned with effects of economic, social, political, demographic, and social formations on human behavior both in U.S. and abroad. Each course may be taken independently for credit. S/U grading.

M204L-M204M-M204N. Seminars: Pharmaceutical Economics and Policy. (1–1–2) (Same as Health Policy M204A-M204B-M204C) Seminar, three hours every other week. Requisite: Health Policy M236. Limited to graduate public health and economics students. Various topics in economics of pharmaceutical industry, including rates of innovation, drug regulation, and economic impact of pharmaceuticals. In Progress (M204L, M204M) and letter (M204N) grading.

204R. (4) Lecture, three hours. Preparation: compilation of econometrics and graduate econometrics courses. In past decade econometricians have learned remarkable amount about how society works. Increased understanding has come about through development of distinctly economic two new methods of research—explicit mathematical models and eclectic statistical techniques—to topics such as healthcare, crime, education, and immigration. Taken together, increased understanding of how to measure economic inequality, how to measure it, how inequality has increased in U.S., how America differs from other rich countries and, most important, what causes inequality, social, economic, and political factors. With focus on two important influences on inequality—education and health—which are two areas in which knowledge is accumulating most rapidly. S/U grading.

205. Economic Modeling. (4) Lecture, three hours. Development of modeling skills by considering sequence of economic issues (e.g., peak load pricing, regulation, monopoly, capital asset pricing, Pareto efficiency). Emphasis on multivariate constrained optimization. S/U or letter grading.

206. Law and Economics Workshop. (2 or 3) Seminar, two hours. Requisite: course 201A or Management 405. Knowledge of empirical methods and basic calculus required. Interdisciplinary speakers series presenting outside research with scholars and students from UCLA Law School and academic departments. Topics include contracts, torts, intellectual property, and other subjects. May write graded research papers. May be repeated for credit. Concurrently scheduled with Law 648 and Management 294. S/U or letter grading.

207. History of Economic Thought. (4) Lecture, three hours. Topics from classical economics, including work of Smith, Ricardo, and Mill, and developments from 1870s, including contributions of major figures of marginalistic revolution, socialist controversy, and history of welfare economics. S/U or letter grading.

M208B. Introduction to Demographic Methods. (4) (Same as Biosciences M220B, Community Health Sciences M220B, and Sociology M213A) Lecture, four hours. May not be counted toward one of statistics courses. Introduction to methods of demographic analysis. Topics include demographic rates, standardization, decomposition of differences, life tables, survival analysis, risk analysis, variance analysis, models of population growth, stable populations, population projection, and demographic source data. S/U or letter grading.

Economic Theory

211A. Contract Theory. (4) Lecture, three hours. Preparation: introductory probability. Enforced requisite: course 210C. Study of trading relationships between two small groups of agents. Coverage of many tools and techniques used in models of moral hazard, adverse selection, and incomplete contracting, starting with static models of moral hazard and mechanism design and development of their dynamic counterparts. Consideration of environments where agents cannot use formal contracts, studying relational contracts and trading relationships with no contracts. Analysis of wide variety of applications from basic organization, corporate finance, personnel economics, and public economics. S/U or letter grading.

211B. Economics of Uncertainty, Information, and Asymmetry. (4) Lecture, three hours. Preparation: introductory probability. Enforced requisite: course 210C. Theory of individual decision making under uncertainty, applied to topics such as asset pricing models, adverse selection, moral hazard, bargaining, signaling, auctions, and search. S/U or letter grading.

211C. Game Theory and Economic Applications. (4) Lecture, three hours. Preparation: introductory probability. Enforced requisite: course 210C. Intended for students who are interested in doing research in microeconomic theory and for students who want to acquire good theory background to do applied work. Coverage of combination of standard results in field and topics of interest to students. Concepts of equilibrium in static and dynamic games, reasoning in games, repeated games, games of incomplete information, and experiments. S/U or letter grading.

212A-212Z. Topics in Advanced Theory. (4 each) Lecture, three hours. Current research in microeconomic theory. Content varies. Courses in this sequence not ordinarily given every year. May be repeated for credit. S/U or letter grading.


212B. Applied Game Theory. (4) Lecture, three hours. Preparation: calculus, introductory probability. Use of theory of Bayesian games to study bargaining, moneymaking, and oligopoly. Use of theory of mechanism design and imperfectly competitive markets. May be repeated for credit. S/U or letter grading.

213A-213B. General Equilibrium and Game Theory. (4–4) Lecture, three hours. Requisite: course 210C. Survey of microeconomic theory with emphasis on current interest and introduction to modern mathematical economics, including general equilibrium theory and game theory. S/U or letter grading.

214A-214Z. Topics in Mathematical Economics. (4 each) Lecture, three hours. Requisite: course 213B. Current research in mathematical economics. Content varies. Ordinarily only two courses in this sequence given every year. May be repeated for credit. S/U or letter grading.

214A. General Equilibrium Theory. (4) Lecture, three hours. Requisite: course 210C. Core convergence theorem, cooperative and noncooperative approach to competitive equilibrium theory, perfectly competitive equilibrium, no-surplus condition, and applications to mechanism theory and incomplete market models. May be repeated for credit. S/U or letter grading.

M215. Topics in Applied Game Theory. (4) (Same as Political Science M208B.) Lecture, three hours. Preparation: calculus or introductory probability. Designed for graduate students in economics and political science students. Survey and applications of major solution concepts to models of bargaining, oligopoly, cost allocation, and voting power. S/U or letter grading.


Monetary Economics

221A-221D. Monetary Economics I to IV. (4 each) Lecture, three hours. S/U or letter grading.

one theoretical restriction on data. Subgroups of students report back to class using technique on their selected data set. S/U or letter grading.

222B-222Z. Topics in Monetary Economics. (4 each) Lecture, three hours. Current research in monetary economics. Content varies. May be repeated for credit. S/U or letter grading.

C226A-C226B-C226C. Seminars: Monetary Economics/Macroeconomics. (4–4–4) Seminar, three hours. Designed for predissertation and dissertation writers. Covers various most current developments in monetary economics and macroeconomics for advanced undergraduate and graduate students. Introduction to graduate-level research in this field. Different topcs each week, with presentation and discussion of new papers. Research in progress presented, discussed, and criticized by visiting experts, UCLA faculty members, and advanced graduate students. Concurrently scheduled with courses C166A-C166B-C166C. S/U (C226B) and S/U or letter (C226A, C226C) grading.

228A-228B-228C. Proseminars: Monetary Economics. (4–4–4) Seminar, three hours. Workshops for pre-dissertation and dissertation writers. Literature survey or research in progress presented, discussed, and criticized by visiting experts, UCLA faculty members, advanced graduate students. Research paper or presentation required. S/U grading.


Also see Management 239A, 239B, 239C (PhD sequence in finance), 239D (advanced topics in finance), 239X, 239Y, 239Z (finance workshops).

Econometrics

231A. Advanced Econometrics I. (4) Lecture, three hours. Econometric methods for microeconometric models. Topics include identification, nonparametric estimation, limited dependent variable models, duration, panel data, tests of hypotheses. S/U or letter grading.

231B. Advanced Econometrics II. (4) Lecture, three hours. Econometric methods for empirical research in economics. Topics include simultaneous equations, instrumental variables, panel data, treatment effects, and point and partial identification, with applications in static and dynamic models, social interactions, matching, and network formation. S/U or letter grading.

231C. Advanced Econometrics III. (4) Lecture, three hours. Advanced topics in econometrics that vary each year to year. Current topics include empirical process methods with applications to quantile regression and general M-estimation, estimation and inference methods in high-dimensional models, including LASSO and Dantzig Selector techniques, and bootstrap. May be repeated for credit. S/U or letter grading.

M232A-232Z. Topics in Econometrics. (4 each) Lecture, three hours. Topics in econometrics vary each year to year. Courses include discipline-based modules such as 231A, 231B: Current research in econometrics. Content varies. Courses in this sequence not ordinarily given every year. May be repeated for credit. S/U or letter grading.

M232A. Bayesian Econometrics. (4) Same as Political Science M208E.) Lecture, three hours. Requisites: courses 231A, 231B. Subjective probability, introduction to decision theory, Bayesian analysis of regression, sensitivity analysis, simplification of models, criticism. May be repeated for credit. S/U or letter grading.


Economic History

241. Economic History of Western Europe. (4) Lecture, three hours. Designed for graduate students. Seminar on European economic history, with emphasis on evolution of institutions and growth. Serfdom, medieval agriculture and agricultural revolution, demographics, industrial revolution, imperial expansion, and decline of Britain. S/U or letter grading.


C246A-C246B-C246C. Seminars: Economic History. (4–4–4) Seminar, three hours. Designed for pre-dissertation and dissertation writers. Overview of most current developments in economic history for advanced undergraduate and graduate students. Intro- duction to graduate research in this field. 1 to 2 topics each week, with presentation and discussion of new papers. Research in progress presented, discussed, and criticized by visiting experts, UCLA faculty members, and advanced graduate students. Concurrently scheduled with courses C186A-C186B-C186C. S/U grading.


249A-249B-249C. Von Gremp Workshops: History of Entrepreneurship in U.S. Economy. (4–4–4) Lecture, three hours. Designed for graduate students. Workshops for advanced graduate students. Research in progress presented, discussed, and criticized by visiting experts, UCLA faculty members, and advanced graduate students. Concurrently scheduled with courses C186A-C186B-C186C. S/U grading.

Public Finance

251A. Theory and Policy of Taxation. (4) Lecture, three hours. Examination of influence of taxation on economic efficiency and incidence of taxation in first part of course. Topics include tax equivalences, Ramsey rules, and alternative forms of taxation. Special tax provisions, tax incentives, and progressivity in taxation in second part of course. S/U or letter grading.

251B. Cost-Benefit Analysis of Public Projects and Programs. (4) Lecture, three hours. Requisite: course 251A. Presentation of those aspects of applied capital theory that are relevant in decisions concerning investment projects in first part of course. Differences between social and private benefits and costs (shadow prices) for foreign exchange, capital, and labor, with applications to public investment decisions, in second part of course. S/U or letter grading.


254A-254B-254C. Workshops: Public Economics. (4–4–4) Lecture, three hours. Designed for graduate students. Workshops for advanced graduate students. Research in progress presented, discussed, and criticized by visiting experts, UCLA faculty members, visiting experts. S/U or letter grading.

Applied Microeconomics


251B. Labor Economics II. (4) Lecture, three hours. Requisite: course 251A. Models of life-cycle learning and labor behavior, with particular emphasis on recent literature examining labor force behavior and experience of women. S/U or letter grading.

262A-262Z. Topics in Labor Economics. (4 each) Lecture, three hours. Current research in labor economics. Content varies. May be repeated for credit. S/U or letter grading.

262D. Development Economics. (4) Lecture, three hours. Preparation: completion of first-year graduate microeconomics and econometrics courses. Coverage of important key topics in microeconomics of development, such as health, education, risk coping, savings, credit, and household economics. Discussion of empirical methods. S/U or letter grading.

265. Public Sector Microeconomics. (4) Lecture, three hours. Preparation: completion of first-year graduate microeconomics and econometrics courses. Coverage of topics related to tax incidence, deadweight loss, public expenditure, income taxation and transfer programs, with emphasis on impacts of such programs on labor supply and savings, social security, unemployment insurance, and other insurance programs. S/U or letter grading.

263. Topics in Urban Economics. (4) Lecture, three hours. Current research in urban and regional economics. Content varies. Serves as forum for presentation of papers on urban economics by students, UCLA faculty members, and visitors. May be repeated for credit. S/U or letter grading.


C266A-C266B-C266C. Seminars: Labor Economics. (4–4–4) Seminar, three hours. Designed for pre-dissertation and dissertation writers. Overview of most current issues in labor economics for advanced undergraduate and graduate students. Introduction to graduate-level research in this field. Different topic each week, with presentation and discussion of most current developments in progress presented, discussed, and criticized by visiting experts, UCLA faculty members, and advanced graduate students. Concurrently scheduled with courses C156A-C156B-C156C. S/U (C266B) and S/U or letter (C266A, C266C) grading.

268A-268B-268C. Proseminars: Labor and Population. (4–4–4) Seminar, three hours. Quarterly seminars for predissertation and dissertation writers working on empirical issues in areas of labor and population, broadly defined. Presentation of work-in-progress or background material for proposed thesis topics, to be discussed and criticized by faculty and fellow graduate students. Research paper required. S/U or letter grading.

269A-269B-269C. Workshops: Labor Economics. (4–4–4) Lecture, three hours. Workshops for predissertation and dissertation writers. Research in progress presented, discussed, and criticized by visiting experts, UCLA faculty members, advanced graduate students, and research paper required. S/U grading.

Industrial Organization


271B. Industrial Organization, Price Policies, and Regulation II. (4) Lecture, three hours. Requisite: course 271A. Competition and pricing under conditions of less than perfect competition; information costs and advertising; economic and legal analysis of marketing practices such as discrimination, tie-in selling, exclusive dealing, and territorial arrangements. S/U or letter grading.


272A-272Z. Topics in Industrial Organization. (4 each) Lecture, three hours. Current research in industrial organization and pricing under conditions of less than perfect competition; information costs and advertising; economic and legal analysis of marketing practices such as discrimination, tie-in selling, exclusive dealing, and territorial arrangements. S/U or letter grading.

273A. Public Utility Regulation. (4–4) Lecture, three hours. Theory, practice, and consequences of regulation in electric power, gas, water, telecommunications, broadcasting, and other regulated industries; experiences of unregulated monopoly and public enterprises by way of contrast. S/U or letter grading.


275A-275B-275C. Workshops: Business Organization and Regulation. (4–4–4) Workshops, three hours. Workshops for predissertation and dissertation writers. Research in progress presented, discussed, and criticized by visiting experts, UCLA faculty members, advanced graduate students. Research paper required. S/U grading. Also see Management 262 (pricing policy)

International Economics


282A-C282B-C282C. Topics in International Economics. (4 each) Lecture, three hours. Recent research in international economics. Content varies. May be repeated for credit. S/U or letter grading.

284. Soviet Economic Theory and Organization. (4) Lecture, three hours. Overall strategy of planning used by U.S.S.R. planners and specific planning methods, interpreted broadly to cover not only instructions and objectives but also institutional arrangements. In tended and unintended outcomes of methods. S/U or letter grading.


Development Economics


286B. Cost-Benefit Analysis of Development Projects. (4) Lecture, three hours. Requisite: course 286A. Methodology for evaluating investment projects, with special attention to methodologies that arise in developing countries. Discussion of social versus private evaluation criteria; applications to highway, electricity, and irrigation projects. S/U or letter grading.

287A-287Z. Topics in Development Economics. (4 each) Lecture, three hours. Current research in development economics. Content varies. Courses in this sequence not ordinarily given every year. May be repeated for credit. S/U or letter grading.


297B. Economic Development in East Asia. (4) Lecture, three hours. Recent economic history of East Asia, focusing on postwar development of Japan, Korea, and China. Emphasis on role of international investment and trade, especially with U.S. in area’s economic development. May be repeated for credit. S/U or letter grading.

287C. Topics in Economic Development. (4) Lecture, three hours. Topics in economic development for advanced graduate students. Topics in monetary and exchange rate policy in developing countries. Students expected to develop analytical tools and underlying policy issues. May be repeated for credit. S/U or letter grading.

C286A-C286B-C286C. Seminars: International and Development Economics. (4–4–4) Seminar, three hours. Quarterly seminars for predissertation and dissertation writers on current issues in international trade and finance and development economics. Presentation of work-in-progress for feedback from faculty and other graduate students. Presentation or research paper required. S/U grading.

291A. Asset Pricing. (4) Lecture, three hours. Introduction to models of financial markets, including forecasting and pricing of equities and other regulated industries; experimental evidence on stock prices, and effects of trade barriers. S/U or letter grading.

291B. Asset Pricing. (4) Lecture, three hours. Theoretical and empirical research on monetary policy. Inclusion of issues such as how monetary policy is implemented in practice. What are the effects of different monetary policy tools, what restrictions on government monetary policy, what are the implications of mechanisms of monetary policy, welfare costs of inflation, how does monetary policy interact with credit markets and how does it affect asset prices. S/U or letter grading.

C296A-C296B-C296C. Seminars: Asset Pricing. (4–4–4) Seminar, three hours. Designed for predissertation and dissertation writers. Overview of most current developments in asset pricing theory for advanced undergraduate and graduate students. Introduction to graduate-level research in this field. Different topic each week, with presentation and discussion of new papers. Research in progress presented, discussed, and criticized by visiting experts, UCLA faculty members, and advanced graduate students. Concurrently scheduled with courses C146A-C146B-C146C. S/U (C296B) and S/U or letter (C296A, C296C) grading.

298A-298B-298C. Proseminars: Asset Pricing. (4–4–4) Seminar, three hours. Quarterly seminars for predissertation and dissertation writers on empirical issues in area of asset pricing, broadly defined. Presentation of work-in-progress or background material for proposed dissertation topics that are discussed and criticized by faculty members and fellow students. Presentation or research paper required. S/U grading.

Teaching Practicum

375. Teaching Apprentice Practicum. (1 to 4) Seminar, to be arranged. Preparation: apprentice personnel employment as teaching assistant, associate, or lecturer. Teaching apprenticeship under active guidance and supervision of regular faculty member responsible for curriculum and instruction at UCLA. May be repeated for credit. S/U grading.

Applied Economics (MAE)


Economics / 363
401B. Applied Economics. (4) Lecture, three hours. Limited to Master of Applied Economics students. How to be sophisticated users and producers of research on issues and policies in several core areas of labor, public, and health economics. Rigorous analyses of complex policy questions with cutting-edge empirical analysis. Letter grading.

402A. Macroeconomic Theory. (4) Lecture, three hours. Limited to Master of Applied Economics students. Introduction to main topics of graduate macroeconomics, including models of economic growth, supply and demand of factors of production, business cycle models, unemployment, monetary policy and inflation, and fiscal policy and deficits. Letter grading.

402B. Applied Macroeconomics. (4) Lecture, three hours. Limited to Master of Applied Economics students. Study of alternative theories of causes of unemployment and inflation, with focus on Keynesian approach to monetary and fiscal policy and modifications and extensions of Keynesian ideas designed to explain financial crises. Letter grading.


415. Evidenced-Based Policy Analysis in Labor, Public, and Health Economics. (4) Lecture, three hours. Limited to Master of Applied Economics students. Focus on understanding policy questions in labor, public, and health economics, including health care, education, unemployment, training programs, and welfare. Economic principles at heart of these topics and approaches to scientifically evaluating policies that affect them, including data, current case evidence, cutting-edge empirical methods, and their relation to microeconomics. Letter grading.

421. Incentives, Information, and Markets. (4) Lecture, three hours; discussion, one hour. Limited to Master of Applied Economics students. Introduction to concepts of information economics that lie at heart of modern economics and application of them to understand incentives within firms, as well as competition between them. Study of theoretical models and incentivizing of real-life markets, such as insurance, labor, and consumer markets. Consideration of whether we can design policies that improve market outcomes. Role of models in economics, and how to tie data and theory together. Letter grading.

422. International Economics. (4) Lecture, three hours; discussion, one hour. Limited to Master of Applied Economics students. Investigation of several theoretical frameworks in international economics followed by applications to empirical questions.Neo-classical trade models, and analysis of heterogeneous producers, and economic geography topics. Case studies and empirical papers focus on understanding determinants of trade patterns and on measurement of aggregate and distributional effects of international trade. Discussion of recent research on effects of NAFTA and Brexit, effect of trade on inequality in developed and developing countries, and impact of infrastructure investments on trade and development. Letter grading.


424. Income Inequality. (4) Lecture, three hours; discussion, one hour. Limited to Master of Applied Economics students. Investigation of rise of earning inequality (with emphasis on U.S.), focusing on learning how to use models and data to quantify impact of range of forces on inequality. Overview of broad empirical trends, with emphasis on understanding how to document these facts ourselves. Consideration of three classes of potential explanations for these patterns international connections (e.g., trade and immigration), institutional change (e.g., minimum wage and unionization), and technical change (e.g., computerization and spread of robots). Focus on quantifying these forces ourselves. Study of top income inequality by whether they have extremely become much richer than very rich? Focus on CEO compensation. Letter grading.

425. Machine Learning I. (4) Lecture, three hours; discussion, one hour. Limited to Master of Applied Economics students. Covers set of fundamental machine learning algorithms, models, and theories, and introduces advanced engineering practices for implementing data-intensive inference models. Involves both supervised methods (e.g., support vector machine, neural network, etc) and unsupervised methods (e.g., clustering, dimensionality reduction, etc), and their applications in classification, regression, data analysis, and visualization. Letter grading.

426. Knowledge Discovery and Data Mining. (4) Lecture, three hours; discussion, one hour. Limited to Master of Applied Economics students. Study of theoretical and practical techniques of data mining and knowledge discovery. Topics include data processing, association rules, supervised learning, clustering, etc., and their applications in visualization, online data analysis, sentiment mining, and opinion analysis. Focus on making sense of large-scale or web-scale dataset, and providing students with first-hand project experiences. Letter grading.

427. Applied Machine Learning. (4) Lecture, three hours; discussion, one hour. Limited to Master of Applied Economics students. Preparation: basic understanding of technology principles, basic programming skills, sufficient mathematical background in probability, statistics, and matrix analysis. Foundation course with primary application to data analytics. Intended to be accessible to students from backgrounds such as economics, mathematics, and to those from less technical backgrounds. Covers some fundamental topics in machine learning such as Bayesian learning, optimization for learning, metric
learning, and various classification, regression, clustering techniques, and other advanced topics. Real-world data-intensive problems. Letter grading.

428. Health Care Analytics: Methods and Applications. (4) Lecture, three hours; discussion, one hour. Limited to Master of Applied Economics students. Introduction to basic concepts of health economics. Development of skills in economic modeling and real-world data analysis. Written policy briefs and business cases evaluating pros and cons of different approaches to improving health care markets. Letter grading.

429A. Professional Development for Emerging Economists I. (2) Seminar, two hours. Enforced prerequisites: course 429A. Limited to Master of Applied Economics students. Designed to help students develop professional skills essential for success in professional business settings. Aids students in translating topics covered in other courses into language and format that is accessible to industry/non-academic settings. Students conduct labor market research, identify and analyze industry trends, and develop targeted plan to achieve professional success. Exploration of skills identification, goal setting, researching employment market, and résumé writing. Letter grading.

429B. Professional Development for Emerging Economists II. (2) Seminar, two hours. Enforced prerequisites: course 429A. Limited to Master of Applied Economics students. Introduction to professional, communication, and presentation skills essential for success in professional business settings. Note: students in translating topics covered in other courses into language and format that is accessible to industry/non-academic settings. Students practice presenting for variety of professional audiences. Exploration of presentation skills, personal branding, salary negotiation, and interviewing techniques. Letter grading.


431. Introduction to Econometrics, Cross-Sectional and Panel Data, and Time Series. (4) Lecture, three hours; discussion, one hour. Limited to Master of Applied Economics students. Introduction to econometrics, cross-sectional and panel data, and time series methods used in economics, business, and government. Topics include estimation, simple and multiple regression, cross-sectional and panel data, instrumental variables, and estimation with stationary/non-stationary processes. Letter grading.

432. Data Science for Financial Engineering. (4) Lecture, three hours; discussion, one hour. Limited to Master of Applied Economics students. Data science provides many useful tools for modeling financial data and testing hypotheses on how markets work, and prices are formed. Study of these important tools. Focus on econometric models and methods to understand financial market dynamics. Topics include returns of financial assets, statistical tests on financial market efficiency, linear time series models, time-varying expected return models, heteroscedastic volatility models, optimal portfolio choice problem, capital asset pricing models, factor models, portfolio allocation, tracking and risk management. Letter grading.


434. Machine Learning and Big Data for Economists. (4) Lecture, three hours; discussion, one hour. Limited to Master of Applied Economics students. Discussion of some machine learning techniques including lasso, regression trees, random forests, and neural networks. Covers most recent developments at intersection of machine learning and econometrics, now commonly referred to as double machine learning. Study of double machine learning in detail, and discussion of how to apply it to enhance analysis of classical econometric problems, such as program evaluation and demand estimation. Letter grading.

435. Principles of Big Data Management Systems. (4) Lecture, three hours; discussion, one hour. Limited to Master of Applied Economics students. Focus on modern data management systems that are used in data analytics. Students are exposed to cutting-edge data management concepts and systems and provided with working knowledge needed to manage large-scale data. Covers modern data management techniques of cloud storage systems, NoSQL databases, and map-reduce computing paradigm. Letter grading.

Special Studies

495. Teaching College Economics. (2) Seminar, one hour; laboratory, three hours. Designed for graduate students. Required of all new teaching assistants. Classroom practice in teaching, with individual and group instruction on related educational methods, materials, and evaluation. May be repeated for credit. S/U grading.

501. Cooperative Program. (2 to 8) Tutorial, to be arranged. Preparation: consent of UCLA graduate advisor and graduate dean, and host campus instructor, department chair, and graduate dean. Used to record enrollment of UCLA students in courses taken under cooperative arrangements with USC. S/U grading.

596. Individual Study. (2 to 8) Tutorial, to be arranged. Directed individual study or research. S/U grading.

597. Individual Study: Graduate Examinations. (2 to 8) Tutorial, to be arranged. Directed individual study in preparation for MA comprehensive examination or PhD qualifying examinations. S/U grading.


Educatio

Graduate School of Education and Information Studies

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Education

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Christina A. Christie, PhD, Chair

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Walter R. Allen, PhD (Allan Murray Cartter Professor of Higher Education)
Alison L. Bailey, EdD
Li Gai, PhD
Mitchell J. Chang, PhD
Christina A. Christie, PhD
Robert Cooper III, PhD
Richard Desjardins, PhD
Megan L. Franke, PhD
Kimberley Gomez, PhD
Louis M. Gomez, PhD

Sandra H. Graham, PhD (Presidental Professor of Education and Diversity)
Tyrone C. Howard, PhD
Sylvia Hurtado, PhD
Connie L. Kasari, PhD
Catherine Lord, PhD, in Residence
Reynaldo F. Macias, PhD
Teresa L. McCarty, PhD (George F. Kneller Professor of Education and Anthropology)
Patricia M. McDonough, PhD
Rashmita S. Misty, PhD
Pedro A. Noguera, PhD
Marjorie Faulstich Orellana, PhD
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John S. Rogers, PhD
William A. Sandoval, PhD
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Michael H. Selzter, PhD
Daniel G. Solórzano, Jr., PhD
Carola E. Suárez-Orozco, PhD
Monica V. Suro-Orozco, PhD
Robert T. Terrasini, PhD (Morgan and Helen Chu Professor of Asian American Studies)
Carlos A. Torres, PhD
Noreen M. Webb, PhD
Jeffrey J. Wood, PhD

Professors Emeriti

Marvin C. Alkin, EdD
Alexander W. Astin, PhD (Allan Murray Carter Professor Emeritus of Higher Education)
Eva L. Baker, EdD
Gordon L. Berry, EdD
Nicholas G. Blurtone, PhD
Arthur M. Cohen, PhD
Sol Cohen, PhD
Aimée Dorr, PhD
Frederick D. Erickson, PhD (George F. Kneller Professor Emeritus of Education and Anthropology)
Norma D. Feldman, PhD
Patricia C. Gándara, PhD
Simon González, EdD
Kris D. Gutiérrez, PhD
Sandra Harding, PhD
Peter L. McClaren, PhD
John D. McNeil, EdD
Bengt Muthén, PhD
Jennie L. Oakes, PhD (Presidential Professor Emerita of Educational Equity)
Gary A. Orfield, PhD
W. James Popham, EdD
Mike A. Rose, PhD
Val D. Rust, PhD
Rodney W. Skager, PhD
Concepción M. Valadez, PhD
Carl Weinberg, EdD
Wellford W. Wilms, PhD
Charles Z. Wilson, PhD

Associate Professors

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Minjeong Jeon, PhD
José-Felipe Martínez, PhD
Safiya U. Noble, PhD
Edith Mukudi Owami, PhD
Lucrecia Santibáñez, PhD

Assistant Professors

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Lorena Guillén, PhD
Mark P. Hansen, PhD, in Residence
Jessica C. Harris, PhD
Ozan Jaquette, PhD

Assistant Professors

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Colette A. Helfre, PhD
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Kritika Khurana, PhD
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Ozan Jaquette, PhD
Ananda Drake Marin, PhD
Anna J. Markowitz, PhD
Federica Raia, PhD, in Residence

Adjunct Professors
Gregory K. Chung, PhD
Diane Durkin, PhD
Faye C. Peitzman, PhD
Jody Z. Priselac, EdD
Karen Hunter Quartz, PhD
Jia Wang, PhD

Adjunct Assistant Professor
Kristen L. Rohanna, PhD

Scope and Objectives
As one of the top-ranked public graduate programs in education in the nation, the Department of Education is guided by a commitment to integrate theory and practice and to improve educational practice and policy. The department attracts prominent scholars and is internationally recognized for its research centers in evaluation, higher education, child development, and urban education. Whether students choose to pursue a PhD, an EdD, a master’s degree, or a services or instructional credential, they graduate with a broad understanding of educational theory and tested practice.

Undergraduate Study

Education and Social Transformation BA

Learning Outcomes
The Education and Social Transformation major has the following learning outcomes:

• Understanding of educational landscape
• Understanding of learning and human development
• Understanding of education and educational institutions in social, cultural, and historical contexts
• Understanding of organizational cultures and dynamics
• Ability to interpret social data and research and critically evaluate research studies
• Ability to apply these understandings to imagine, assess, and implement solutions to specific problems in education
• Clear and cogent communication
• Understanding of multiple perspectives, diversity, pluralism, and social justice

Admission
Students must submit an application to declare the Education and Social Transformation major. Admission is based on academic performance in preparation for the major courses and overall academic record at UCLA.

Premajor
Students entering UCLA directly from high school or first-term transfer students who want to declare the Education and Social Transformation premajor at the time they apply for admission are automatically admitted to the premajor.

Students identified as Education and Social Transformation premajors may formally petition to declare the Education and Social Transformation major after completing the required lower-division courses and 45 lower-division units.

Current UCLA students must file an application in the Education Office of Student Services. All students are identified as Education and Social Transformation premajors until they satisfy the following minimum requirements: 1) achieve grades of C or better in all lower-division course requirements, 2) file an application to enter the major before completing 135 quarter units.

Preparation for the Major
Required: Education 10 or 11, 35. Preparation for the major courses must be completed with a C grade or better.

Transfer Students
Transfer applicants to the Education and Social Transformation major with 90 or more units are considered for admission based on academic achievement. Transfer credit is subject to department approval. Consult an undergraduate counselor before enrolling in any courses for the major.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

The Major
Required: at least 9 upper-division courses distributed as follows: (1) two courses from each of the following three areas of competency: Histories and Philosophies of Education—Education M102, M103, M108, 122, 124, 125, 129, 130, 134, 147, 152A, 152B, 152C, 162, 164; Contexts of Teaching, Learning, and Development—Education M104, 118, 120, 123, 127, 132, 133, M136, 143, M145A, M145B, M145C, C160, CM163, 166, CM178, M190, M190S, M194A, M194B, M194C, 195, 196C, 196D; Inquiry and Design for Learning—Education 139, 150, 188A, 188B; (2) Education 180; (3) Education 181; (4) at least one additional course in education, for a minimum of 40 total upper-division units.

At least one course taken for the major must satisfy the community engagement requirement.

Each course must be taken for a letter grade, and students must have an overall grade-point average of 2.0 or better in the major.

Education Studies Minor
The Education Studies minor is intended to address the diverse information needs of the UCLA undergraduate community to (1) allow students to learn more about the multitude of contemporary professional research issues confronting the field of education, (2) understand the complex interactions between the legal, social, political, and economic forces that influence and shape educational policies in America, (3) provide an introduction for students who wish eventually to pursue careers in education either as teachers or researchers.

To enter the minor, students must have completed one education, have at least sophomore standing with a minimum overall 2.3 (C+) grade-point average, and file an admission application with the Education Studies academic adviser in the Office of Student Services, 1002 Moore Hall. Applicants are expected to be committed to inquiry of issues central to educational research and practice. Students must follow the program of study in effect at the time of their admission. Students completing their sophomore year are encouraged to apply.

Required Courses (28 units minimum): Any seven education courses (minimum of 4 units each), one of which may be a lower-division course.

A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor.

Each minor course must be taken for a letter grade. Successful completion of the minor is indicated on the transcript and diploma.

Graduate Study
Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Division website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Graduate Degrees
The Department of Education offers Master of Arts (MA) and Doctor of Philosophy (PhD) degrees in Education, Master of Education (MED) degree, Doctor of Education (EdD) degree, Doctor of Philosophy (PhD) degree in Special Education (with California State University, Los Angeles), and Doctor of Education (EdD) degree in Educational Administration (with UC Irvine).

One articulated degree program (Education MED/Latin American Studies MA) and one concurrent degree program (Education MED, MA, EdD, or PhD/Law JD) are also offered.

Education

Lower-Division Courses
10. Introduction to Educational Issues and Scholarship. (5) Lecture, four hours; discussion, one hour. Schools are primary institutions charged with responsibility of preparing young people for their roles as citizens so that they can participate in our democracy. Public schools also serve as key sites where two essential, and at times conflicting, functions are carried out; students are sorted based on measures (and perceptions) of their ability to fill occupations and roles that are essen-
M103. Asian American Education and Schooling. (4) [Same as Asian American Studies M114.] Seminar, four hours. Examination of existing body of research from various disciplines on Asian/Pacific American educational experiences. Letter grading.

M104. Introduction to Arts Education for Multiple Publics: Theory and Practice. (4) [Same as Arts Education M102.] Seminar, three hours; outside study, nine hours. Introductory course with focus on arts education for multiple publics in inner-city settings. Study of creative and critical thinking, and social justice as students develop, implement, and assess original curricula, lesson plans, and community outreach projects in learning environments for inner-city schools and arts organizations. Collaboration with partner schools in planning, teaching, and evaluation of arts education programs in dance, music, theater, and visual arts. Letter grading.

M108. Sociology of Education. (5) [Same as Sociology M175.] Lecture, four hours; discussion, one hour. Study of how U.S. educational system both promotes socioeconomic opportunities and maintains and exacerbates socioeconomic inequalities. Focus on prosocial behavior and social exclusion. Letter grading.

M110. Literacy in Society. (5) Lecture, four hours. Literacy plays significant role in cognition and language, political governance and law, and economic and social development. Consideration of the relationship between literacy and society, education, and social inequality. Letter grading.


M118. Literacy and Social Policy. (5) Lecture, four hours. Students learn about social sciences research, and the role of literacy and social policy in U.S. society. Letter grading.

M120. Childhood Development. (5) Seminar, four hours. Examination of major theories of childhood development and social and cultural influences. Letter grading.

M122. Perspectives on American College. (5) Seminar, four hours. Examination of role colleges and universities play in larger cultural life of U.S. society. Letter grading.

M129. Race, Class, and Education Inequality in U.S. (5) Lecture, two hours; discussion, two hours. Focus extensively on understanding educational experiences of following groups in U.S.: African Americans, Asian Americans and Pacific Islanders, Chicanas/Chicanos/Latinas/Latinos, and low-income white Americans. Examination of how historical development of public education in U.S. has influenced its present form. Critical look at current issues and policy debates in education, including debate over school reform, bilingual education, and affirmative action. Letter grading.

M130. Autism: Mind, Brain, and Education. (5) Lecture, two hours; discussion, two hours. Focus on autism spectrum disorders (ASD) and related disabilities. Letter grading.

M132. Autism: Mind, Brain, and Education. (5) Lecture, two hours; discussion, two hours. Focus on autism spectrum disorders (ASD) and related disabilities. Letter grading.

M135. Education and Law. (5) Seminar, four hours. Focus on educational law, with emphasis on relationship of teaching and learning; various perspectives as to how children learn; issues of teaching and learning that arise based on child's social class, ethnic background, gender, age, and level of ability. Letter grading.

M136. Working Families and Educational Inequalities in Urban Schools. (4) [Same as Labor Studies M136.] Lecture, three hours per week per quarter. Examination of complex relationship between working-class and poor communities and inequalities in American urban schools. Letter grading.

M112. Early Childhood Development. (5) Seminar, four hours. Examination of major theories of childhood development and social and cultural influences. Letter grading.

M129. Race, Class, and Education Inequality in U.S. (5) Lecture, two hours; discussion, two hours. Focus extensively on understanding educational experiences of following groups in U.S.: African Americans, Asian Americans and Pacific Islanders, Chicanas/Chicanos/Latinas/Latinos, and low-income white Americans. Examination of how historical development of public education in U.S. has influenced its present form. Critical look at current issues and policy debates in education, including debate over school reform, bilingual education, and affirmative action. Letter grading.

M130. Autism: Mind, Brain, and Education. (5) Lecture, two hours; discussion, two hours. Focus on autism spectrum disorders (ASD) and related disabilities. Letter grading.

M132. Autism: Mind, Brain, and Education. (5) Lecture, two hours; discussion, two hours. Focus on autism spectrum disorders (ASD) and related disabilities. Letter grading.

M135. Education and Law. (5) Seminar, four hours. Focus on educational law, with emphasis on relationship of teaching and learning; various perspectives as to how children learn; issues of teaching and learning that arise based on child's social class, ethnic background, gender, age, and level of ability. Letter grading.

M136. Working Families and Educational Inequalities in Urban Schools. (4) [Same as Labor Studies M136.] Lecture, three hours per week per quarter. Examination of complex relationship between working-class and poor communities and inequalities in American urban schools. Letter grading.
137. Critical Digital Media Literacies. (4) Lecture, four hours. Students question relationships with digital media and information society and explore how media and information communication technologies are improving society, strengthening democracy, and opening up opportunities for challenging hegemony and promoting social transformation. Problematization of social media and questioning of ways it is being used to surveil, capture data, spread hate, mislead, distract, and deceive. Students analyze social media representations, question process of normalizing dominant ideologies, and create counter-hegemonic media messages. Combines theoretical foundation of critical and cultural studies with practical applications of new digital media and technology, as well as traditional print-based means of communication. Exploration of media representations of race, class, gender, sexual orientation, and other identity markers. Students analyze and create media projects related to education. Letter grading.

138. Cognitive Development and Schooling. (5) Lecture, four hours; discussion, two hours. Overview of theories, methods, and research on children's cognitive development and implications of this work for educational practice. Covers range of research from different perspectives from domains such as developmental psychology, cognitive psychology, developmental cognitive neuroscience, and education. Students learn about basic cognitive processes. Exploration of ways—whether at home, early-care settings, and school—impact children's development. Letter grading.

139. Educational Program Evaluation. (5) Seminar, four hours. Stages and methods for conducting evaluations of educational and social programs, with emphasis on evaluation approaches that are theoretically grounded, methodologically rigorous, practical, and useful. Letter grading.

140. Understanding Pathways to College. (4–5) Lecture, two hours. Examination of access across K-12 and higher education to understand how college admissions are stratified across racial and class lines. Roles of school personnel, higher education admissions, families, and students in promoting equal educational opportunity. Course is good preparation for students interested in working in UCLA programs such as Early Academic Outreach Programs that serve students in Los Angeles area schools. Letter grading.

M145A-M145B. Restoring Civility: Understanding, Using, and Resolving Conflict. (4–5) (Same as Chicana and Chicano Studies M174C.) Lecture, one hour; fieldwork, three hours. Requisites: courses M145A, M145B. Limited to juniors/seniors. Application of student knowledge and experience to help students in partner schools to develop peer mediation programs to be sustained by future UCLA students. Work at partner school sites and demonstration of firm grasp of concepts of conflict resolution through weekly reflective discussions, journal writing, role playing, and practice of how to apply them in educational settings. In Progress (M145A) and letter (M145B) grading.

M145C. Alternatives to Violence: Peer Mediation in Public Schools. (4) (Same as Chicana and Chicano Studies M174C.) Lecture, one hour; fieldwork, three hours. Requisites: courses M145A, M145B. Limited to juniors/seniors. Application of student knowledge and experience to help students in partner schools to develop peer mediation programs to be sustained by future UCLA students. Work at partner school sites and demonstration of firm grasp of concepts of conflict resolution through weekly reflective discussions, journal writing, role playing, and practice of how to apply them in educational settings. In Progress (M145A) and letter (M145B) grading.

142. Race and Education: Access, Equity, and Achievement. (5) Seminar, four hours. Focus on race, class, gender, and other identity markers and their implications on educational outcomes and prospects for students. Focus on conceptual tools used to evaluate soundness of conclusions drawn from research evidence; notions of internal validity, statistical validity, construct validity, and external validity. Statistical validity requires basic fluency with quantitative data analysis, which students learn using statistical software R. Analysis of race, class, and gender differences in educational research and how research findings get translated when they are reported for popular media audiences. Quantitative background is not required. Letter grading.

152A. Globalization and Learning. (4) Lecture, two hours; discussion, two hours. Introduction to different conceptualizations of globalization and their relationship to educational processes and learning in contemporary societies. Discussion of several concepts and theoretical lenses as basis for approaching and understanding how dialectics of global and local are affecting educational systems and learning over lifespan.

152B. Global Citizenship Education. (4) Lecture, four hours. Exploration of issues of global citizenship in education and society as whole by analyzing critical challenges of headway-grade students and focus on to multiple layers of theoretical, empirical, and practical implementation of global citizenship education. Examination of how global citizenship education and education of sustainability are impacting to impact life, actions, policies, and practices of educators, students, non-government organizations, governments, multinational organizations, and other key players. Focus on local and global level. Examination of how global citizenship education impacts our worldview, teaching, and learning as we strive to envision and work toward more just and sustainable society. Letter grading.

152C. Global Citizenship Education. (4) Lecture, four hours. Questions regarding nature and possibility of education that can foster global citizenship necessary to understand and resolve world's most pressing issues. Focus on core concepts and processes of developing global citizenship education. Using local and global research, exploration and analysis of various perspectives, curricula, and pedagogies pertaining to teaching and implementation of global citizenship education at different levels of education. Letter grading.

C160. Theory and Practice of Intergroup Dialogue: Building Facilitation Skills. (4) Seminar, four hours. Topical orientation to the group relations, intercultural and dialogic communication theories, methods for reconciling and bridging differences in schools and communities, research and evaluation of educational applications, approaches to theory and practice of critical media literacy. Development for improving intergroup relations, and core competencies for planning, delivering, and evaluating intergroup dialogues in multicultural settings. While providing foundational grounding in theory and pedagogy of intergroup dialogue, particular attention to relationships between intergroup dynamics, structural inequalities, systems of privilege and oppression, and mental health outcomes and disparities among populations. Concurrently scheduled with course C244. Letter grading.

162. Policy Analysis and Real Politics of Education. (5) Lecture, two hours; discussion, two hours. Exploration of models and methods for policy analysis and actual workings of policy systems. Selected topics include achievement standards and assessment, school finance, equal access to education, and school reform. Letter grading.

CM163. Narratives of Justice: Disrupting School-to-Prison Pipeline—Arts, Activism, and Agency. (4) (Same as African American Studies CM113.) Lecture, four hours; discussion, one hour. Exploration of policies and other forms of agency engaging school-to-prison pipeline. Concurrently scheduled with course CM229B. P/NP or letter grading.

164. Race and Education: Access, Equity, and Achievement. (5) Seminar, four hours. Social/psychological perspective on education, with particular attention to race, ethnicity, and inequality. Study of structural, social, and personal determinants of educational outcomes. Consideration of relationships of school to social context and other societal institutions. Examination of how education sets life trajectory in America and effects of race/ethnicity on access to educational opportunities in our society. Letter grading.

166. Language, Literacy, and Academic Development: Educational Considerations for School-Age Multilingual and English Language Learner Students. (5) Seminar, five hours. Use of child-centered approach to examine instructional strategies and assessment practices with preK-12 multilingual and English language learner (ELL) students who are learning academic content in English (and possibly additional languages) in school. Critical comparison of effectiveness of English-only programming with dual-language approaches (e.g., two-way immersion, transitional bilingual education) and roles of summative and formative assessments in educational decision making with multilingual and ELL students. Letter grading.

170C. Experiential Learning in Secondary Classrooms: Health. (4) Lecture, one hour; fieldwork, four hours. Training and supervised practicum for undergraduate mathematics students interested in teaching in secondary classrooms, including working with 6th- through 12th-grade students and focusing on multi-age health requirements from California Commission on Teacher Credentialing. Experts in field lead discussion of issues related to physical and mental health of students in schools, issues regarding theoretical and practical theories and practices that engage diverse groups of students in classrooms. Active engagement in reflection on issues in schools in which students work. Letter grading.

170D. Experiential Learning in Secondary Classrooms: Technology. (2) Lecture, two hours. Focus on important issues related to technology in secondary classrooms, including working with 7th- through 12th-grade students in school sites. Focus on law requirements from California Commission on Teacher Credentialing. Experts in field lead discussion of issues related to legal and ethical concerns of schooling, culture of schools, issues of bullying, building of classroom community, and learning theories and practices that engage diverse groups of students in classrooms. Active engagement in reflection on issues in schools in which students work. Letter grading.

170E. Experiential Learning in Secondary Class-rooms: Health. (4) Lecture, one hour; fieldwork, four hours. Training and supervised practicum for undergraduate mathematics students interested in teaching in secondary classrooms, including working with 7th- through 12th-grade students in school sites. Focus on law requirements from California Commission on Teacher Credentialing. Experts in field lead discussion of issues related to use of technology in classrooms, and learning theories and practices that engage students with diverse needs and interests. Active engagement in reflection on issues in schools in which students work. Letter grading.


CM178L. Critical Media Literacy and Politics of Gender: Laboratory. (2) (Same as Gender Studies CM117BL) Laboratory, two hours. Corequisite: course CM178. Hands-on production experience as integral to course. Concurrently scheduled with course CM178. Letter grading.

180. Orientation to Community Engagement. (4) Seminar, four hours. First course in three-part series to strengthen community engagement for Education and Social Transformation major capstone project. Introduction to conceptions and contexts of community engagement, focusing on possibilities and
complexities of critical and asset-based approaches to community engagement. In preparation for students’ own community engagement experiences in community organizations, early childhood centers, or schools in Los Angeles, emphasis on reflecting on po-
sitionality, identifying points of power and privilege, and understanding relationships between systemic is-
In preparation for students’ own community engagement experiences in community organizations, early childhood centers, or schools in Los Angeles, emphasis on reflecting on positionality, identifying points of power and privilege, and understanding relationships between systemic issues and community engagement. Letter grading.

184. Variable Topics in Teaching and Learning. (2) Lecture, one hour. Variable topics course, with emphasis on reflective learning and teaching approaches. Preapproved, and may be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

M190. Arts Education Undergraduate Practicum: Preparation, Observation, and Practice. (4 Same as Arts Education M192.) Seminar, three hours. En-
forced requisite: course M104. Limited to juniors/seniors in advanced standing. Arts Education undergraduate students participating in Visual and Performing Arts Education minor. Students implement and evaluate original arts education programs under guidance of faculty members in small course settings. P/NP or letter grading.

M190SL. Arts Education Undergraduate Practicum and Capstone Project. (4) Same as Arts Education M192SL.) Seminar, three hours; practicum, three hours; outside study, six hours. Enforced requisite: courses M104, M190. Limited to juniors/seniors. Con-
Missed preapproved 12-16 settings coordinated through Center for Community Learning. Students meet on required topics course organized on selected current issues basis, integrating field observations and readings through seminar discussions. Development of culmi-

191A-191E. Current Issues in Education. (4 each) Seminar, four hours. Limited to juniors/seniors. Vari-
191D. Directed Research or Senior Project in Educa-
191E. Directed Research or Senior Project in Educa-
192A. Practicum in Intergroup Dialogue Facilita-
192C. Practicum in Intergroup Dialogue Facilita-
192M. Practicum in Intergroup Dialogue Facilita-

193. Community Internships in Education. (4) Tuto-
195. Community Internships in Education. (4) Tuto-
196. Instructional Apprenticeship in Teaching and Learning at UCLA. Lab School. (4) Tutorial, 10 hours. Limited to juniors/seniors. Introduction to K-12 teaching profession through training and supervised off-campus experiences at UCLA partners. (Nora Sterry Elementary School, Brockton Elementary School, Emerson Middle School, University High School, UCLA Community School, or other LAUSD schools coordinated by students). Students gain ground understanding of social issues in education through readings, observations, direct support in classrooms, and tutoring activities. Individual meet-

Graduate Courses

200A. Historical Research and Writing. (4) Lecture, four hours. Methods of historical research and writing for students who are or who will be engaged in re-
200B. Survey Research Methods in Education. (4) Lecture, four hours. Requisite: course 230A. Problems of conceptualization, organization, and gathering non-
200C. Analysis of Survey Data in Education. (4) Lecture, three hours; laboratory, two hours. Requisite: course 200B. Introduction to techniques of processing and analyzing non-

M201C. History of American Education. (4) (Same as History M264.) Discussion, three hours. History of educational thought and of social forces impinging on American education. Thematic topics include theories of social change, analysis of relation between these ideas and forces, and aims and practices of American education today. S/U or letter grading.


204A. Introduction to Education and Social Sciences. (4) Lecture, four hours. Interdisciplinary course intended to introduce students to study of educational issues, texts, and movements of thought through social sciences and comparative perspectives. S/U or letter grading.

204B. Introduction to Comparative Education. (4) Lecture, four hours. Examination of conceptual and methodological questions underlying comparative education. Particular attention to development of field and to study of problems that may be applied to comparative and cross-national studies in education. S/U or letter grading.

204C. Education and National Development. (4) Lecture, four hours. Comparative and international analysis of various social sciences perspectives and methodologies (including modernization, dependency, Marxism, neo-Marxist, liberation theology, and world-system theories of change and development) and changing notions of role of education in development of less-industrialized countries of world. S/U or letter grading.

204D. Minority Education in Cross-Cultural Perspective. (4) Lecture, four hours. Designed for graduate students. Context and contemporary analyses of educational policies with regard to ethnic, religious, and linguistic minorities through selected national and international case studies. Introduction to cross-cultural representation in representative countries in relation to social, political, and economic systems. S/U or letter grading.


204F. Nonformal Education in Comparative Perspective. (4) Lecture, four hours. Comparative and international study of organized and systematic educational activity for children, youth, and adults carried on outside of schools. Types of programs include, among others, community group, family, peer group, and school; application of developmental, skills training, literacy, and extension programs. S/U or letter grading.

205. Computers in Educational Process. (4) Lecture, four hours. Introduction to theory, experimentation, evaluation, and future of computer systems in education, with emphasis on computer-assisted instruction (CAI), and use of computers to teach programming and to foster development of writing, computational, and logical thinking skills. S/U or letter grading.

206A. Philosophy of Education: Introduction. (4) Lecture, four hours. Systematic introduction to field, including ways in which philosophy serves to elucidate educational aims, content, methods, and values. S/U or letter grading.

207. Politics of Education. (5) Lecture, two hours; discussion, two hours. Political dimensions of education institutions as organizations. Relationships between educational and political institutions in society. Political theory as foundation for public policy analysis; interest groups in education policy formation and implementation; and focus on Freirean pedagogy. Concurrently scheduled with course C125. S/U or letter grading.

208A. Perspectives on Sociology of Education. (4) Lecture, four hours. Sociological perspectives on current issues in educational policy and practice, including desegregation, decentralization, equality of educational opportunity, structure of educational organization, teacher/student relationships, reform in education at elementary, secondary, postsecondary levels. S/U or letter grading.

208B. (In)National Youth, Ethnography, and Education. (4) Seminar, four hours. Exploration of experiences of immigrant youth in U.S. schools, with focus on family, language, culture, and educational equity in urban settings. Letter grading.

208C. Explanation in Social Sciences and Educational Research. (4) Lecture, two hours; discussion, two hours; laboratory, graduate students. Overview of basic strategies and forms of explanation relevant to inquiry in education from vantage point of various social and behavioral sciences disciplines. S/U or letter grading.

209A. History of Higher Education. (5) Seminar, four hours. Examination of major eras in history of higher education. Topics include issues concerning access, diversity, parental choice, cultural literacy, teacher empowerment, and role of popular media. Concurrently scheduled with course C124. S/U or letter grading.

209C. Research and Evaluation in Higher Education. (4) Lecture, four hours. Development of conceptual and methodological framework of research and evaluation in higher education. Topics include basic statistics, survey design, data analysis, assessment issues, and research proposal writing. Letter grading.

210A. Educational Evaluation. (4) Lecture, four hours. Evaluation of major issues and approaches in educational research through selection of faculty presentations, selected readings, and writing assignments. Letter grading.


211C. Advanced Item Response Theory. (4) Lecture, four hours. Requisites: course 211A or 211B or Psychology 255A, Psychology 255B. Review of standard item response models, multiple group models and models with covariates, item and person parameter estimation, differential item functioning analysis, testing model fit, linking across tests, computerized adaptive testing. S/U or letter grading.

212A. Learning and Education. (4) Lecture, four hours. Models of learning, modeling, reinforcement, motivation, encoding, memory, transfer, individual differences, and instruction. S/U or letter grading.

212B. Motivation and Affect in Educational Process. (4) Lecture, four hours. Review of theoretical and empirical literature on motivational factors in school settings and conditions for acquisition of effective outcomes. S/U or letter grading.

213C. Group Counseling Theory and Process. (4) Lecture, three hours; discussion, one hour. Requisite: course 414A. Group productivity, leadership in groups, social psychology, and impact of group on individual behavior. S/U or letter grading.

213D. Assessment in Counseling and Student Affairs. (4) Lecture, four hours. Overview of assessment issues and methods used in counseling and student affairs activities. Emphasis on concepts of testing and measurement, applications of measurement theory, and contemporary issues that are significant in influencing assessment in student affairs programs. Letter grading.

214A. Counseling Theory and Practice. (4) Lecture, four hours. Alternatives in counseling practice in relation to theories of personality development and functioning, research on effectiveness of counseling, professional issues in counseling, educational aspects of counseling. S/U or letter grading.

214C. American Professoriate: Faculty Status, Role, and Performance. (4) Discussion, four hours. Historical and contemporary issues involving American professoriate. Topics include employment, academic culture, teaching and research standards, faculty development. Letter grading.


214F. Student Problems: Social Context. (4) Lecture, four hours. Designed to assist students in understanding configuration of social forces that lead to student dysfunctions. Consideration of number of contemporary social problems that are of concern to school counselors, educators in general, and behavior scientists. S/U or letter grading.

M215. Personality, Motivation, and Attribution. (4) (Same as Psychology M239.) Discussion, three hours. Current research and theory relating personality variables (e.g., attributional styles, self-esteem) to motivation and behavior problems such as aggression and conduct behavior. Perceived causes of outcomes in achieve ment and affiliative domains. S/U or letter grading.


217A. Social Development and Education. (4) Seminar, four hours. Biological and familial, school, and other influences on children development in context of current research and theoretical models; consideration of theoretical and methodological research on family, peer group, and school; application of developmental theory and research to educational practice. S/U or letter grading.

217B. Cognitive Development and Education. (4) Lecture, two hours; discussion, two hours. Designed for graduate students. Critical review of theories of research and development in cognitive development. Emphasis on work of Piaget and Vygotsky, and relation of this work to issues in educational practice. S/U or letter grading.

M217C. Personality Development and Education. (4) (Same as Psychology M238.) Lecture, four hours. Review of research and theory of critical content areas in personality development that bear on school performance: achievement motivation, self-concept, aggression, sex differences, empathy, and other social behaviors; review of status of emotional behavior in personality theory and development. S/U or letter grading.

217D. Language Development and Education. (4) Lecture, four hours. Research and theory on how children develop their first language; sociolinguistic and psycholinguistic issues in preschool and primary years; bilingual and dialectical issues. S/U or letter grading.

217E. Emerging into Adulthood. (4) Seminar, four hours. Examination of theories and research related to transition to adulthood and role of race/ethnicity, gender, and immigration status in shaping developmental outcomes. Topics include historical and cross-cultural comparisons of emerging adulthood; ethnic, racial, and gender identity; family relationships and expectations; college opportunities and experiences; entering workforce as alternative to education and military; and civic engagement. Letter grading.

M217F. Adolescent Development. (4) (Same as Psychology M242G.) Seminar, four hours. Designed for graduate students. Review of recent research on physical, cognitive, social, and psychological development during second decade of life. Topics include pubertal development, changes in parent/adolescent re-
218. Measurement of Educational Achievement and Aptitude. (4) Lecture, four hours. Requisite: course 230A. Critical study of tests of achievement and aptitude, with emphasis on group tests; relation of achievement to aptitude; social implications of measurement of intelligence; elements of validity and reliability. S/U or letter grading.

219. Laboratory: Advanced Topics in Research Methodology. (4) Laboratory, four hours. Provides assistance in design of research and interpretation of data to advanced students from other divisions. Cov- erage will vary, and may include in other courses on research methods. S/U or letter grading.

220A. Inquiry into Schooling: Organization and Change. (4) Lecture, four hours. Critical analysis of issues in reconstruction of schooling; concepts of function and structure of schooling; organization theory; systems approaches in analysis of organization development and change. S/U or letter grading.

221. Computer Analyses of Empirical Data in Education. (4) Lecture, two hours; laboratory, two hours. Requisites: courses 209C (section 1), 230A. Designed to develop conceptual and technical skills needed for designing and executing empirical research utilizing statistical packages. Each student conducts two original studies. Equal emphasis on techniques of data analysis and interpretation of results. S/U or letter grading.

222A. Introduction to Qualitative Methods and Design Issues in Educational Research. (4) Lecture, three hours; discussion, one hour. Introductory course for students interested in epistemology, theories, and styles of qualitative research in educational settings. Theory of qualitative, naturalistic, qualitative research design covered in second half of course. Letter grading.

222B. Participant-Observation Field Methods. (4) Lecture, two hours; discussion, two hours. Requisite: course 222A. Continuation of fieldwork project started in course 222B, with focus on practical skills and conceptual/methodological issues involved in reducing and analyzing qualitative data. Letter grading.

222D. Qualitative Inquiry: Special Topics. (4) Lecture, four hours. Special topics cover on some field or aspect of qualitative inquiry. Topics may include classroom ethnography, advanced ethnographic writing and/or multimedia design, discourse analysis, and multimodal sociology of social interaction. S/U or letter grading.


224. Leading Change through Disciplined Inquiry. (4) Lecture, four hours. Introduction to disciplined inquiry and continuous improvement methods as means for driving change in complex systems. Introduction to organizational learning and change, and adult learning concepts and strategies. Application of strategy to lead change, whether for individuals, teams, or organiza- tions, and its application in education, health care, and other disciplines. S/U or letter grading.

225A. Issues in Education of Exceptional Individuals. (4) Lecture, four hours. Designed for graduate stu- dents. Analysis of major research regarding contem- porary trends, issues, and programs for exceptional individuals; consideration of commonalities and differ- ences among exceptional individuals. S/U or letter grading.

225B. Advanced Issues in Education of Exceptional Individuals. (4) Lecture, four hours. Synthesis of developmental and educational theory relevant to study of exceptional individuals, including consider- ation of historical context of current research and ap- pailed issues in special education. S/U or letter grading.

226. Seminar: Special Topics in Writing, Rhetoric, and Editing. (4) Lecture, four hours. Special topics seminar on writing in education that could focus on history of writing about education, social and political dimensions of it, its variation by discipline, and its inclusion in professional and public con- texts. Letter grading.

227A. Research on Learning Characteristics of Ex- ceptional Individuals. (4) Lecture, four hours. Requi- site: course 225B. Overview of research and theory re- garding learning characteristics of exceptional individu- als and discussion of application of this work to edu- cational practice. S/U or letter grading.


227C. Research on Behavioral and Social Charac- teristics of Exceptional Individuals. (4) Lecture, four hours. Requisite: course 227B. Analysis of social and emotional development of exceptional individuals and development of social competence in special education programs. S/U or letter grading.


229. Seminar: Special Topics in Urban Schooling. (4) Seminar, four hours. Research on selected topics in fields of administration, policy, curriculum, and teaching studies and on conceptualization of hypoth- eses and research programs on division topics and is- sues. Letter grading.

CM229B. Narratives of Justice: Disrupting School-To-Prison Pipeline/Youth Justice. (4) (Same as African American Studies CM213.) Lecture, four hours; discussion, one hour. Exploration of poli- cies and practices, art and activism, and other forms of African American resistance in and against the prison pipeline. Con- currently scheduled with course CM163. S/U or letter grading.


231D. Advanced Quantitative Models in Nonexpo- nential Research: Multilevel Anal. (4) Lecture, four hours. Requisites: courses 230B, 230C. Examination of conceptual, substantive, and methodological issues in analyzing multilevel data (i.e., on individuals in organizational settings such as schools, corpora- tions, hospitals, communities); consideration of alter- native analytical models. Letter grading.


233. Professional Writing in Education. (4) Lecture, four hours. Professional development as writers, with focus on style and organization, scholarly genres, modes of discourse, and broader issues of conceptualization and method. Letter grading.

234. Critical Perspectives on Economic Approaches to Education. (4) Seminar, four hours. Introduction to concepts and principles in economics of education, types of skill formation, and well-being. S/U or letter grading.

241. Research Methodology in School Administration. (4) Lecture, four hours. Examination of research methodology affect research design and framing of research questions in studies of higher education. Letter grading.

247. Special Topics in Law and Educational Policy. (4) Lecture, four hours. Policy-based inquiry with focus on specific law-related debates that inevitably influence both K-12 and higher education communities. Identification of legal issues have been successfully employed by those who have sought to use law to shape educational policy. Letter grading.

248. Seminar: Special Topics in Child Development and Education. (4) Seminar, four hours. Content varies; limits of investigation set by individual instructor. S/U or letter grading.

250A. Fundamentals of U.S. Higher Education System. (4) Lecture, four hours. Designed for graduate students. Two-course sequence designed to orient new students to issues, ideas, and literature that constitute this division, with emphasis on underlying social and political issues that shape higher education and organizational change. Letter grading.

250B. Organizational Analysis of Higher Education. (4) Lecture, four hours. Designed for graduate students. Two-course sequence designed to orient new students to issues, ideas, and literature that constitute this division, with emphasis on underlying social and political issues that shape higher education and organizational change. Letter grading.

250C. Theoretical Frameworks of Higher Education. (4) Lecture, four hours. Examination of theories, models, and principles that underlie the study of higher education. Letter grading.

252B. Educational Enterprise. (4) Lecture, two hours; discussion, two hours. Requisite: course 252A. Limited to Educational Leadership Program students. Use of structural, human resource, political, and symbolic forces to study K-12 education, with focus on educational environments, organizations, and curriculum and instruction. Letter grading.

252A. Seminar: Educational Organizations. (4) Seminar, four hours. Requisite: course 252A. S/U or letter grading.


253D. Seminar: Latin American Education. (4) Seminar, four hours. S/U or letter grading.

253E. Seminar: European Education. (4) Seminar, four hours. S/U or letter grading.

253F. Seminar: Education in Revolutionary Societies. (4) Seminar, four hours. Multidisciplinary and comparative study of educational theory examined through writings of Marx, Lenin, Mao, and others. Implementation of this theory in specific case studies, along with comparative assessments of non-capitalist and socialistic educational systems. S/U or letter grading.

253G. Seminar: Asian Americans and Education. (4) Seminar, four hours. Basic issues and topics related to Asian Americans in field of education. Examples of issues and topics include Asian American history and culture, educational policies, and implications for schooling. S/U or letter grading.

253H. Seminar: Chicano/Hispanic and Education. (4) Seminar, four hours. Basic issues and topics related to Chicanos and other Hispanic groups in education. Review of literature on specific educational levels and Chicano/Hispanic student progress (e.g., early childhood, elementary, higher education); specific topics: assessment, access, participation, educational policies, implications for schooling. S/U or letter grading.

253I. Education and Social Change in Middle East and Islamic World. (4) Seminar, four hours. Critical and analytical examination of the recent role of traditional and modern (Western) education in affecting social, political, and economic changes in countries of Middle East and Islamic world (including Persian Gulf, Turkey, South and Central Asia). S/U or letter grading.


256B. Seminar: Special Topics in Development. (4) Seminar, four hours. S/U or letter grading.

257. Seminar: Research in Counseling Psychology. (4) Seminar, four hours. Introduction to student experiences, curriculum, institutional climate, educational policies, and administrative practices. Letter grading.

258A. Seminar: Problems in Instructional Research. (4) Seminar, four hours. Introduces to theory and practice of internationalization in U.S. higher education, looking at meaning of concept of comprehensive internationalization across campus, issues of effective leadership and management, and individual aspects of internationalization, including study abroad program development and implementation, international student recruitment and support services, international curriculum—area and language studies, English as a second language programs, international partnerships/branch campuses, international development and grant projects, international alumni, distance learning/massive open online courses (MOOCs)/hybrid models. Letter grading.


261E. Higher Education Seminar: Diversity Issues and Research Perspectives. (4) Seminar, four hours. Examination of how racial diversity and its related dynamics have transformed and at same time been re- shaped by institutions of higher education, with focus on intergroup relations, curricula, institutional climate, educational policies, and administrative practices. Letter grading.
261F. Seminar: Cognitive and Personal Development of College Students. (4) Seminar, four hours. Examination of cognitive development of college students; issues of personal and social development, including leadership, and interpersonal relations and skills. S/U or letter grading.

262B. Seminar: Reading. (4) Seminar, four hours. S/U or letter grading.

262F. Seminar: Research Topics in Bilingual/Multicultural Education. (4) Seminar, four hours. S/U or letter grading.

263. Seminar: Higher Education. (4) Seminar, four hours. May be repeated for credit. S/U or letter grading.


265. Higher Education Policy. (4) Lecture, four hours. Requisites: courses 250A, 250B. Understanding public policy for higher education requires understanding both policy and policy process. Examination of major topics on which U.S. government is active, as well as key actors and their influence. Letter grading.

M266. Feminist Theory and Social Sciences Research. (4) (Same as Gender Studies M266L.) Lecture, four hours. Examination of how diverse feminist social theories of last quarter century have both challenged and strengthened conventional social sciences theories and approaches. Introduction especially to feminist standpoint theory, distinctive critical theory methodology now widely used in social sciences. Letter grading.


268. Theorizing Reading: Rhetorics of Academic Discourse. (4) Lecture, two hours; discussion, two hours. Designed for graduate students. Introduction to theoretical approaches to reading, such as poststructuralist, feminist, deconstruction, reader reception, and semiotics, and to core ideas of some leading theorists of reading, such as Roland Barthes, Wolfgang Iser, Barbara Johnson, Stanley Fish, and Gayatri Spivak. Letter grading.

269. Representations of Education in Cinema. (4) Lecture, two hours; discussion, two hours. Designed for graduate students. Exploration of ways in which we read the diverse “texts,” particularly films set in or around schools, to illuminate contemporary issues in American secondary education (e.g., issues pertaining to representation of teachers, students, parents, and administration in popular films about high school and adolescents). Letter grading.


CM278. Critical Media Literacy and Politics of Gender: Theory and Production. (4) (Same as Gender Studies CM278L.) Seminar, three hours. Corequisite: course CM278L. Use of range of pedagogical approaches to theory and practice of critical media literacy that necessarily involves understanding of new technologies and the study of both theory and production techniques to inform student analysis of media and critical media literacy projects. Concurrently scheduled with course CM178L. Letter grading.

CM278L. Critical Media Literacy and Politics of Gender: Laboratory. (2) (Same as Gender Studies CM278LL.) Laboratory, two hours. Corequisite: course CM278L. Hands-on production experience as integral component of course CM278. Concurrently scheduled with course CM178L. Letter grading.

279. History of Urban Schooling. (4) Lecture, four hours. Designed for graduate students. Survey of major events, political and economic forces, and ideas that shaped urban schools since 1890. Examination of historical scholarship across range of political/ideological perspectives. Letter grading.

280A. Seminar: Selected Topics in Special Education. (2 to 6) Seminar, two to six hours. Focus on research in special education. Introduction to range of clinical services and research strategies. Exploration of current topics in field. S/U or letter grading.

280B. Seminar: Exceptional Individuals. (4) Seminar, four hours. Limited to doctoral students. S/U or letter grading.

281. College Access Seminar. (4) Seminar, four hours; discussion, two hours. Knowledge of changing dynamics of college access, individual organizational, and field levels and understanding of links between K-12 and postsecondary stratification and how educational advantage and disadvantage accumulate throughout education and affects equity in college access. Letter grading.


283. Social Research in Multicultural and Postcolonial World. (4) Lecture, four hours. Philosophy of social sciences that focuses on how to think fruitfully about issues. (1) Identification of diverse procedures and results of research conducted within liberal state that must be committed to value-neutrality and (2) challenges that multicultural and postcolonial so- cial theory have raised to conventional research theo- ries and methodologies. Letter grading.

284. Critical Theory in Education: Power, Politics, and Liberation. (4) Lecture, four hours. Designed for graduate students. Examination of how diverse feminist social theories and critical theory methodology have devalued communities, their lifeways, and their challenges offered by language variation and displaces arising at every stage of education process, from issues regarding practices that may engender school-to-prison pipeline to ongoing legal battles regarding race-conscious policies. Every Student Success Act, K-12 teacher tenure, school sports, unmet needs of English language learners, misuse of special education system, impact of burgeoning charter school movement, and many other issues and opportunities for applying methodological skills to actual case-study research projects. Focus on single and strengths-based pedagogy tradition. Work on cultural and discourse analysis. Letter grading.

CM288. Language, Culture, and Education. (4) (Same as Anthropology M288L.) Seminar, three hours. Examination of ongoing movement to reclaim and reimagine schooling as site to sustain indigenous, black, Latinx, Asian and Pacific Islander communities, including ways these identities/memberships intersect with gender identity and expression, sexuality, disability, language, migration, place, class, and more. For centuries of teaching and learning, communities have sought to push against ways nation-state schools have devalued communities, their lifeways, and their lives. Most recently, this movement is indebted to sev- eral decades of research, theory, and practice in asset-based pedagogy. While on cultur- ally sustaining pedagogy (CSP) has joined these decades (and centuries) of work to offer vision of school that seeks to perpetuate and foster—to sustain—in- guistic, literate, and cultural survival as part of schooling for positive social transformation and revi- talization. S/U or letter grading.

287. Research on Language Issues in Education. (4) Seminar, four hours. Roles of language(s) in formal and informal education, including study of opportuni- ties and challenges offered by language variation found in schools. Examination of language acquisition theories along with those of language ideologies, lan- guage and politics, and multifunctionality. Letter grading.

288. Research Apprenticeship Course. (2) Discussion, two hours. Course facilitates mentorship model of training PhD students in education, with focus on development of graduate student research topics. Assis- tance with conference preparation and reading of recent theories; students have opportunity to offer and receive feedback. May be repeated for credit. S/U grading.

290. Educational Policy Analysis: Research, Theo- ries, and Practice. (4) Seminar, four hours. Broad overview of development of educational policy from 1950s to present. Examination of current issues and debates within educational policy in U.S. through different the- oretical lenses. Exploration of major bodies of re- search on educational policy and alternative para- digms. Letter grading.
Asian American studies, and gender/sexuality studies and how to develop curriculum focused on local histories in urban classrooms. S/U grading.

321B. Ethnic Studies Curriculum Development. (3) Lecture, three hours. Examination and development of theoretical frameworks around curriculum development for grades 7 through 12, with emphasis on interdisciplinary approach that integrates content areas and infuses literacy, technology, and strategies for second language learners. Methods courses align with California state frameworks and California content standards for grades K through 12, including English Language Development Standards and content standards for mathematics, science, arts, and social sciences. Students are employed by school/community relations. Increased daily responsibilities. S/U grading.


330A. Observation and Participation. (2 to 6) Site-based fieldwork, 10 to 15 hours. Students are assigned to schools with racially, culturally, and linguistically diverse student populations. Throughout observation and participation period, students analyze effective strategies for achieving learning for all students, including sociocultural approaches and appropriate use of educational technology. S/U grading.

330B. Student Teaching. (4 to 8) Site-based fieldwork, 10 to 20 hours. Requisite: course 330A. Students are assigned to student teach in designated school sites with racially, culturally, and linguistically diverse student populations. Throughout student teaching period, students as novice teachers plan, implement, and assess daily lessons and units, as well as actively engage in reflecting on issues specific to school/community relations. S/U grading.

330C. Student Teaching. (4 to 8) Site-based fieldwork, 10 to 30 hours. Requisite: course 330A. Students are assigned to student teach in designated school sites with racially, culturally, and linguistically diverse student populations. Throughout student teaching period, students as novice teachers plan, implement, and assess daily lessons and units, as well as actively engage in reflecting on issues specific to school/community relations. Increased daily responsibilities. S/U grading.

330D. Classroom Residency and Teaching. (4) Site-based fieldwork, 40 hours. Students are employed by local school districts to teach as residents in designated school sites with racially, culturally, and linguistically diverse student populations. Students also work in collaborative teams through Teacher Education Program to initiate change project in their local school and/or complete case study on project. May be repeated for credit. S/U grading.

360A-360B-360C. Novice Seminars. (2–2–2) Seminar, two hours. Analysis of basic principles and concepts of planning, conducting, and evaluating units of curriculum and instruction. Emphasis on study and utilization of constructivist strategies and their application in urban classrooms. Examination of different methods of computer literacy and teaching subject matter. May conduct ethnographic inquiry of local community of their designated partnership district. May be repeated for credit. S/U grading.

375. Teaching Apprentice Practicum. (1 to 4) Seminar, to be arranged. Preparation: apprentice personnel to be teaching assistant, associate, or fellow. Teaching apprenticeship under active guid-

380A. Exploring Communities. (2) Seminar, two hours. Limited to credential program students. Letter grading.

405A. Exploring Communities. (2) Seminar, two hours. Limited to credential program students. Letter grading.

408A. African American and/or complete case study on project. S/U grading.

408B. 408U. Language and Culture. (2 each) Lecture, two hours. Exploration of complex nature of culture and impact of cultural diversity in urban classrooms through class discussion and reflective expression, allowing novice teachers to understand and participate in rich cultural diversity of urban Los Angeles. By exploring culture as tool and target for increasing understanding of multicultural diversity, teachers may construct meaningful connections to students, communities, and home cultures. Each course may be taken independently for credit. Letter grading.

408B. 409A. Language Structure, Acquisition, and Development. (3) Lecture, four hours. Exploration of infant and toddler development (ages 0 to 3) and implications of development on their care and education. Introduction to major theories in child development, developmental milestones, and implications of research. Knowledge of curriculum, and curriculum evaluation. S/U or letter grading.


410B. Issues in Higher Education and K-12. (4) Lecture, 3 and 2 laboratory hours. Two-course sequence providing overview of higher education systems. Letter grading. 410A. Designed to develop knowledge, understanding, and sensitivity to contemporary critical and emerging issues that impact higher education, with focus on both theory and practice. Study of relationships between issues in K-12 and higher education. 410B. Exploration of issues that effect both higher education and K-12, including re-structuring and reform, standards, access and accountability, and new technologies. A major emphasis. Letter grading.

411A. 411B. Gender and Cultural Issues in Evaluation. (4) Lecture, four hours. Assessment methodologies appropriate for evaluation programs. Writing evaluation proposals, developing program monitoring procedures, selecting appropriate evaluation design strategies, coping with ethical considerations in evaluation, framing decision context, and reporting evaluation results. Letter grading.

412. Why Research Matters to Student Affairs Practitioners. (1) Lecture, three hours. How do researchers study impact of college on students? How can that research be used to improve student affairs practice? Introduction to world of college impact research and orientation to major ongoing studies conducted at UCLA and beyond. Students interact with researchers and provide input on how research results might be utilized to improve work of student affairs. Letter grading.
413A. Language and Culture. (2 to 4) Lecture, two hours. Limited to credential program students. Offered and required for Bilingual Authorization Programs. Focus on language of emphasis for bilingual teachers. Practice in listening, reading, speaking, and writing competencies of the target language. Class sessions are conducted in the language of emphasis; practice in use of activities to develop student ability to use language for real-world and academic purposes in culturally appropriate ways. Consideration of models for teaching across content, primary language and language for delivery of core curriculum to bilingual students. Letter grading.

413C. Culture of Emphasis. (2 to 4) Lecture, three hours. Offered and required for Bilingual Authorization Programs. Conducted in language of authorization. Discussion of commonalities of culture of emphasis in home country or countries; major historical periods and events; values, belief systems, and expectations; migration and immigration; historical and contemporary demographic letter grading. Letter grading.

414A. Student Affairs Practice and Theory. (3) Lecture, two hours; discussion, two hours. Examination of needs for student affairs services, range of services, their philosophical and empirical rationale, and their organization and evaluation to provide knowledge base for developing theories of practice. Ongoing involvement in cooperative learning project to examine these issues both as team members and as individuals. Offered in summer only. Letter grading.

414B. Legal and Ethical Issues in Student Affairs. (4) Lecture, two hours; discussion, two hours. Examination of legal and ethical issues that affect student affairs practices. Lecture. Letter grading.

414C. College Student Counseling. (3) Lecture, three hours. Overview of counseling at college counseling centers. Review of historical context, philosophical and practical bases, organization and administration, specific programs, and contemporary issues and trends in college student counseling. Letter grading.

414D. Career Development and Interventions in Colleges. Lecture, four hours; discussion, one hour; laboratory, one hour. Examination of challenges faced by college students of all ages in preparing for careers in dynamic multiculural world environment and intervention for those specific needs. Emphasis on understanding development and evaluation of interventions. Letter grading.

414E. Administration of Student Affairs. (3) Lecture, two hours; discussion, two hours. Overview of general knowledge and processes essential to effectively administer programs or services under student affairs. Examination of relationship between environmental factors and strategies for governing, planning, and managing student affairs programs and services. Offered in summer only. Letter grading.

415A. Assessment in Counseling Psychology. (4) Lecture, four hours. Requisites: courses 218, 230A. Overview of various methodologies and procedures used by counseling psychologists for assessing individuals in multicultural society. Emphasis on standardized cognitive assessment instruments and specialized techniques for diagnosis, evaluation, and development of counseling strategies for at-risk populations. S/U or letter grading.

415B. Advanced Assessment in Counseling Psychology. (4) Lecture, four hours. Requisite: course 415A. Advanced course in assessment for counseling psychologists. Survey and description of instruments of achievement, affective, and personality appraisal, with emphasis on testing and interplay between assessment and psychologial functioning for reducing risks of failure in academic, personal, and social areas. S/U or letter grading.

416. Program Development and Planning in Student Affairs. (4) Lecture, two hours; discussion, two hours. Planning of programs that provide or support learning for individuals and groups in student affairs context. Examination of philosophical foundations of programs and classroom; conceptual and logical dimensions of program development. Letter grading.

417. Program Evaluation and Assessment in Student Affairs. (4) Lecture, two hours; discussion, two hours. Examination of usefulness and appropriateness of various program evaluation methodologies and theories of assessment. Letter grading.

418. Group Dynamics in Student Affairs. (3) Lecture, two hours; discussion, two hours. Group productivity, leadership in groups, social perception, attitude formation, and group dynamics; individuals and groups. Evaluation of social, psychological, and educational principles related to experiences of individuals in small groups. Letter grading.

419. Introduction to Research in Student Affairs. (4) Lecture, two hours; discussion, two hours. Designed to orient students to nature of educational research in context of student affairs. Overview of quantitative, qualitative, and mixed methods to position students as scholar-practitioners. Exposure to these methods supplemented by examination of how they are used in published research relevant to practice of student affairs. Letter grading.


421A. Programs and Research in Early Childhood Education. (4) Lecture, four hours. Preparation: one course from development series. Examination of child care programs and research in early childhood education. Emphasis on research in developmental psychology and education to goals of early childhood education and day care. S/U or letter grading.


422. Inquiry into Schooling: Basic Issues. (4) Lecture, four hours. Critical examination of basic issues and problems in organization and reconstruction of precollege schooling. Consideration of historical development and changing functions of schooling in American society; school organization; schooling alternatives; opportunities for development of educational change. S/U or letter grading.


424A. Social Studies in Curriculum. (4) Lecture, four hours. Advanced study in social studies curriculum development; problems in defining objectives and organizing single and multidisciplinary programs; critical review of literature on cognitive and affective learning in social education. Preparation: one course from instructional study of instructional programs. S/U or letter grading.

424B. Reading in Curriculum. (4) Lecture, four hours. Requisite: course 230A. Study of reading curriculum and instructional procedures, with emphasis on rationale and research underlying their development and research comparing their effectiveness. S/U or letter grading.

424G. Curriculum Design for Bilingual Education. (4) Lecture, four hours. Advanced study of curriculum design for bilingual educational programs. Philosophical basis for bilingual programs; learning and instruction applied to bilingual learner; language assessment; development of instructional component; program evaluation. S/U or letter grading.


426A–426B. Program Development and Program Evaluation in Student Affairs. (2–2) Lecture, two hours. Introduction to program development and planning, as well as to assessment and program review. Development of knowledge of and skill in planning educational and training programs that provide support for learning within context of student affairs, as well as knowledge of and skill in developing, implementing, and analyzing assessment projects within student affairs context. Study of basic theoretical perspectives underlying program design and program review/assessment and application by developing, implementing, and assessing effectiveness of one program. In Progress (426A) and letter (426B) grades.

431A. Administration in Higher Education. (4) Lecture, four hours. Overview of college and university administration and introduction to policy research and analysis in postsecondary education. Studies of administrative, policies, practices, Management information systems, resource allocation, and issues related to responsibility, authority, and participation in administrative decisions. S/U or letter grading.

431B. Curriculum and Instruction in Higher Education. (4) Lecture, four hours. Principles of curriculum and instruction in postsecondary programs. Theory and practice in design of educational programs that provide support or learning within context of student affairs, as well as to assessment and program review/assessment and application by developing, implementing, and assessing effectiveness of one program. In Progress (426A) and letter (426B) grades.


433B. Development of Educational Media. (4) Discussion, four hours. Current issues and trends in design of interactive educational media. Design and development of prototype educational media applications, integration plans for established or experimental educational media into formal learning settings, or evaluations of specific learning environments. Letter grading.

440C. Administration of Instructional Programs. (4) Lecture, four hours. Examination of current educational problems in society and strategies of their solution through curriculum process: practice, instructional design and operation; in-service training of teaching staffs. S/U or letter grading.

441A. Instructional Supervision A. (4) Lecture, four hours. Analysis of teaching in light of research-substantiated elements of instruction: task analysis, appropriate objectives, principles that increase motivation, rate and degree of learning, retention and transfer, monitoring and adjusting instruction to meet needs and capacities of learners. S/U or letter grading.

442B. Legal Aspects of Educational Management and Practice. (4) Lecture, four hours. Examination of structures and kinds of law governing educational systems in U.S.; constitutional dimensions of church/state relations; employees’ civil rights and legal aspects of hiring, firing, and negotiating procedures; student attendance, control, and civil rights. S/U or letter grading.

443. Policy Analysis in Education. (4) Lecture, four hours. Overview of political, economic, and legal context of educational policy formation. Included in examination are issues that impact on minorities (e.g., bilingual education, desegregation, affirmative action, role of subordinates in policy-making process). S/U or letter grading.

444B. Equality of Educational Opportunity through Desegregation and Finance Case Law. (4) Lecture, four hours. Requisite: course 442B. Concentrated review of definition of equality of educational opportunity as it is being developed by courts in cases concerning desegregation and educational finance. S/U or letter grading.

447. Seminar: Educational Policy and Planning, Special Topics. (1 to 4) Seminar, one to four hours. S/U or letter grading.

448A. Urban School Leadership. (4) Lecture, four hours. Analysis of problems of urban school leadership. Emphasis on changing nature of urban principalship, with attention to role of school and community agencies that interact with urban school leaders. S/U or letter grading.

448B. Urban Leadership Laboratory, (4) Laboratory, four hours. Preparing city leaders to practice human and technical skills required for success as urban school leader. Topics include negotiations, conflict resolution, applied computer technology, and effective communication. Activities include gaming, simulation, computer programming, and group dynamics. S/U or letter grading.

450. Leadership Capacity Building. (4) Lecture, one hour; discussion, three hours. Limited to Educational Leadership Program students. Course taken in year three of Educational Leadership Program to help students with their communication and leadership capacities. S/U grading.

451. Foundations of Organizations and Leadership. (4) Lecture, four hours. Limited to Educational Leadership Program students. Promotion of understanding of traditional and contemporary conceptions of leadership and organizational theory, with application of these conceptions to student professional work settings. Letter grading.

452A-452B. Educational Enterprise. (4-4) Lecture, two hours; discussion, two hours. Limited to Educational Leadership Program students. Use of structural, human resource, political, and symbolic frames to study K-12 education. Letter grading. 452A. Focus on purposes of education governance, finance, access, and equity. S/U or letter grading. 452B. Requisite: course 452A. Focus on educational environments, organizations, and curricular and instructional issues.

453. Technology in Education: Learning and Leading with Technology. (2) Lecture, two hours; discussion, two hours. Introduction to and use of classroom technologies for classroom instruction. Letter grading.

454A. Action Research: Collaboration in Change. (4) Lecture, one hour; discussion, two hours; small group work, one hour. Limited to Educational Leadership Program students. Students carry out full cycle of action research at educational site. Projects done in teams and students have access to collaboration and writing. Letter grading.

454B. Action Research: Collaboration in Change. (4) Lecture, one hour; discussion, two hours; small group work, one hour. Limited to Educational Leadership Program students. Second course in two-course sequence on learning how to do and use action research in educational processes and settings while collaborating on data collection and analysis at educational site. Letter grading.

455. Writing and Inquiry. (4) Lecture/workshop, eight hours per month; discussion, one hour; laboratory, one hour. Limited to doctoral students in Educational Leadership Program. Intended to assist students’ professional development as writers, addressing style and organization of written work; criticism and evaluation of dis- course, and broader issues of conceptualization and method. Letter grading.

456. Altering Structure and Culture of Schooling. (4) Lecture, four hours; discussion, four hours. Limited to Educational Leadership Program students. Using applied orientation, examination of variety of approaches to organizational change and ways to sus- tain change. Letter grading.

457. Student Assessment across K-16 Spectrum. (4) Discussion, four hours. Limited to Educational Leadership Program students. Theories of student development applicable to K-12 and postsecondary education. Focus on educational influences on self and others. Letter grading.


460. Seminar: Special Issues in Evaluation. (2 or 4) Seminar, one or two hours; discussion, one or two hours. Recent emphasis included evaluation utilization and cost-effec- tiveness evaluation. S/U or letter grading.


464. Critical Media Literacy: Teaching Youth to Critically Read and Create Media. (4) Lecture, four hours. Preparation for educators to teach K-12 students to explore their relationships with media by criti- cally questioning media representations and creating their own alternative media messages. Critical media literacy topics include domination theories, practices in commu- nity college formation, instruction, student flow, admin- istration, and/or evaluation. S/U or letter grading.

466. Critical Media Literacy: Teaching Youth to Critically Read and Create Media. (4) Lecture, four hours. Preparation for educators to teach K-12 students to explore their relationships with media by criti- cally questioning media representations and creating their own alternative media messages. Critical media literacy topics include domination theories, practices in commu- nity college formation, instruction, student flow, admin- istration, and/or evaluation. S/U or letter grading.


470A. Seminar: Large Systems and Individual Schools. (4) Seminar, four hours. S/U or letter grading.


471. Principles of Effective Coaching and Teaching. (4) Seminar, four hours. Introduction to principles and practice of effective coaching and teaching for as- piring coaches considering careers in professional and collegiate athletics, K-12 schools, and community- based sports organizations. Premised on principles of social psychology, the theories of social influence, social exclusion, and diversity for contributing to creation of more humane, equitable, and harmonious society and nation. Letter grading.

472. Introduction to Philosophies of Coaching. (4) Seminar, four hours. Introduction to philosophies of coaching—overarching frameworks, perspectives, deep beliefs, and values that drive coaches’ specific practices—as they are manifested in writings and con- duct of professional and college sport coaches. Ex- ploration of these through study of successful coaches in variety of sports unpacking their funda- mental keys of success. Reflection on and cultivation of education of coaches and philosophical theory of coaching answering questions such as what is your word and what is your way. Exploration of questions such as what is coach, what is coach’s overall purpose, what are we trying to do, and how do we design research and lead and pro- duce these results. Methods and assignments include presentations, analyzing videos, group work, inter- views, analysis of coaching philosophies, and con- structive statement of one’s own philosophy of coaching. Letter grading.

481. Knowledge and Inquiry in Classroom. (4) Lecture, four hours. Logical features of instruction and their application to inquiry techniques in teaching and learning. Focus on issues of teaching, beliefs, and fact and opinion, and their application to classroom learning situations. S/U or letter grading.

482A. Instructional Strategies in Urban Education: Technology. (4) Lecture, four hours. Emphasis on in- structional practices that integrate use of technology in urban public schools. Study and analysis of com- prehensive specialized use of appropriate computer- based technology in supporting learning and teaching process, and debriefing of field experiences integrating technology-related tools. Letter grading.

482B. Instructional Strategies in Urban Education: English Language Learners. (4) Lecture, four hours. Emphasis on instructional practices that support En- glish language learners in urban public schools. Study and analysis of delivery of comprehensive specialized instruction for English learners and debriefing of field experiences implementing adopted instructional pro- grams for development of academic language, com- prehension, and knowledge in core academic curric- licum. Letter grading.

482C. Instructional Strategies in Urban Education: Social Studies. (4) Lecture, four hours. Emphasis on instructional practices that support special populations in urban public schools. Continuation of study of student populations, curriculum, instruction, and assessment issues, focusing on teaching students with disabilities, students who are at risk, and stu- dents who are gifted and talented. Research opportu- nities and additional methods in content areas for ad- vanced study, and preparation of MEd inquiry in- cluded. Letter grading.

482D. Instructional Strategies in Urban Education: Visual and Performing Arts. (4) Lecture, two hours; discussion, two hours. Examination of advanced instructional practices that integrate visual and performing arts into urban classrooms. Debriefing of field experiences im- plementing subject-centered arts instruction, instruc- tion connecting arts disciplines, and instruction con- necting arts and other core disciplines. Advanced ex- ploration of elements of each art form, as well as content and emotional scaffolding strategies and re- placement strategies to make learning accessible, en- gaging, and relevant. Letter grading.

485. Advanced Study of Health Education. (1) Lecture, four hours. Students meetings with instructors, field specialists, and team cohorts to study and ana- lyze delivery of comprehensive health education in physical, cognitive, emotional, and social well-being of students in K-12 classrooms. Topics include prevention and in- tervention strategies, accessing local and community resources, curriculum and instruction, and major state and federal laws related to student health and safety. Letter grading.


490A. Instructional Decision Making. (4) Lecture, four hours. Analysis of instructional models relevant to public school education. Assumptions, procedures, and constraints of each strategy considered in terms of learner and task variables. Laboratory experiences in classroom settings permit students systematically to apply and evaluate alternative instructional strate- gies. S/U or letter grading.


492. Evaluation of Teaching and Learning. (4) Lecture, four hours. Relationship between appraisal instru- ments and information required for making deci-
sions about teachers, pupils, and materials. Recent developments in evaluation of teaching and learning; use of modern appraisal techniques in classroom settings. S/U or letter grading.

495. Teaching Preparation in Education, (2) Seminar, two hours. Teaching assistants (TA) are supported while becoming more effective and reflective teachers. Focus on how to create student-centered, inclusive learning experiences. Study of theory (relationship between teaching and learning), research (what we know about how people learn), and logistics (how this actually happens for students). Students gain under- standing of serving as TA in education (e.g., departmental policies, responsibilities to students, how/where to get additional support, etc.). Students have opportunities to apply (in their own sections) what they learn, to reflect collaboratively on their ongoing TA experiences, and to learn from experienced TAs. S/U grading.

498A-498B-498C. Directed Field Experience, (2 to 8 each) Clinical, to be arranged. Field experiences designed to increase understanding of student fields of study. May be repeated for credit. S/U or letter grading.

499A-499B-499C. Advanced Directed Field Experience, (4 to 8 each) Clinical, to be arranged. May be repeated for credit. S/U or letter grading.

501. Cooperative Program in Special Education, (2 to 8) Tutorial, to be arranged. Preparation: consent of UCLA academic adviser and graduate dean, and host campus instructor, department chair, and graduate dean. Limited to UCLA doctoral students in special education. Used to record enrollment in practicum courses taken under cooperative arrangements with USC. S/U grading.

596. Directed Independent Study, (1 to 12) Tutorial, to be arranged (one hour per unit). Individual study or research for graduate students. May be repeated for credit. S/U or letter grading.

597. Preparation for Master’s Comprehensive Examinations or Doctoral Qualifying Examinations. (1 to 12) Tutorial, to be arranged. Individual study for master’s comprehensive examinations or for PhD or EdD qualifying examinations. May be repeated for credit. S/U grading.


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**ELECTRICAL AND COMPUTER ENGINEERING**

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**Professors Emeriti**

Frederick G. Allen, PhD
Francis C. Chen, PhD
Babak Daneshkrad, PhD
Harold R. Fetterman, PhD
Stephen E. Jacobsen, PhD
Rajeev Jain, PhD
Alan J. Laub, PhD
Nhan N. Levan, PhD
Dee-Son Pan, PhD
Izhak Rubinstein, PhD
Frederick W. Schott, PhD
Oscar M. Staflia, Jr., PhD
Gabor C. Temes, PhD
Donald M. Wiberg, PhD
Alan N. Willson, Jr., PhD (Charles P. Reamers Endowed Professor Emeritus of Electrical Engineering)
Kung Yao, PhD

**Associate Professors**

Aydin Babakhani, PhD
Alyson K. Fletcher, PhD

**Assistant Professors**

Xiang Chen, PhD
Sam Emamjomey, PhD
Achuta Kadambi, PhD
Jonathan C. Kao, PhD
Ankur M. Mehta, PhD
Nader Sehatbakhsh, PhD

**Adjunct Professors**

Darush Divsalar, PhD
Dan M. Goebel, PhD
Diana L. Huffaker, PhD
Asad M. Madni, PhD
Ingrid M. Verbauwhede, PhD
Eli Yablonovitch, PhD

**Adjunct Associate Professor**

Chi On Chui, PhD

**Adjunct Assistant Professors**

Shervin Moloudi, PhD
Zachary D. Taylor, PhD

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**Scope and Objectives**

Electrical and computer engineers are responsible for inventions that have revolutionized our society, such as the electrical grid, telecommunications, and automated computing and control. The profession continues to make vital contributions in many domains, such as the infusion of information technology into all aspects of daily life. To further these ends, the Department of Electrical and Computer Engineering fosters a dynamic academic environment that is committed to a tradition of excellence in teaching, research, and service. It has state-of-the-art research programs and facilities in a variety of fields. Departmental faculty members are engaged in research efforts across several disciplines in order to serve the needs of industry, government, society, and the scientific community. Interactions with other disciplines are strong. Faculty members regularly conduct collaborative research projects with colleagues in the Geffen School of Medicine; Graduate School of Education and Information Studies; School of Theater, Film, and Television; and College of Letters and Science.

There are three primary research areas in the department: circuits and embedded systems, physical and wave electronics, and signals and systems. These areas cover a broad spectrum of specializations in, for example, communications and telecommunication, control systems, electromagnetics, embedded computing systems, engineering optimization, integrated circuits and systems, micro- and nanoelectronic systems (MEMS), nanotechnology, photonics and optoelectronics, plasma electronics, signal processing, and solid-state electronics.

The program grants two undergraduate degrees (Bachelor of Science in Electrical Engineering and Bachelor of Science in Computer Engineering) and two graduate degrees (Master of Science and Doctor of Philosophy in Electrical and Computer Engi-
neering). The graduate program provides students with an opportunity to pursue advanced coursework, in-depth training, and research investigations in several fields.

Undergraduate Study
The Electrical Engineering major is accredited by the Engineering Accreditation Commission of ABET.

The Electrical Engineering major is a designated capstone major. Undergraduate students complete a design course in which they integrate their knowledge of the discipline and engage in creative design within realistic and professional constraints. Students apply their knowledge and expertise gained in previous mathematics, science, and engineering coursework. Within a multidisciplinary team structure, students identify, formulate, and solve engineering problems and present their projects to the class.

The Computer Engineering major is a designated capstone major that is jointly administered by the Computer Science and Electrical and Computer Engineering departments. Undergraduate students complete a design course in which they integrate their knowledge of the discipline and engage in creative design within realistic and professional constraints. Students apply their knowledge and expertise gained in previous mathematics, science, and engineering coursework. Students identify, formulate, and solve engineering problems and present their projects to the class.

Electrical Engineering BS
Capstone Major
The undergraduate curriculum provides all Electrical Engineering majors with preparation in the mathematical and scientific disciplines that lead to a set of courses that span the fundamentals of the three major departmental areas of signals and systems, circuits and embedded systems, and physical wave electronics. These collectively provide an understanding of inventions of importance to society, such as integrated circuits, embedded systems, photonic devices, automatic computation and control, and telecommunication devices and systems.

Students are encouraged to make use of their electrical engineering electives and a two-semester capstone design course to pursue deeper knowledge within one of these areas according to their interests, whether for graduate study or preparation for employment. See the department website for examples of specializations.

Learning Outcomes
The Electrical Engineering major has the following learning outcomes:

• Application of knowledge of mathematics, science, and engineering
• Design of a system, component, or process to meet desired needs within realistic constraints
• Function as a productive member of a multidisciplinary team
• Effective communication
• Identification, formulation, and solution of electrical engineering problems

Preparation for the Major
Required: Chemistry and Biochemistry 20A; Computer Science 31, 32; Electrical and Computer Engineering 2, 3, 10, 11L, M16 (or Computer Science M51A); Mathematics 31A, 31B, 32A, 32B, 33A, 33B; Physics 1A, 1B, 1C, 4A, 4AL, 4BL.

The Major
Required: Electrical and Computer Engineering 101A, 102, 110, 111L, 113, 113A; six core courses selected from Computer Science 33, Electrical and Computer Engineering 101B, 115A, 121B, 132A, 133A, 141, 170A; three technical breadth courses (12 units) selected from an approved list available in the Office of Academic and Student Affairs; 12 units of major field elective courses, at least 8 of which must be upper-division electrical and computer engineering courses—the remaining 4 units may be from upper-division electrical and computer engineering courses or from another engineering school department; and one two-semester electrical and computer engineering capstone design course (8 units).

Electrical and Computer Engineering 100 and CM182 may not satisfy elective credit.

For information on UC, school, and general education requirements, see the College and Schools chapter.

Computer Engineering BS
Capstone Major
The undergraduate curriculum provides all Computer Engineering majors with preparation in the mathematical and scientific disciplines that lead to a set of courses that span the fundamentals of the discipline in the major areas of data science and embedded networked systems. These collectively provide an understanding of many inventions of importance to our society, such as the Internet of Things, human–cyber–physical systems, mobile/wearable/implantable systems, robotic systems, and more generally smart systems at all scales in diverse spheres. The design of hardware, software, and algorithmic elements of such systems represents an already dominant and rapidly growing part of the computer engineering profession. Students are encouraged to make use of their computer science and electrical and computer engineering electives and a two-semester capstone design course to pursue deeper knowledge within one of these areas according to their interests, whether for graduate study or preparation for employment.

Learning Outcomes
The Computer Engineering major has the following learning outcomes:

• Application of mathematical, scientific, and engineering knowledge
• Design of a software or hardware system, component, or process to meet desired needs within realistic economic, environmental, social, ethical, health, safety, security, reliability, manufacturability, and sustainability constraints
• Function productively on a team with others
• Identification, formulation, and solution of computer engineering problems
• Effective communication

Preparation for the Major
Required: Computer Science 1 (or Electrical and Computer Engineering 1), 31, 32, 33, 35L, M51A (or Electrical and Computer Engineering M16); Electrical and Computer Engineering 3; Engineering 96C; Mathematics 31A, 31B, 32A, 33A, 33B, 61; Physics 1A, 1B, 1C, and 4A, 4AL or 4BL.

The Major
Required: Computer Science 111, 118 (or Electrical and Computer Engineering 112B), M151B (or Electrical and Computer Engineering M116C), M152A (or Electrical and Computer Engineering M116L); Electrical and Computer Engineering 100, 102, 113, 115C; one course from Civil and Environmental Engineering 110, Electrical and Computer Engineering 131A, Mathematics 170A, 170E, Statistics 100A; 8 units of computer science and 8 units of electrical and computer engineering upper-division electives; three technical breadth courses (12 units) selected from an approved list available in the Office of Academic and Student Affairs; 8 units capstone design from either Electrical and Computer Engineering 180DA/180DB or 183DA/183DB.

For information on UC, school, and general education requirements, see the College and Schools chapter.

Graduate Study
Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Division website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Graduate Degrees

The Department of Electrical and Computer Engineering offers Master of Science (MS) and Doctor of Philosophy (PhD) degrees in Electrical and Computer Engineering.

Electrical and Computer Engineering
Lower-Division Courses
1. Undergraduate Seminar. (1) (Formerly numbered Electrical Engineering 1.) Seminar, one hour; outside study, two hours. Introduction by faculty members and industry lecturers to electrical engineering disciplines through current and emerging applications of autonomous systems and vehicles, biomedical devices, aerospace electronic systems, consumer products, data science, and entertainment products (amusement rides, etc.), as well as energy generation, storage, and transmission. P/NP grading.

2. Physics for Electrical Engineers. (4) (Formerly numbered Electrical Engineering 2.) Lecture, four hours; discussion, two hours; outside study, six hours. Requisite: Physics 1C. Introduction to concepts of modern physics necessary to understand solid-state devices, including elementary quantum theory, Fermi energies, and concepts of electrons in solids. Discussion of electrical properties of semiconductors leading to operation of junction devices. Letter grading.
Upper-Division Courses

100. Electrical and Electronic Circuits. (4) Formerly numbered Electrical Engineering 100.) Lecture, three hours; discussion, one hour; outside study, eight hours. Requisites: Mathematics 33A, 33B or Mechanical and Aerospace Engineering 82, Physics 1C. Not open for credit to students with credit for course 110. Quantitative analysis, logical elements, circuit analysis techniques, and design of simple logic circuits. Letter grading.

101A. Engineering Electromagnetics. (4) Formerly numbered Electrical Engineering 101A.) Lecture, four hours; discussion, one hour; outside study, seven hours. Requisites: Mathematics 32A and 32B, or 33A and 33B, Physics 1C. Electromagnetic field concepts, wave propagation, and transmission lines. Letter grading.

101B. Electromagnetic Waves. (4) Formerly numbered Electrical Engineering 101B.) Lecture, four hours; discussion, one hour; outside study, seven hours. Enforced requisite: course 101A. Time-varying fields and Maxwell equations, plane wave propagation and interaction with objects, Gauss and Poynting vectors, guided waves in waveguides, phase and group velocity, radiation and antennas. Letter grading.


103. Circuit Theory I (Honors). (4) Formerly numbered Electrical Engineering 103.) Lecture, four hours; discussion, one hour; outside study, six hours. Enforced requisite: courses 10, M16 (or Computer Science 1 or Materials Science 10). Requisites: Mathematics 33A, Physics 1B. Corequisites: course 11L (enforced only for Computer Science and Engineering and Electrical Engineering majors), Mathematics 33B. Honor course parallel to course 10. Letter grading.

110H. Circuit Theory II (Honors). (4) Formerly numbered Electrical Engineering 110.) Lecture, three hours; discussion, one hour; outside study, eight hours. Enforced requisite: courses 10, M16 (or Computer Science 1M16). Corequisite: course 11L (enforced only for Computer Science and Electrical Engineering majors). Sinusoidal excitation and phasors, AC steady state analysis, AC steady state power, network theorems, frequency response, mutual inductance, ideal transformer, application of Laplace transforms to circuit analysis. Letter grading.

110H. Circuit Theory III (Honors). (4) Formerly numbered Electrical Engineering 110H.) Lecture, four hours; discussion, one hour; outside study, seven hours. Requisites: courses 10, M16 (or Computer Science 1M16A). Corequisite: course 11L. Sinusoidal excitation and phasors, AC steady state analysis, AC steady state power, network functions, poles and zeros, frequency response, mutual inductance, ideal transformer, application of Laplace transforms to circuit analysis. Letter grading.

110L. Circuit Measurements Laboratory. (2) Formerly numbered Electrical Engineering 110L.) Laboratory, four hours; outside study, two hours. Requisite: course 100 or 110. Experiments with basic circuits containing resistors, capacitors, inductors, and op-amps. Op-amps, operational amplifiers, and integrated circuits. Letter grading.


111L. Circuits Laboratory II. (1) Formerly numbered Electrical Engineering 111L.) Lecture, one hour; laboratory, one hour; outside study, one hour. Enforced requisite: course 110. Experiments with electrical circuits containing resistors, capacitors, inductors, transformers, and op-amps. Steady state power analysis, frequency response principles, op-amp-based circuit synthesis, and two-port network principles. Letter grading.

112. Introduction to Power Systems. (4) Formerly numbered Electrical Engineering 112.) Lecture, four hours; discussion, one hour; outside study, seven hours. Enforced requisite: course 110. Complete overview of organization and operation of interconnected power systems. Development of appropriate models for interconnected power systems and learning how to perform power flow, economic dispatch, and short circuit analysis. Introduction to power system transient dynamic analysis. Letter grading.


113DA-113DB. Digital Signal Processing Design. (4) Formerly numbered Electrical Engineering 113DA-113DB.) Real-time implementation of digital signal processing algorithms on digital processor hardware. Experiments involving A/D and D/A conversion, aliasing, digital filtering, sinusoidal oscillators, Fourier transforms, and finite wordlength effects. Course project involving original design and implementation of digital signal processing systems for communications, speech, audio, video or using DSP chip. Letter grading.

114. Speech and Image Processing Systems Design. (4) Formerly numbered Electrical Engineering 114.) Lecture, three hours; discussion, one hour; laboratory, two hours; outside study, six hours. Enforced requisite: course 113. Design, analysis, and modeling in first half of course; design techniques for image enhancement, filtering, and transforms in second half. Lectures supplemented by laboratory implementation of speech and image processing tasks. Letter grading.


115AL. Analog Electronics Laboratory I. (2) Formerly numbered Electrical Engineering 115AL.) Laboratory, four hours; outside study, two hours. Enforced requisite: courses 110L or 111L or 115A. Experimental determination of device characteristics, resistive diode circuits, single-stage amplifiers, compound transistor stages, effect of feedback on single-stage amplifiers, operational amplifiers, and operational amplifier circuits. Introduction to hands-on laboratory experience based on individual student hardware design and implementation platforms. Letter grading.


115C. Digital Electronic Circuits. (4) Formerly numbered Electrical Engineering 115C.) Lecture, four hours; discussion, one hour; outside study, seven hours. Requisites: courses 100 or 115A, and Computer Science 351A. Transistor-level digital circuit analysis and design. Modern logic styles. Modern CMOS, pass-transistor, dynamic logic, integrated circuit (IC) layout,
digital circuits (logic gates, flip-flops/latches, counters, etc.), computer-aided simulation of digital circuits. Letter grading.

115E. Design Studies in Electronic Circuits. (4) (Formerly numbered Electrical Engineering 115E.) Lecture, four hours; discussion, one hour; outside study, seven hours. Required: courses 102 or 102DA, 111B. Prequisite: design of process circuit design through lectures to complement other laboratory-based design courses. Topics vary by instructor and include communication, electronics, and photonics. Letter grading.

116C. Computer Systems Architecture. (4) (Formerly numbered Electrical Engineering M116C.) (Same as Computer Science M115B.) Lecture, four hours; discussion, two hours; outside study, six hours. Required: courses 121B or Computer Science M51A, Computer Science 33. Recommended: course 116L or Computer Science M112A, Computer Science 111. Computer system organization and design; implementation of CPU datapath and control, instruction set design, memory hierarchy (caches, main memory, virtual memory) organization and management, hardware and software interactions (bus structure, interrupts, DMA), performance evaluation, pipelined processors. Letter grading.

116L. Introductory Digital Design Laboratory. (2) (Formerly numbered Electrical Engineering M116L.) (Same as Computer Science M115A.) Lecture, two hours; discussion, two hours; outside study, two hours. Required: course M16 or Computer Science M51A. Hands-on design, implementation, and debugging of digital logic circuits, use of computer-aided design tools for schematic capture and simulation, implementation of complex circuits using programmed array logic, design projects. Letter grading.

119. Fundamentals of Embedded Networked Systems. (Formerly numbered Electrical Engineering M119.) (Same as Computer Science M119.) Lecture, four hours; discussion, one hour; outside study, eight hours. Required: course 131A or Civil and Environmental Engineering 110 or Mathematics 170A or Statistics 100A, course 132B or Computer Science 118, Computer Science 33. Design, trade-offs and principles of operation of cyber physical systems such as Internet of Things. Topics include signal propagation and modeling, sensing, node architecture and operation, and applications. Letter grading.

121B. Principles of Semiconductor Device Design. (4) (Formerly numbered Electrical Engineering 121B.) Lecture, three hours; discussion, one hour; outside study, eight hours. Required: course 2 or Introduction to Computer Hardware. Limited to 60. Prequisites: computer-aided design tools, integrated circuit design courses, semiconductor physics. Letter grading.

123A. Fundamentals of Solid-State I. (4) (Formerly numbered Electrical Engineering 123A.) Lecture, three hours; discussion, one hour; outside study, eight hours. Required: course 121B or 121DA, or Physics 1C. Fundamentals of solid-state, introduction to quantum mechanics and quantum statistics applied to solid-state. Crystal structure, energy levels in solids, and band theory and semiconductor properties. Letter grading.

123B. Fundamentals of Solid-State II. (4) (Formerly numbered Electrical Engineering 123B.) Lecture, four hours; outside study, eight hours. Required: course 123A. Crystal structure, band properties, lattice vibrations, thermal properties, dielectric, magnetic, and superconducting properties. Letter grading.

128. Principles of Nanoelectronics. (4) (Formerly numbered Electrical Engineering 128.) Lecture, four hours; discussion, four hours; outside study, four hours. Required: Physics 1C. Introduction to fundamentals of nanoscience for electronics nanosystems. Principles of fundamental quantities: electron charge, effective mass, Bohr magneton, and spin, as well as theoretical approaches. From these nanoscale components, discussion of basic behaviors of nanosystems such as analysis of dynamics, variability, and noise, contrasted with those of scaled CMOS. Incorporation of design project in which students are challenged to design electronic nanosystems. Letter grading.

131A. Probability and Statistics. (4) (Formerly numbered Electrical Engineering 131A.) Lecture, four hours; discussion, one hour; outside study, ten hours. Required: courses 102 (enforced), Mathematics 32B, 38B. Introduction to probability, including random variables and distributions, moments, characteristic functions, and limit theorems. Applications to communication, control theory, and information theory. Introduction to Monte Carlo simulation and generation of random events. Letter grading.

132A. Introduction to Communication Systems. (4) (Formerly numbered Electrical Engineering 132A.) Lecture, four hours; discussion, one hour; outside study, seven hours. Required: courses 102, 113, 131A. Review of basic probability, basics of hypothesis testing, sufficient statistics and waveform commutation, principles of classical waveforms and their limits for digital communications, basics of error control coding, inter-symbol interference channels and orthogonal frequency division multiplexing (OFDM), basics of wireless communications. Letter grading.

132B. Data Communications and Telecommunication Networks. (4) (Formerly numbered Electrical Engineering 132B.) Lecture, four hours; discussion, one hour; outside study, seven hours. Required: course 131A. Layered communications architectures. Queuing system modeling and analysis. Error control, flow and congestion control. Packet switching, circuit switching, signaling, transmission, performance analysis and design. Multiple-access communications: TDMA, FDMA, polling, random access. Local, metropolitan, wide area, integrated services networks. Letter grading.


133B. Simulation, Optimization, and Data Analysis. (4) (Formerly numbered Electrical Engineering 133B.) Lecture, four hours; discussion, one hour; outside study, seven hours. Required: course 133A. Introduction to simulation; sensitivity and stability; parameter estimation; random number generators. Simulation of stochastic systems, Monte Carlo methods. Optimization; applications of optimization to engineering design, modeling, and data analysis. Introduction to data mining and machine learning. Algorithms and complexity, Integration of mathematical software in applications. Letter grading.

134. Graph Theory in Engineering. (4) (Formerly numbered Electrical Engineering 134.) Lecture, four hours; discussion, one hour; outside study, seven hours. Basics of graph theory, including trees, bipartite graphs, matching problems, graph coloring, planar graphs and networks. Emphasis on reducing real-world engineering problems to graph theory formulation. Letter grading.


142. Linear Systems: State-Space Approach. (4) (Formerly numbered Electrical Engineering 142.) Lecture, four hours; discussion, one hour; outside study, seven hours. Emphasis on state-space models of linear systems and synthesis, with application to problems in networks, control, and system modeling. Letter grading.

C143A. Neural Signal Processing. (4) Lecture, four hours; discussion, one hour; outside study, seven hours. Required: course 131A, Mathematics 33A. Topics include fundamental properties of electrical activity in neurons, technology for measuring neural activity; spiking statistics and Poisson processes; generative models and classification; regression and Kalman filtering; principal components analysis, factor analysis, and expectation maximization. Concurrently scheduled with course C243A. Letter grading.

M146. Introduction to Machine Learning. (4) (Formerly numbered Electrical Engineering M146.) (Same as Computer Science M146.) Lecture, four hours; discussion, one hour; outside study, seven hours. Required: courses 131A or Civil and Environmental Engineering 110 or Mathematics 170A or 170E or Statistics 100A. Computer Science 33. Introduction to building data science foundations for modeling, data sources, principles of operation of common tools for data analysis, and application of tools and models to data gathering and analysis. Topics include statistical foundations, regression, kernel methods, clustering, expectation maximization, principal component analysis, decision tree, reinforcement learning and deep learning. Letter grading.

C147. Neural Networks and Deep Learning. (4) Lecture, four hours; discussion, two hours; outside study, six hours. Required: courses 131A, 133A or 205A, and M146, or equivalent. Review of machine learning concepts; maximum likelihood; supervised classification; neural network architectures; backpropagation; regularization for training neural networks; optimization for training neural networks; convolutional neural networks; practical CNN architectures; distributed computing libraries in Python; recurrent neural network models, backpropagation through time, long-term short-term memory and gated recurrent units; variational autoencoders; generative adversarial networks; adversarial examples and training. Concurrently scheduled with course C247. Letter grading.

M153. Introduction to Microscale and Nanoscale Manufacturing. (4) (Formerly numbered Electrical Engineering 153.) Lecture, four hours; discussion, one hour; outside study, five hours. Required: chemistry 110A, 110B, 112A, 113; M153; Chemical Engineering M153, and Mechanical and Aerospace Engineering M183B.) Lecture, three hours; laboratory, four hours; outside study, five hours. Enforced requisites: Chemistry 110A, Chemistry 110B, 111, 1B, or 4AL, 4BL. Introduction to general manufacturing methods, mechanisms, constraints, and microfabrication and nanofabrication. Focus on concepts, physics, and design of a variety of micro- and nano-fabrication techniques that have been broadly applied in industry and academia, including various photolithography technologies, physical and chemical depo-
testing, and other real-world issues. Oral and written presentations of project results required. In Progress (184DA) and letter (184DB) grading. 170A. Principles of Photonics. (4) Formerly numbered Electrical Engineering 170A.) Lecture, four hours; recitation, one hour; outside study, seven hours. Recommended requisites: courses 101A, 173DA. Development of solid foundation on essential principles of photonics from ground up with minimum prior knowledge on this subject. Topics include optical properties of materials and free-space modes, optical interferometers and resonators, optical coupling and modulation, optical absorption and emission phenomena of laser and light-emitting diodes, and optical detection. Letter grading. 170B. Photonic Devices and Circuits. (4) Formerly numbered Electrical Engineering 170B.) Lecture, four hours; recitation, one hour; outside study, seven hours. Enforced requisite: course 170A. Coverage of core knowledge of practical photonic devices and circuits. Topics include optical waveguides, optical fibers, optical couplers, optical modulators, lasers and light-emitting diodes, optical detectors, and integrated photonic devices and circuits. Letter grading. 170C. Photonic Sensors and Solar Cells. (4) Formerly numbered Electrical Engineering 170C.) Lecture, four hours; recitation, one hour; outside study, seven hours. Enforced requisite: course 170A. Coverage of solar cells, solar energy sources. Letter grading.

173DA. Microwave and Wireless Design I. (4) Formerly numbered Electrical Engineering 163DA.) Lecture, one hour; laboratory, three hours; outside study, eight hours. Required courses: courses 101A, 101B. Course 163DA is enforced requisite to 163DB. Limited to senior Electrical Engineering majors. Capstone design course, emphasis on transmission line-based circuits and components to address need in industry and research community for students with micro-wave and wireless design experiences. Standard design procedure for waveguide and transmission line-based microwave circuits and systems to gain experience in using Microwave CAD software such as Agilent ADS or HFSS. How to fabricate and test these designs, In Progress grading (credit to be given only on completion of course 163DB).

163DB. Microwave and Wireless Design II. (4) Formerly numbered Electrical Engineering 163DB.) Lecture, one hour; laboratory, three hours; outside study, eight hours. Required requisites: courses 101A, 101B, 163DA. Letter grading. Design of radio frequency circuits and systems, with emphasis on both theoretical foundations and hands-on experience. Design of radio frequency transceivers and their building blocks according to given specifications or in form of open-ended problems. Introduction to advanced topics related to projects through lecture and laboratories. Creation by students of end-to-end systems in application context, managing trade-offs across subsystems while meeting constraints and optimizing metrics related to cost, performance, ease of use, manufacturability, and societal implications. Concurrently scheduled with course CM282. Letter grading.

173DA-173DB. Photonics and Communication Design. (4-4) Formerly numbered Electrical Engineering 173DA-173DB.) Lecture, one hour; laboratory, three hours; outside study, eight hours. Introduction to measurement of basic photonic devices, including LEDs, lasers, detectors, and amplifiers; fiber-optic fundamentals and measurement of fiber systems. Modulation techniques, including AM, FM, phase and frequency carrier methods. Possible projects include lasers, optical communication, and biomedical imaging and sensing. 173DA. Enforced requisite: course 101A. Recommended: course 170A or Bioengineering C170. Choice of design assignment. In Progress grading (credit to be given only on completion of course 173DB). 173DB. Enforced requisites: courses 101A, 173DA. Finalization of design and testing of projects begun in course 173DA grading.

176. Photonics in Biomedical Applications. (4) Formerly numbered Electrical Engineering 176.) Lecture, three hours; discussion, one hour; outside study, eight hours. Enforced requisite: course 170A. Study of various types of photonic devices and sensing. Use of optical fiber and coherent laser light to detect biomolecular structures and nanostructures in modern cleanroom fabrication methods. Hands-on experience for fabricating microstructures and nanostructures. Open-ended projects vary each offering.

Student teams create high-performance designs that manage trade-offs among subsystems, including cost, performance, ease of use, and other real-world constraints. Oral and written presentation of project results. Requisite: course 170A or Physics 110A. Senior-level introduction to photoelectronics, use of photodetectors and applications to materials processing, generation of coherent radiation and particle beams, and renewable energy sources. Letter grading.
186. Special Courses in Electrical Engineering. (4) (Formerly numbered Electrical Engineering 186.) Seminar, four hours; outside study, eight hours. Special topics in electrical engineering for undergraduate students taught on experimental or temporary basis, such as those taught by resident and visiting faculty members. May be repeated once for credit with topic or instructor change. Letter grading.

189. Advanced Honors Seminars. (1 Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate honors curriculum. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be repeated for credit with different seminar leaders. Honors students noted on transcript. P/NP or letter grading.

194. Research Group Seminars: Electrical Engineering. (2 to 4) (Formerly numbered Electrical Engineering 194.) Seminar, four hours; outside study, eight hours. Designed for undergraduate students who are part of research group. Discussion of research methods and current literature in field. May be repeated for credit.

199. Directed Research in Electrical Engineering. (2 to 8) (Formerly numbered Electrical Engineering 199.) Tutorial, to be arranged. Limited to juniors/seniors. Supervised individual research or investigation under guidance of faculty. Culminating paper or project required. May be repeated for credit with school approval. Individual contract required; enrollment petitions available in Office of Academic and Student Affairs. Letter grading.

Graduate Courses

201A. VLSI Design Automation. (4) (Formerly numbered Electrical Engineering 201A.) Lecture, four hours; discussion, one hour; outside study, seven hours. Requisite: course 115C. Fundamentals of design automation and electronic design automation. Discussion of principles of modeling and optimization codevelopment. Letter grading.

201C. Modeling of VLSI Circuits and Systems. (4) (Formerly numbered Electrical Engineering 201C.) Lecture, four hours; outside study, eight hours. Requisite: course 115C. Detailed study of VLSI circuit and system models considering performance, signal integrity, power and thermal effects, signal integrity analysis, and manufacturability. Discussion of principles of modeling and optimization codevelopment. Letter grading.

201D. Design in Nanoscale Technologies. (4) (Formerly numbered Electrical Engineering 201D.) Lecture, four hours; discussion, one hour; outside study, seven hours. Requisite: course 115C. Challenges of digital circuit design and layout in deeply scaled technologies, with focus on design-manufacturing interactions. Summary of large-scale digital design flow; basic manufacturing processes; lithographic patterning, resolution enhancement, and mask preparation; yield and variation modeling; circuit reliability and aging issues; design rules and their effects on circuit fabrication; test structures and process control; circuit architectures required for variability mitigation. Letter grading.

202A. Embedded Systems. (4) (Formerly numbered Electrical Engineering 202A.) (Same as Computer Science 213A.) Lecture, four hours; discussion, one hour; outside study, seven hours. Designed for graduate computer science and electrical engineering students. Methodologies and technologies for design of embedded systems. Topics include hardware and software platforms for embedded systems, techniques for modeling and specification of system behavior, software organization, real-time operating systems, operating system kernels, communication, and visiting faculty members. May be repeated once for credit with topic or instructor change. Letter grading.

202B. Energy-Aware Computing and Physical Systems. (4) (Formerly numbered Electrical Engineering 202B.) (Same as Computer Science M213B.) Lecture, four hours; outside study, eight hours. Requisite: course M16 or Computer Science M54A. Introduction to computer organization, computer architecture, and frequency integrated circuits (RF ICs); electronic design automation; wireless communication circuits and systems; embedded processor architectures; embedded software; distributed sensor and actuator networks; robotics; and embedded security. May be repeated for credit with topic change. S/U or letter grading.

209B. Seminar: Circuits and Embedded Systems. (2 to 8) (Formerly numbered Electrical Engineering 209B.) Seminar, two to four hours; outside study, four to eight hours. Seminars and discussions on current and advanced topics in one or more aspects of circuits and embedded systems, such as digital, analog, mixed-signal, and radio frequency integrated circuits (RF ICs); electronic design automation; wireless communication circuits and systems; embedded processor architectures; embedded software; distributed sensor and actuator networks; robotics; and embedded security. May be repeated for credit with topic change. S/U grading.


212A. Digital Speech Processing. (4) (Formerly numbered Electrical Engineering 212A.) Lecture, three hours; discussion, one hour; outside study, seven hours. Requisite: course 113. Theory and applications of digital processing of speech signals. Psychological models of human speech production and perception mechanisms, speech analysis/synthesis, techniques include linear prediction, filter-bank models, and homomorphic filtering. Applications to speech synthesis, automatic recognition, and hearing aids. Letter grading.

212B. Advanced Topics in Speech Processing. (4) (Formerly numbered Electrical Engineering 212B.) Lecture, three hours; discussion, one hour; computer assignments, two hours; outside study, six hours.
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215A. Analog Integrated Circuit Design. (Formerly numbered Electrical Engineering 215A.) Lecture, four hours; discussion, one hour; outside study, seven hours. Requisite: course 115B. Analysis and design of analog integrated circuits. MOS and bipolar device structures and fabrication, circuit analysis and design, mixing techniques, noise, feedback, operational amplifiers, offset and distortion, sampling devices and discrete-time circuits, bandgap references. Letter grading.

215B. Advanced Digital Integrated Circuits. (Formerly numbered Electrical Engineering 215B.) Lecture, four hours; discussion, one hour; outside study, seven hours. Requisites: courses 115C, M216A. Analysis and comparison of modern logic families, VLSI memories (SRAM, DRAM, and ROMs). Letter grading.

215C. Analysis and Design of RF Circuits and Systems. (Formerly numbered Electrical Engineering 215C.) Lecture, four hours; discussion, one hour; outside study, seven hours. Requisite: course 215A. Principles of RF circuit and system design, with emphasis on monolithic implementation in VLSI technologies. Basic concepts, background, transceiver architectures, low-noise amplifiers and mixers, oscillators, frequency synthesizers, power amplifiers. Letter grading.

215D. Analog Microsystem Design. (Formerly numbered Electrical Engineering 215D.) Lecture, four hours; discussion, one hour; outside study, seven hours. Requisite: course 215A. Analysis and design of data conversion interfaces and filters. Sampling circuits and filter transformation techniques, A/D converter architectures, building blocks, precision techniques, discrete- and continuous-time filters. Letter grading.

215E. Signaling and Synchronization. (Formerly numbered Electrical Engineering 215E.) Lecture, four hours; discussion, one hour; outside study, seven hours. Requisites: courses 215A, M216A. Analysis and design of circuits for synchronization, communication for VLSI systems. Use of both digital and analog design techniques to improve rate data of electronics between functional blocks, chips, and systems. Advanced clocking methodologies and design for high-speed computing, and high-performance wire-line transmitters, receivers, and timing recovery circuits. Letter grading.

M216A. Design of VLSI Circuits and Systems. (Formerly numbered Electrical Engineering M216A.) Same as Computer Science M258A. Lecture, four hours; discussion, two hours; laboratory, four hours; outside study, two hours. Requisites: courses M16 or Computer Science M51A, and 115A. Recommended: course 115C, LSI/VLSI design and application in computer systems. Fundamental design techniques that can be used to implement complex integrated systems on chips. Letter grading.

216B. VLSI Architectures and VLSI Design. (Formerly numbered Electrical Engineering 216B.) Lecture, four hours; outside study, eight hours. Advanced concepts in VLSI signal processing, with emphasis on architecture design and optimization within block-based description that can be mapped to hardware. Fundamental concepts from digital signal processing (DSP) theory, architecture, and circuit design applied to complete DSP algorithms in emerging applications for personal communications and healthcare. Letter grading.

M216C. LSI in Computer System Design. (Formerly numbered Electrical Engineering M216C.) Same as Computer Science M258C. Lecture, four hours; laboratory, four hours; outside study, four hours. Requisite: course M216A. LSI/VLSI design and application in computer systems. In-depth studies of VLSI architectures and VLSI design tools. Letter grading.

M217. Biomedical Imaging. (Formerly numbered Electrical Engineering M217.) (Same as Bioengineering M217.) Lecture, three hours; discussion, one hour; outside study, eight hours. Requisite: course 114 or 211A. Optical imaging modalities in biomedicine. Other methodologies in topic, body-centered briefly for comparison purposes. Letter grading.

218. Network Economics and Game Theory. (Formerly numbered Electrical Engineering 218.) Lecture, four hours; discussion, one hour; outside study, seven hours. Discussion of how different competitive and noncooperative games among agents can be constructed to model, analyze, and optimize, and shape emerging electronic and networked systems in different networks and system settings. How strategic agents can successfully compete with each other for limited and time-varying resources by optimizing their decision processes locally with other agents. To determine their optimal actions in these distributed, informationally decentralized envi- ronments, agents need to learn and model directly or implicitly other agents’ responses to their actions. Discus- sion of existing multiagent learning techniques and learning in games, including adjustment processes for learning equilibria, fictitious play, regret-learning, and more. Letter grading.

219. Large-Scale Data Mining: Models and Algo- rithms. (Formerly numbered Electrical Engineering 219.) Lecture, four hours; discussion, one hour; outside study, seven hours. Introduction of variety of scalable data modeling and machine learning from different disciplines. Topics include supervised and unsupervised data modeling tools from machine learning, such as support vector machines, different regression engines, different types of regularization and kernel techniques, deep learning, and Bayesian graphical models. Emphasis on techniques to eval- uate relative performance of different methods and their applicability. Includes computer projects that ex- plore entire data analysis and modeling cycle: col- lecting and cleaning large-scale data, deriving predic- tive and causal models, and evaluating performance of different models. Letter grading.

221A. Physics of Semiconductor Devices I. (Formerly numbered Electrical Engineering 221A.) Lecture, four hours; discussion, one hour; outside study, seven hours. Physical principles and design considerations of different kinds of devices. Letter grading.

221B. Physics of Semiconductor Devices II. (Formerly numbered Electrical Engineering 221B.) Lecture, four hours; outside study, eight hours. Principles and design considerations of devices and charge-coupled devices. Letter grading.

221C. Microwave Semiconductor Devices. (Formerly numbered Electrical Engineering 221C.) Lecture, four hours; discussion, one hour; outside study, seven hours. Microwave modeling of semiconductor devices: Schottky barrier mixer diodes, IMPATT diodes, transferred electron de- vices, tunnel diodes, microwave transistors. Letter grading.

222. Integrated Circuits Fabrication Processes. (Formerly numbered Electrical Engineering 222.) Lecture, four hours; discussion, one hour; outside study, seven hours. Requisite: course 2. Principles of inte- grated circuit technology and the fundamental limitations of integrated circuits design. Topics include bulk crystal and epitaxial growth, thermal oxidation, diffusion, ion-implantation, chemical vapor deposition, dry etching, lithography, and metatization. Introduction of advanced process simulation tools. Letter grading.

223. Solid-State Electronics I. (Formerly numbered Electrical Engineering 223.) Lecture, four hours; discussion, one hour; outside study, seven hours. Requisites: course 207. Energy band theory, electronic band structure of various elemen- tary, compound, and semiconductor devices, defects in semiconductors. Recombination mechanisms, trans- port properties. Letter grading.

224. Solid-State Electronics II. (Formerly numbered Electrical Engineering 224.) Lecture, four hours; outside study, eight hours. Requisite: course 223. Techniques to solve Boltzmann transport equation, various scattering mechanisms in semiconductors, high field transport properties of semiconductors, Monte Carlo method in transport. Optical properties. Letter grading.

225. Physics of Semiconductor Nanostructures and Devices. (Formerly numbered Electrical Engineering 225.) Lecture, four hours; discussion, one hour; outside study, eight hours. Requisite: course 223. Theoretical methods for circulating electronics and optical properties of semi- conductor structures. Quantum size effects and low- dimensional phenomena. Arrays of semiconductor nano-scale devices, including negative resis- tance diodes, transistors, and detectors. Letter grading.

229. Seminar: Advanced Topics in Solid-State Elec- tronics. (Formerly numbered Electrical Engineering 229.) Seminar, four hours; outside study, eight hours. Requisites: courses 223, 224. Current research areas, such as radiation effects in sensor devices, diffusion in semiconductors, optical and microwave semiconductor devices, nonlinear optics, and electron and optical emission. Letter grading.

230B. Advanced Digital Communication Systems. (Formerly numbered Electrical Engineering M230B.) Lecture, two hours; outside study, six hours. Preparation: successful completion of PhD major field exam- ination. Seminar on current research topics in solid- state and quantum electronics (Section 1) or in elec- tronic circuit theory and applications (Section 2). Stu- dents report on tutorial topic and on research topic in their dissertation area. May be repeated for credit. S/U grading.

230A. Detection and Estimation in Communication. (Formerly numbered Electrical Engineering 230A.) Lecture, four hours; discussion, one hour; outside study, seven hours. Requisites: course 131A. Applications of estimation and detection concepts in commu- nication and signal processing; random signal and noise characterizations by analysis and simulations; mean square (MS) and maximum likelihood (ML) esti- mations and detection algorithms. Bayes, Neyman-Pearson (NP) criteria; signal-to-noise ratio (SNR) and error probability evaluations. Introduc- tion to Monte Carlo simulations. Letter grading.


231A. Information Theory: Channel and Source Coding. (4) (Formerly numbered Electrical Engineering 231A.) Lecture, four hours; discussion, one hour; outside study, seven hours. Requisite: course 131A. Fundamentals information compression, transmission, processing, and learning. Topics include limits and algorithms for lossless data compression, connections to model estimation and learning, channel capacity, rate versus distortion in lossy compression, and basic information theory for networks. Letter grading.


232A. Stochastic Modeling with Applications to Telecommunication Systems. (4) (Formerly numbered Electrical Engineering 232A.) Lecture, four hours; discussion, one hour; outside study, eight hours. Requisite: course 131A. Fundamentals of error control codes and decoding algorithms. Topics include block codes, convolutional codes, trellis codes, and turbo codes. Letter grading.


232E. Large-Scale Social and Complex Networks: Design and Algorithms. (4) (Formerly numbered Electrical Engineering 232E.) Lecture, four hours; discussion, one hour; outside study, seven hours. Modelling and design of large-scale complex networks, including social networks, peer-to-peer file-sharing networks, and biological networks. Modeling of characteristic topological features of complex networks, such as power laws and percolation threshold. Mining topology to design algorithms for various applications, such as e-mail spam detection, friendship recommendations, viral popularity, and epidemics. Introduction to network algorithms, computational complexity, and nondeterministic, polynomial-time completeness. Letter grading.

233. Wireless Communications System Design, Modeling, and Analysis. (4) Lecture, four hours; discussion, one hour; outside study, seven hours. Requisite: course 113. Key concepts, principles, and algorithms of wireless communications and learning how to make decisions under uncertainty in broad context. Introduction to information theory, optimal stopping, reinforcement learning, structural results for online learning, multiarmed bandits learning, multiagent learning, multitextile deep learning. Letter grading.

239A. Special Topics in Signals and Systems. (4) (Formerly numbered Electrical Engineering 239A.) Lecture, four hours; discussion, one hour; outside study, seven hours. Special topics in one or more aspects of signals and systems, such as communications, control, image processing, information theory, multimedia, computer networking, optimization, speech processing, telecommunications, and VLSI signal processing. May be repeated for credit with topic change. S/U or letter grading.

239BS. Seminar: Signals and Systems. (2 to 4) (Formerly numbered Electrical Engineering 239BS.) Seminar, two to four hours; outside study, four to eight hours. Research developments in new topics in one or more aspects of signals and systems, such as communications, control, image processing, information theory, multimedia, computer networking, optimization, speech processing, telecommunications, and VLSI signal processing. May be repeated for credit with topic change. S/U grading.

M240A. Linear Dynamics. (4) (Formerly numbered Electrical Engineering M240A.) (Same as Chemical Engineering M280A and Mechanical and Aerospace Engineering M270A.) Lecture, four hours; outside study, eight hours. Requisite: course 141 or Mechanical and Aerospace Engineering 171A. State-space description of linear time-invariant (LTI) and time-varying (LTV) systems in continuous and discrete time. Linear algebra concepts such as eigenvalues and eigenvectors, singular values, Cayley-Hamilton theorem, and Jordan forms. Fundamentals of stability, controllability, observability, realizability, and minimality. Stabilization design via state feedback and observer separation. Applications to control systems with transfer function techniques. Letter grading.

M240C. Optimal Control. (4) (Formerly numbered Electrical Engineering M240C.) (Same as Chemical Engineering M280C and Mechanical and Aerospace Engineering M270C.) Lecture, four hours; outside study, eight hours. Requisite: course 240B. Applications of variational methods, Pontryagin maximum principle, Hamilton/Jacobi/Bellman equation (dynamic programming) to optimal control of dynamic systems modeled by nonlinear ordinary differential equations. Letter grading.

241A. Stochastic Processes. (4) (Formerly numbered Electrical Engineering 241A.) Lecture, four hours; discussion, one hour; outside study, seven hours. Requisite: course 131A. Review of basic probability, axiomatic development, expectation, convergence of random processes: stationarity, power spectral density, response of linear systems to random inputs. Basics of estimation. Special random processes, Markov processes, martingales, etc. Letter grading.

M242A. Nonlinear Dynamic Systems. (4) (Formerly numbered Electrical Engineering 242A.) Lecture, four hours; outside study, eight hours. Requisite: course M240A or Mechanical and Aerospace Engineering M270A. State-space techniques for studying solutions of time-invariant and time-varying nonlinear dynamic systems with emphasis on stability (Lyapunov’s direct method, including converse theorems), invariance, center manifold theorem, input-to-state stability and small-gain theorem. Letter grading.
246. Foundations of Statistical Machine Learning. (4) Lecture, four hours; discussion, one hour; outside study, seven hours. Enforced requisites: course 131A, Mathematics 33A. Topics include fundamental properties of electrical activity in neurons; technology for measuring neural activity; spiking statistics and Poisson processes; generative models and classification; regression and Kalman filtering; principal components analysis, factor analysis, and expectation maximization. Concurrently scheduled with other courses. Letter grading.

C247. Neural Networks and Deep Learning. (4) Lecture, four hours; discussion, two hours; outside study, six hours. Requisites: courses 131A, 131B, 201A, 205A, or 205B, and 213A or 213B, or 204A, or 204B, or 204A and 204B, or 205A and 205B, or 213A and 213B, or 204A and 204B, or 205A and 205B, or 213A and 213B, or 204A and 204B, or 205A and 205B, or 213A and 213B, or 204A and 204B, or 205A and 205B, or 213A and 213B, or 204A and 204B, or 205A and 205B, or 213A and 213B, or 204A and 204B, or 205A and 205B, or 213A and 213B, or 204A and 204B, or 205A and 205B, or 213A and 213B, or 204A and 204B, or 205A and 205B, or 213A and 213B, or 204A and 204B, or 205A and 205B, or 213A and 213B, or 204A and 204B, or 205A and 205B. Introduction to representation learning with topics including unsupervised learning, clustering, (non-linear) dimensionality reduction, autoencoders; generative distribution estimation including Gaussian mixtures, expectation maximization, non-parametric distribution estimation, property testing and neural networks focused on distributional data (variations of autoencoders [VAEs]; generative adversarial networks [GANs]). Discussion of reinforcement learning. Letter grading.

M248S. Seminar: Systems, Dynamics, and Control Topics. (2) Formerly numbered Electrical Engineering M248S. (Same as Chemical Engineering M297 and Mechanical and Aerospace Engineering M299A.) Seminar, two hours; discussion, one hour; outside study, six hours. Enrollment limited to graduate engineering students. Presentations of research topics by leading academic researchers from fields of systems, dynamics, and control. Students who work on these fields present their papers and results. S/U grading.

M250B. Microelectromechanical Systems (MEMS) Fabrication. (4) Formerly numbered Electrical Engineering M250B. (Same as Bioengineering M250B and Mechanical and Aerospace Engineering M250B.) Lecture, three hours; discussion, one hour; outside study, eight hours. Enforced requisite: course M153. Advanced discussion of micromachining processes used to construct MEMS. Coverage of many lithographic, deposition, etching, and polishing processes, as well as their combination in process integration. Materials issues such as choice of materials, mechanical properties, and residual/intrinsic stress. Letter grading.

M252. Microelectromechanical Systems (MEMS) Design Physics and Design. (4) Formerly numbered Electrical Engineering M252. (Same as Bioengineering M252 and Mechanical and Aerospace Engineering M252.) Lecture, four hours; discussion, one hour; outside study, seven hours. Introduction to MEMS design. Design methods, design rules, sensing and actuation mechanisms, microsensors, and microactuators. Designing MEMS to be produced with both foundry and nonfoundry processes. Computer-aided design for MEMS. Design project required. Letter grading.

M255. Neuroengineering. (4) Formerly numbered Electrical Engineering M255. (Same as Bioengineering M260 and Neuroscience M206.) Lecture, four hours; laboratory, three hours; outside study, five hours. Requisites: Mathematics 32A, Physics 1B or 1C, Introduction to principles and technologies of bio-electricity and neural signal recording, processing, and stimulation. Topics include bioelectricity, electrophysiology (action potentials, local field potentials, EEG, ECoG), intracellular and extracellular recording, neural interface technology, neural signal processing (neural signal frequency bands, filtering, spike detection, spike sorting, stimulus artifact removal), brain-computer interfaces, and brain–brain stimulation, and prosthetics. Letter grading.


M257. Nanoscience and Technology. (4) Formerly numbered Electrical Engineering M257. (Same as Mechanical and Aerospace Engineering M257.) Lecture, four hours; outside study, eight hours. Introduction to fundamentals of nanoscale science and technology. Basic physical principles, quantum mechanics, chemical bonding and nanostructures, top-down and bottom-up approaches to nanotechnology, nanomechanization; nanomaterials, nanoelectronics, and nobiotechnology. Introduction to new knowledge and technologies in nanoscale systems to understand scientific principles of nanotechnology and inspire students to create new ideas in multidisciplinary nanoscale areas. Letter grading.

M260A. Advanced Engineering Electrodynamics. (4) Formerly numbered Electrical Engineering 260A.) Lecture, four hours; discussion, one hour; outside study, seven hours. Requisites: courses 101B, 162A. Advanced treatment of concepts in electrodynamics and their applications to modern engineering problems. Vector calculus, vector fields and coordinate system. Solutions of wave equation and special functions. Refraction, transmission, and polarization. Vector potential, duality, reciprocity, and equivalence theorems. Scattering from cylinder, half-plane, wedge, and sphere, including radar cross-section characterization. Green’s functions in electromagnetics and dyadic calculus. Letter grading.


M261. Microwave and Millimeter Wave Circuits. (4) Formerly numbered Electrical Engineering 261.) Lecture, four hours; discussion, one hour; outside study, seven hours. Requisite: course 163A. Rectangular and circular waveguides, microstrip, stripline, and dielectric waveguides, with applications in microwave and millimeter wave integrated circuits. Substrate materials, surface wave phenomena. Analytical methods for discontinuity effects. Design of passive microwave and millimeter wave circuits. Letter grading.


266. Computational Methods for Electromagnetics. (4) Formerly numbered Electrical Engineering 266.) Lecture, four hours; discussion, one hour; outside study, seven hours. Requisites: courses 162A, 163A. Computational techniques for partial differential and integral equations: finite difference, finite element. Method of moments. Applications include transmiss lines, resonators, integrated circuits, solid-state devices, microelectromechanical scattering, and antennas. Letter grading.


274. Optical Communication and Sensing Design. (4) Formerly numbered Electrical Engineering 274.) Lecture, three hours; outside study, nine hours. Requisites: courses 170A and 170B or equivalent. Top-down introduction to physical layer design in fiber optic communication systems, including Telecom, Datacom, and CATV. Fundamentals of digital and analog optical communication systems, fiber transmission characteristics, and optical modulation techniques, including direct and modulated lightwave and computer-aided design. Architectural-level design of fiber optic transceiver circuits, including preamplifier, quantizer, clock and data recovery, laser driver, and pulse distortion circuits. Letter grading.

279AS. Special Topics in Physical and Wave Electronics. (4) Formerly numbered Electrical Engineering 279AS.) Lecture, four hours; discussion, one hour; outside study, four hours. Extended topics of interest to current developments and the latest advances in specific areas of physical and wave electronics, such as electromagnetics, microwave and millimeter wave circuits, photonics and optoelectronics, plasma electronics, microelectromechanical systems, solid state, and nanotechnology. May be repeated for credit with topic change. S/U or letter grading.

279BS. Seminar: Physical and Wave Electronics. (2 to 4) Formerly numbered Electrical Engineering 279BS.) Seminar, two to four hours; outside study, four to eight hours. Seminars and discussions on cur-
ents, engineers outside their specific fields, and non-
teaching, clear communication, and multimodal
writing skills by writing and revising confer-
tional engineering PhD students who have completed
and revising technical writing. Emphasis may be repeated for credit with topic change.
S/U grading.
279CS. Clean Green IGERT Brown-Bag Seminar. (1) (Formerly numbered Electrical Engineering 279CS.) Seminar, one hour. Required of students in Clean Energy for Green Industry (IGERT) Research. Literature seminar presented by graduate students and experts from around country who conduct research in energy harvest, storage, and conservation. S/U grading.
CM292B. Technology, and Public Policy. (4) (Formerly numbered Electrical Engineering CM292B.) Lecture, three hours. Recent and continuing advances in science and technology are raising profoundly important public policy issues. Consideration of selection of critical policy is-
several topics: courses M185, and 285A or Physics 222A. Inter-
ations to heating by neutral beams, RF, and fusion re-
Bases,y and damping, parametric instabilities, anomalous resistivity, shock waves, plasmas, laser heating. Emphasis on experimen-
tal considerations and techniques. Letter grading.
M287. Fusion Plasma Physics and Analysis. (4) (Formerly numbered Electrical Engineering M287.) Lecture, four hours; outside study, eight hours. Requi-
sites: courses M185, and 285A or Physics 222A. Inter-
action of internal-magnetic field and plasma parameters in inhomogeneous and bounded plasmas, nonlinear wave coupling and damping, parametric instabilities, anomalous resistivity, shock waves, laser heating. Emphasis on experiment-
tal considerations and techniques. Letter grading.
M293. Intellectual Property for Technology Entre-
preneurs and Managers. (2) (Formerly numbered Electrical Engineering M293.) (Same as Management M247.) Seminar, two hours; outside study, four hours. Introduction to intellectual property (IP) in context of technology products and markets. Topics include best practices to put in place before product development starts, how to develop high-value patent portfolios, patent licensing, offensive and defensive IP litigation considerations, trade secrets, opportunities and pit-
tfalls of open source software, trademarks, managing copyright in increasingly complex content ecosys-
tems, and adopting IP strategies to globalized market-
ices. Case studies examined by complex IP questions facing technology companies today. S/U or letter grading.
295. Academic Technical Writing for Electrical En-
gineers. (3) (Formerly numbered Electrical Engi-
neering 295.) Seminar, three hours. Designed for elec-
trical engineering PhD students who have completed preliminary examinations. Students read models of good writing and learn to make rhetorical observations and writing decisions, improve their academic and technical writing skills by writing and revising confer-
ence and journal papers, and practice writing for and
speaking to various audiences, including potential stu-
dents, engineers outside their specific fields, and non-
enGINEERING SCHOOLWIDE PROGRAMS
Henry Samueli School of Engineering and Applied Science
4624 Boelter Hall
Box 951601
Los Angeles, CA 90095-1601
Engineering Schoolwide Programs 310-825-9580
Graduate Study
Official, specific degree requirements are detailed in
program requirements for UCLA graduate
degrees, available at the Graduate Division website.
In many cases, more detailed guidelines may be
outlined in announcements, other publications, and
websites of the schools, departments, and programs.
Graduate Degrees
The Henry Samueli School of Engineering and
Applied Science offers the Master of Engineering
(MEng) degree (through the Engineering Execu-
tive Program), Master of Science (MSc) online de-
Emergency Medicine / 387
EMERGENCY MEDICINE
David Geffen School of Medicine
924 Westwood Boulevard, Suite 300
Box 951777
Los Angeles, CA 90095-1777
Emergency Medicine
310-794-0578
Gregory W. Hendey, MD, Chair
Scope and Objectives
The Department of Emergency Medicine focuses on the teaching and management of diagnosis and treatment of unforeseen illness or injury. The prac-
tice of emergency medicine includes the initial eval-
uation, diagnosis, treatment, coordination of care
among multiple providers, and disposition of any
patient requiring expeditious medical, surgical, or psychiatric care. A three- or four-week subintern-
sipation is offered to fourth-year medical stu-
dents. The length of training in the residency pro-
gram is four years.
For details on the Department of Emergency Medi-
cine and courses offered, see the department
website.
gree in Engineering, and Engineer (Engr) degree as undergraduate degrees. The following area-specific online degrees have also been established: MS in Engineering—Aerospace, MS in Engineering—Computer Networking, MS in Engineering—Electrical, MS in Engineering—Electronic Materials, MS in Engineering—Integrated Circuits, MS in Engineering—Manufacturing and Design, MS in Engineering—Materials Science, MS in Engineering—Mechanical, MS in Engineering—Signal Processing and Communication, and MS in Engineering—Structural Materials.

A certificate of specialization is available in all areas of specialization, except computer science.

### Engineering

#### Lower-Division Courses

2. Technology and Society. (2) Lecture, two hours; discussion, one hour; outside study, three to four hours. Introduction of broader societal opportunities, impacts, and challenges associated with technology. Drawing from historical and contemporary examples, consider- ation of the role of technology in society, and legislation and legal and ethical implications spurred by rapid technological change. Development of perspectives to take broad, contextualized view of role of technology in society. Letter grading.

10. Introduction to Complex Systems Science. (5) Lecture, four hours; outside study, eight hours. How macroscopic patterns emerge dynamically from local interactions of large number of interdependent (often heterogeneous) entities without global design or central control. Such emergent order, whose explanation cannot be reduced to explanations at level of indi- vidual entities, is ubiquitous in biology and human so- cial systems. Students examine how certain physical pro- cesses such as earthquakes and some chemical reac- tions. Complexity also deals with how such systems undergo sudden changes, including catastrophic breakdowns, in absence of external force or central in- fluence. Key aspect of biological and social collectives is their nature as complex adaptive systems, where in- dividuals and groups adjust their behavior to external conditions. In biological and social systems, com- plexity goes beyond traditional mathematics and statistics in its use of multagent computational models that better capture these complex, adaptive, and self-organized properties. Letter grading.

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating the role of technology in society. Letter grading.

20. First-Year Engineering Transition Bridge. (2) Seminar, three hours. Designed primarily for new students to help them understand UCLA, its culture, structure, and academic policies and to facilitate their transition from high school to college. Examination of research on first-year experience of college students, studying at UCLA versus high school, policies and procedures, and campus resources. Advanced preparation and early exposure to course work in core disciplines such as chemistry, and computer science curricula. Collabora- tive learning techniques and community-building ac- tivities are integral processes to both day and evening programs. Intensive classroom instruction and collab- orative learning workshops. Offered in summer only. P/NP grading.

21. Computing Immersion Summer Experience. (2) Seminar, one hour; primarily for new students to help them understand UCLA, its culture, structure, and academic policies and to facilitate their transition from high school to college. Examination of research on first-year experience of college students, studying at UCLA versus high school, policies and procedures, and campus resources. Designed to im- prove incoming computing students in foundation concepts and theories of computer science, with focus on fundamental computer programming princi-
comparing structure, properties, and fabrication of technologically important nanoscale systems. New phenomena that emerge in very small systems (typically with feature sizes below few hundred nanometers) explained using basic concepts from physics and chemistry. Chemical, optical, and electronic properties, electron transport, structural stability, self-assembled, templated assembly and applications of various nanostructures such as quantum dots, nanoparticlles, quantum wells and multilayers, carbon nanotubes. Letter grading.

102. Synthetic Biosystems and Nanosystems Design. (4) Lecture, four hours; outside study, eight hours. Introduction to current progress in engineering to integrate biosciences and nanosciences into synthetic systems, where biological components are reengi neered and rewired to perform desired functions in both intracellular and cell-free environments. Discussion of basic technologies and systems analysis that deal with dynamic behavior, noise, and uncertainties. Design projects in which students are challenged to design novel biosystems and nanosystems for nontechnical task required. Letter grading.

M103. Environmental Nanotechnology: Implications and Applications. (4) (Same as Civil Engineering 166.) Lecture, four hours; discussion, one hour; outside study, six hours. Recommended requisite: course M101. Introduction to potential implications of nanotechnology to environmental systems as well as its relationship to environmental protection. Technical contents include three multidisciplinary areas: (1) physical, chemical, and biological properties of nanomaterials, (2) transport, retention, and fate of nanomaterials in natural environmental systems, and (3) use of nanotechnology for energy and water production, plus environmental protection, monitoring, and remediation. Letter grading.

110. Introduction to Technology Management and Economics for Engineers. (4) Lecture, four hours; discussion, one hour; outside study, seven hours. Fundamental principles of micro-level (individual, firm, and industry) and macro-level (government, international) economics as they relate to technology management. How individuals, firms, and governments impact successful commercialization of high tech products and services. Letter grading.

111. Introduction to Finance and Marketing for Engineers. (4) Lecture, four hours; discussion, one hour; outside study, seven hours. Critical components of financial analysis, research, and practice as they impact management of technology commercialization. Internal (within firm) and external (in marketplace) marketing and financing of high-technology innovation. Concepts such as business models, cost micro and macro costs, discounted cash flow, internal rate of return, return on assets, return on equity, return on investment, interest rates, cost of capital, and product, price, positioning, and promotion. Use of market research, segmentation, and forecasting in management of technological innovation. Letter grading.

112. Laboratory to Market, Entrepreneurship for Engineers. (4) Lecture, four hours; discussion, one hour; outside study, seven hours. Critical components of entrepreneurship, finance, marketing, human resources, and accountability disciplines as they impact management of technology commercialization. Topics include: strategy, management, building, market forecasting, and entrepreneurial finance. Students work in small teams studying technology management plans to bring new technologies to market. Preparation from a set of available technology concepts, many generated at UCLA, that are in need of plans for movement from laboratory to market. Letter grading.

113. Product Strategy. (4) Lecture, four hours; discussion, one hour; outside study, seven hours. Designed for juniors/seniors. Introduction to current management concept of product development. Topics include product strategy, product platform, and product mix; pricing, demand management, vectors of differentiation, product pricing, first-to-market versus fast-follower; growth strategy, growth through acquisition, and new ventures; product portfolio management. Case studies, class projects, group discussions, and guest lectures by speakers from industry. Letter grading.

116. Statistics for Management Decisions. (4) Lecture, four hours; outside study, eight hours. Management as well as engineering decisions nearly always take place in a climate of uncertainty and uncer tainty. Probability provides mathematical framework for understanding how to make rational decisions when outcomes of actions are uncertain. Application of probability to sample data, encompassing estimation, hypothesis testing, and regression analysis. Discussion of specific analytical tools relevant to later courses in program. Development of understanding of statistical analysis. Letter grading.

120. Entrepreneurship for Scientists and Engineers. (2) Seminar, two hours; outside study, four hours. Letter grading.

160. Entrepreneurship and Venture Initiation for Engineers. (4) Lecture, four hours; discussion, one hour; outside study, seven hours. Not open to students with credit for course 162M. Focus on process and methodology for starting new venture. Introduction to entrepreneurship from perspective of entrepreneur. Examination of core concepts and frameworks on start up, anchoring, fundraising, corporate structures, and financial accounting for entrepreneurial endeavors. Focus on fundamentals of building business, and also emphasis on inherent experimental nature and creativity of process for success and need for constant learning on this subject. Letter grading.

163. Entrepreneurship and New Product Development for Engineers. (4) Lecture, four hours; discussion, one hour; outside study, seven hours. Limited to juniors/seniors. Not open to students with credit for Management 163. Designed to deepen understanding of innovations and innovative processes related to creating new products. Inquiry into why, what, and how of making new products. New products are essential to any business (start-up or well-established) and thriving economies. Making successful new products requires various types of innovation. Availability of capital, technology and skilled resources have accelerated pace of these innovations. Letter grading.

180. Engineering of Complex Systems. (4) Lecture, four hours; discussion, two hours; outside study, six hours. Designed for engineers, computer scientists, and technology majors. Holistic view of engineering discipline, covering life cycle of engineering, processes, and techniques used in industry today. Multidisciplinary systems engineering perspective in which aspects of electrical, mechanical, and software engineering are incorporated. Three specific case studies in communications, sensor, and processing systems included to help students understand these concepts. Special attention paid to link material covered to engineering curriculum offered by UCLA to help students integrate and enhance their understanding of knowledge already acquired. Motivation of students to continue their learning and reinforce lifelong learning habits. Letter grading.

181EW. Ethics and Impact of Technology on Society. (4) Lecture, four hours; discussion, three hours; outside study, four hours. Not open for credit to students with credit for course 182EW, 183EW, or 185EW. Focuses on changing nature of technology and complex ethical issues that arise from technology such as biotechnology, information technology, nanotechnology, and energy technology. Discussion of nature of these issues; their ethical, legal, and social ramifications; and what society values in relation to these issues. Exploration of philosophy, religion, and natural and social sciences in relation to these issues. Emphasis on research and writing within engineering environments. Letter grading.

182EW. Technology and Society. (4) Lecture, four hours; discussion, three hours; outside study, five hours. Requisite: English Composition 3, and one core course in electrical and computer engineering, computer engineering, computer science, or mathematics. Focuses on new engineering and emerging technology products and services. Historical examination of ethical and legal frameworks generally and in relation to technology. Exploration of series of specific contemporary technology-related topics to examine their broader ramifications. Topics include driverless cars, algorithms and artificial intelligence, global supply chain for engineering products, cryptocurrencies and blockchain, net neutrality, and impact of technology on employment. Offers students tools enabling them to think more proactively and holisti cally about ethical and societal dimensions of their work as technology creators. Satisfies engineering writing requirement. Letter grading.

183EW. Engineering and Society. (4) Lecture, four hours; discussion, three hours; outside study, five hours. Requisite: English Composition 3 or 3E. Not open for credit to students with credit for course 185EW. Limited to sophomore/junior engineering students. Professional and ethical considerations in practice of engineering. Impact of technology on society and professional and ethical values. Contemporary environmental, biologic al, legal, and other issues created by new technologies. Emphasis on research and writing within engineering environments. Writing and revision of about 20 pages total, including two individual technical essays and one team-written research report. Readings address technical issues and writing form. Satisfies engineering writing requirement. Letter grading.

185EW. Art of Engineering Endowees. (4) Lecture, four hours; discussion, three hours; outside study, five hours. Requisite: English Composition 3 or 3E. Not open for credit to students with credit for course 185EW. Designed for junior/senior engineering students. Nontechnical skills and experiences necessary for engineering career success. Importance of group dynamics in engineering practice. Teamwork and cross-functional group skills. Organization and control of multidisciplinary complex engineering projects. Forms of leadership and qualities and characteristics of effective leaders. How engineering, computer science, and technology relate to major ethical and social issues. Societal demands on practice of engineering. Emphasis on research and writing in engineering environments. Satisfies engineering writing requirement. Letter grading.

188. Special Courses in Engineering. (4) Seminar, four hours; outside study, eight hours. Special topics in engineering for undergraduate students taught on experimental or temporary basis, such as those taught by resident and visiting faculty members. May be repeated for credit with topic or instructor change. Letter grading.

191. Seminar Series in Engineering Research. (1) Seminar, two hours. Not open for credit to students with credit for 115-117-119-121 engineering research at UCLA. Each seminar is given by UCLA graduate student researcher or post-doctoral scholar. Designed to be accessible to undergraduate students majoring in any science, technology, engineering, and mathematics (STEM) major. Offers undergraduate students window into excitement of graduate student research experience. Also offers opportunity for graduate students to learn about what their peers are doing. P/NP grading.

192. Fundamentals of Engineering Mentorship. (2) Seminar, two hours; outside study, four hours. Principl es and practical techniques for instruction of hands-on engineering design and experiment courses. Strategies for outreach programs. Curriculum planning, project prepa ration, classroom management, team collaboration, diversity awareness, fostering of group cohesion, and
Graduate Courses

200. Program Management Principles for Engi-
neers (4) Lecture, four hours; outside study, eight hours. Requisite: course 201. Designed for graduate students. Practical review of necessary processes and procedures to successfully manage technology programs. Requirements include organizational structure, implementation, and performance tracking methods to provide program manager with necessary information to support decision-making processes. Development of high-quality products on time and within budget. Letter grading.

201. Systems Engineering (4) Lecture, four hours; outside study, eight hours. Designed for graduate students. Practical review of major elements of system engineering, including processes of key elements, system requirements and flow down, product development cycle, functional analysis, system synthesis, organizational structure, implementation, and performance tracking methods to provide program manager with necessary information to support decision-making processes. Development of high-quality products on time and within budget. Letter grading.

202. Reliability, Maintainability, and Supportability (4) Lecture, four hours; outside study, eight hours. Introduction to strategic and operating issues and decisions involved in managing enterprises. Operational processes use organization’s resources to transform inputs into goods and utilizes them to provide service, or does both. Conceptual framework and set of analytic tools to better understand why processes behave as they do. Given this understanding, students are able to identify themselves in organization’s defining strategic decisions, those related to knowing organizational unit’s performance. Letter grading.

211. Financial Management (4) Lecture, four hours; outside study, eight hours. Introduction to concepts reflecting material generally covered in certain MBA core and elective courses. Integration of both theory—reflecting material generally covered in certain MBA core and elective courses. Examination of professionalization of systems architecture. Letter grading.

212. Intellectual Property Law and Strategy (4) Lecture, three hours; outside study, six hours. Requisite: course 210. Designed for graduate students with BS degrees in engineering or science and one to two years experience in selected domain. Art and science of architecting. Introduction to architecting methodology—paradigm and tools. Principles of architecting through analysis of architectural designs of major existing systems. Discussion of selected elements of architectural practices, such as object-oriented modeling, design and configuration, system architectures, and organizational structures. Examination of professionalization of systems architecture. Letter grading.

213. Data and Business Analytics (4) Lecture, four hours; outside study, eight hours. Course 210. Designed for graduate students with BS degrees in engineering or science and one to two years experience in selected domain. Art and science of architecting. Introduction to architecting methodology—paradigm and tools. Principles of architecting through analysis of architectural designs of major existing systems. Discussion of selected elements of architectural practices, such as object-oriented modeling, design and configuration, system architectures, and organizational structures. Examination of professionalization of systems architecture. Letter grading.

214. Management Communication (4) Lecture, four hours. Exploration of knowledge, attributes, skills, and strategies necessary to succeed communicatively in workplace, with focus on business presentation skills, visual and verbal persuasion skills, and interpersonal communication skills. Letter grading.

215. Entrepreneurship for Engineers (4) Lecture, four hours; outside study, eight hours. Limited to graduate engineering students. Topics in starting and developing high-technology enterprises for students who wish to complement their technical education with introduction to entrepreneurship. Letter grading.

217. Capstone Project (4) Activity, ten hours. Prepa-
ration: completion of minimum of four 200-level courses in online MS program. Project course that satisfies UCLA full comprehensive examination requirement. Research and data analysis, project required. May be repeated for credit. Limited to juniors/seniors. In Progress (471B) and S/U or letter (471C) grading.

218. Teaching Apprentice Practicum (1 to 4) Seminar, to be arranged. Preparation: apprentice personnel employment as teaching assistant, associate, or fellow. Teaching apprenticeship under active guidance and supervision of regular faculty member responsible for curriculum and instruction at UCLA. May be repeated for credit. S/U grading.

470A-470D. Engineer in Technical Environment. (3 each) Lecture, three hours; outside study, six hours. Limited to Engineering Executive Program students. Theory and application of quantitative methods in analysis and synthesis of engineering systems for purpose of making management decisions. Optimization problems with respect to financial, material, energy, information, and manpower. Case studies and individual projects. S/U or letter grading.

471A-471B-471C. Engineer in General Environment. (3–5.5) Lecture, three hours (courses 471A, 471B) and 90 minutes (course 471C). Limited to Engineering Executive Program students. Influences of human relations, laws, social sciences, humanities, and fine arts on development and utilization of natural and human resources. Interaction of technology and society past, present, and future. Change agents and resistance to change. S/U or letter grading (471A); In Progress (471B) and S/U or letter (471C) grading.

472A-472D. Engineer in Business Environment. (3–3.5) Lecture, three hours (courses 472A, 472B, 472C) and 90 minutes (course 472D). Limited to Engineering Executive Program students. Language of business for engineering executive. Accounting, finance, business economics, business law, and marketing. Laboratory in organization and management problem solving. Analysis of actual business problems involving community, and nation, and evidence of high cooperation and participation with California business corporations and government agencies. In Progress (472A, 472C) and S/U or letter grading (credit to be applied only on completion of course).

473A-473B. Analysis and Synthesis of Large-Scale Systems. (3–3) Lecture, two and one half hours; out-
side study, six hours. Limited to Engineering Executive Program students. Problem area of modern industry or government is selected as class project, and its rules support. Examples and case studies to be taken from: aerospace, computer science, engineering, and pharmaceutical industries. Letter grading.

213. Data and Business Analytics. (4) Lecture, four hours; outside study, eight hours. Coverage of wide variety of spreadsheet models that can be used to analyze business problems and decision-making problems with emphasis on mastery of Excel spreadsheet modeling as integral part of analytic decision making. Managerial models include data modeling, regression and forecasting models, distribution models, integer programming, nonlinear programming, and Monte Carlo simulation. Problems from operations management taught by spreadsheet example and described and analyzed by participants from various industries and disciplines. Development of spreadsheet models to facilitate decision making. Letter grading.

214. Management Communication. (4) Lecture, four hours. Exploration of knowledge, attributes, skills, and strategies necessary to succeed communicatively in workplace, with focus on business presentation skills, visual and verbal persuasion skills, and interpersonal communication skills. Letter grading.

215. Entrepreneurship for Engineers. (4) Lecture, four hours; outside study, eight hours. Limited to graduate engineering students. Topics in starting and developing high-technology enterprises for students who wish to complement their technical education with introduction to entrepreneurship. Letter grading.

195. Internship Studies in Engineering. (2 to 4) Tu-
torial, two to four hours. Limited to juniors/seniors. Internship studies course supervised by associate dean for career development or member of program planning committee. Further supervision to be provided by organization for which students are doing internship. Students may be required to meet on regular basis with instructor and provide periodic reports of the job with the possibility that the job may not be appropriate for all students. May be repeated for credit. Individual contract with associate dean required. P/NP grading.

199. Directed Research in Engineering. (2 to 8) Tu-
torial, to be arranged. Limited to juniors/seniors. Supervised individual research or investigation under guidance of faculty mentor. Culminating paper or project required. May be repeated for credit with school approval. Individual contract required; enrollment petitions available in Office of Academic and Student Affairs. Letter grading.
solution is synthesized using quantitative tools and methods. Project also serves as laboratory in organization for goal-oriented technical group. In Progress (473A) and S/U (473B) grading.

493A. Teaching Assistant Training Seminar. (4) Seminar, four hours; outside study, eight hours. Preparation for teaching assistant. Limited to graduate engineering students. Seminar on communication of engineering principles, concepts, and methods; preparation, organization of material, presentation, use of visual aids, grading, advising, and rapport with students. S/U grading.

M495J. Teaching Preparation Seminar: Writing for Engineers. (4) (Same as English Composition M495J.) Seminar, one hour; outside study, five hours. Enforced requisite: course M495J. Required of all teaching assistants in initial term of teaching Engineering Writing. Course in composition pedagogy, assessment of student writing, guidance of revision process, and specialized writing problems that may occur in engineering writing contexts. Practical concerns of preparing students to write course assignments, marking and grading essays, and conducting peer reviews and conferences. S/U grading.

M495L Supervised Teaching of Writing for Engineers. (Same as English Composition M495L.) Seminar, two and one half hours. Limited to graduate students. Seminar on composition pedagogy, assessment of student writing, guidance of revision process, and specialized writing problems that may occur in engineering writing contexts. Practical concerns of preparing students to write course assignments, marking and grading essays, and conducting peer reviews and conferences. S/U grading.

501. Cooperative Program. (2 to 8) Tutorial, to be arranged. Preparation: consent of UCLA graduate advisor and graduate dean, and host campus instructor, department chair, and graduate dean. Used to record enrollment of UCLA students in courses taken under cooperative arrangements with USC. S/U grading.

Scope and Objectives

The Department of English is dedicated to the study of the literatures and cultures of those parts of the world in which English is a primary language. All courses committed to no single method or approach, the department requires a knowledge of British, American, and Anglophone literary history and an engagement with a range of methodological approaches that foster intellectual curiosity and critical thinking and encourage its students to be not only expert readers and writers but engaged and ethical citizens.

An understanding and appreciation of literature can furnish lifelong rewards. In addition to offering students such personal benefits, the department seeks to foster critical analysis and lucid writing and to teach them to think about how language and representation function in the world. Such skills are essential to success in a variety of professions for which the major in English can provide excellent preparation, including law, administration, business, teaching, media, and entertainment.

Within the BA degree in English, qualified students may elect a concentration in creative writing. The department also offers a Bachelor of Arts degree in American Literature and Culture.

When selecting courses to fulfill requirements for the majors, students are expected to choose those that best reflect their own interests and simultaneously contribute toward a coherent program in literary studies.

A graduate program leading to the Master of Arts degree is available for students who wish to continue the study of literature at an advanced level. A parallel program continues to the PhD degree. Because the PhD program may require five years or more, it is intended only for qualified students who are seriously committed to advanced literary scholarship and, in some cases, to a career in college or university teaching.

Undergraduate Study

Students must have completed the Entry-Level Writing requirement before taking any courses in English (other than English Composition 1 or 2). For more information regarding Entry-Level Writing, see the Undergraduate Study chapter.

The English major and American Literature and Culture major are designated capstone majors. Students in both majors have the option of completing...
a capstone or other culminating work that enables them to use knowledge and skills acquired through previous coursework to engage, under the guidance of a faculty member, in literary research or other creative projects that result in a final paper or other product.

Extra-Departmental Requirement in Foreign Literature or Foreign Language

All English majors must have completed either (1) level five or equivalent in any one foreign language or (2) level three or equivalent in one foreign language and two additional courses in foreign language or foreign literature, including foreign literature in translation (see course listings under Foreign Literature in Translation). Transfer students who have satisfied the College of Letters and Science foreign language requirement at the high-school level through the ICETC program may satisfy the departmental requirement with five foreign literature in translation courses. The courses may be taken on a P/NP grading basis.

English BA

Capstone Program

The Bachelor of Arts degree in English has an optional concentration in creative writing for students who have been admitted to and completed three English composition courses, one English composition course, one English critical reading and writing course, one year of English literature survey courses, and two years of one foreign language or a combination of foreign language and foreign literature courses.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

The Major

Required: Ten 4- or 5-unit upper-division English courses, including (1) four historical period courses, one from each of the following four periods: (a) literatures in English to 1500—course 140A through 148 or indicated sections of 149; (b) literatures in English, 1500 to 1700—course 150A through 157, indicated sections of 159 or 159R or 166A; (c) literatures in English, 1700 to 1850—course 160A through 165C, 166B through 167B, 176B, or indicated sections of 169 or 169R, and (d) literatures in English, 1850 to present—course M101B, M101C, M102A, M102B, M104A through M104D, M105B through M105E, 116A, 130, 131, 164B, 164C, 164D, 167A, 167B, 168, 170A through 174C, 176, 179, or 179R; (2) three breadth courses, one from each of three of the following four areas: (a) gender, race, ethnicity, disability, and sexuality studies—English 100 through 109, M126, 135, 155, 163C, 165B, 166C, or indicated sections of 119, 139, 149, 159, 159R, 169, 169R, 179, or 179R; (b) imperial, transnational, and postcolonial studies—course M105A through M105D, 112D, 128, 130 through 135, 154, 157, 163B, 164D, 165A, 166A, 166B, 176, or indicated sections of 149, 159, 159R, 169, 169R, 179, or 179R; (c) genre studies, interdisciplinary studies, critical theory—course 111A through 129, 144, 146, 147, 153, 156, 161A, 161B, 161C, 162A, 163C, 164A through 164D, 167A, 171A through 177, or indicated sections of 149, 159, 159R, 169, 169R, 179, or 179R; (d) creative writing—courses 136, 137, M138; (3) two elective courses (two sections of English 110A may fulfill one elective; English 195CE is not applicable); (4) one seminar from course 180 through 184, or M191A through M191E. Admission to creative writing workshops (courses 136, 137, M138) is by application only. Each course applied toward requirements for the major must be 4 or 5 units and be taken for a letter grade.

Creative Writing Concentration

The creative writing concentration consists of the same requirements as the major, with the exception that one breadth course must be taken from the creative writing area (English 136, 137), and both electives must be creative writing workshops (courses 136, 137, M138). All other requirements remain the same. English M138 cannot satisfy any breadth or workshop requirements in the concentration and may only be applied toward the basic English major. Students may declare creative writing as a concentration only after they have completed three creative writing workshops in a single genre of either poetry or short story. Students may not enroll in more than one workshop (course 136, 137, or M138) per term or in more than two workshops with the same instructor. No student may take for credit more than three poetry or short story workshops. Students planning to select this program should contact the departmental counselor for more details.

American Literature and Culture BA

Capstone Program

Students are expected to meet with the undergraduate counselors and undergraduate faculty adviser to plan and follow a course of study that incorporates their interests and goals with the fulfillment of requirements for the degree.

Learning Outcomes

The American Literature and Culture major has the following learning outcomes:

- Proficiency in a broad knowledge/skill set including research methods, critical thinking, and analytical writing
- Familiarity with basic project material including data from multiple sources
- Familiarity with relevant scholarly and current debates in the field
- Conception and execution of an independent project
- Demonstrated seminar or workshop skills
- Demonstrated oral and written communication skills
- Demonstrated defense-of-scholarship skills

Preparation for the Major

Required: English Composition 3, English 4W or 4HW or 4WS taken in the stated sequence (English Composition 3 is requisite to any English 4 course), 11, 87. A grade of C or better is required in each course.

Transfer Students

Transfer applicants to the American Literature and Culture major with 90 or more units must complete the following introductory courses prior to admission to UCLA: one English composition course, one English critical reading and writing course, one year of English literature survey courses, and two years of one foreign language or a combination of foreign language and foreign literature courses.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

The Major

Required: Ten 4- or 5-unit upper-division courses, including (1) seven American literature English courses, at least two in the time period before 1848 and two in the time period after 1848, selected from the following three areas with a minimum of two selected from each area: (a) origins—beginnings, events, and trajectories: studying the making of America in its myriad beginnings and manifestations—courses 100, M102A, M104A, 166A, 166B, 166C, 167A, 167B, 170A, or, when treating American topics, M101B, 106, 123, 131, 139, 169; (b) identities: places, communities, and environments: studying people, collectives and movements across the diverse geographies of the Americas—courses 100, M102A, M102B, M104A through M104E, M105A through M105E, 106, 115A, 117, 135, 168, 170B, 170C, 172C, 173A, 173B, 173C, 174A, 174B, 174C, 175, 176, 177,

Honors Program

Admission

The honors program is open to departmental majors with a 3.5 departmental and a 3.25 overall grade-point average (GPA). Students with lower GPAs may petition for admission to the program, but these grade-point averages must be achieved before graduation in order to qualify for honors. Students should apply by winter quarter of the junior year. For application forms and more information, contact the departmental counselor.

Requirements

All honors students are required to take one theory course from English 120 through 128 (may fulfill one of three required breadth courses) no later than winter quarter of the junior year. Students in the creative writing concentration are required to have completed or been accepted into their third workshop in a single genre prior to or concurrent with enrollment in course 191H. In spring quarter of the junior year, students must take course 191H (may fulfill one of two electives for the major). During fall and winter quarters of the senior year, they take courses 198A and 198B, in which they write a thesis under the direction of a faculty member (198B may fulfill the second of two electives for the major). The thesis determines whether they receive highest honors, honors, or no honors.

English Minor

The English minor is designed for students who wish to enhance their major program with the benefits of intensive study of English language and literatures, including a better understanding and appreciation of literatures in English and improvement in critical thinking, reading, and writing skills. To enter the minor, students must have an overall grade-point average of 2.0 or better, have completed English 10A with a grade of C or better, and have satisfied the English Composition 3 requirement and completed English 4W. Students must file a petition to declare the minor by meeting with a student affairs officer in the Undergraduate Counseling Office, 158/160 Kaplan Hall, 310-825-1389. This allows them priority enrollment in many upper-division courses.

Required Lower-Division Courses (10 units): English 10B and 10C, with grades of C or better.

Required Upper-Division Courses (25 units): Five courses selected from English 100 through 191WE, including one course in literatures in English written before 1700 (see course lists 1a and 1b under English BA, the major, above) and one other course in literatures in English written before 1850 (see course lists 1a, 1b, and 1c under English BA, the major, above).

A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor. At least 15 upper-division units applied toward the minor must be taken in residence during the regular academic year (excluding summer sessions) at UCLA. Transfer credit is subject to department approval; consult with the undergraduate counselors before enrolling in any courses for the minor.

Each minor course must be taken for a letter grade, and students must have an overall grade-point average of 2.0 or better in the minor. Successful completion of the minor is indicated on the transcript and diploma.

Literature and Environment Minor

The Literature and Environment minor provides students with both a solid foundation for literary interpretation and a superstructure that integrates those skills and perspectives with the questions about the past, present, and future of the biosphere. It is designed for undergraduate students who wish to enhance their major program with intensive study of literature in its relationship to the natural environment, while improving their skills in reading, writing, creative and critical thinking, and analysis of complex situations in an ethical frame. The minor examines how different cultural forms (for example, fiction, journalism, poetry, film, design, and other arts) represent environmental issues, including biodiversity, animal studies, wilderness, food, urban ecologies, postcolonial ecologies, environmental justice, and climate change.

To enter the minor, students must be in good academic standing with an overall grade-point average of 2.0 or better and have completed English 4W, 4HW, 4WS, or any Writing II course with a grade of C or better. Students must file a petition to declare the minor by meeting with a student affairs officer in the Undergraduate Counseling Office, 158/160 Kaplan Hall, 310-825-1389. For more information, see the minor website.

Required Lower-Division Courses (10 units): English 4W, 4HW, 4WS, or any Writing II course, and English M30 (or M30S), with grades of C or better.

Required Upper-Division Courses (20 to 24 units): (1) English 118E and M118F or one additional 118E course on a different topic or one other English course that has a primary focus on environmental issues to be selected from a list available in the Undergraduate Counseling Office prior to the opening of enrollment each term (students may petition to substitute other courses), (2) one course selected from American Indian Studies C178, Anthropology 133, 136P, Art History 123D, 133E, C145A, Chicano and Chicana Studies M144, M183, Food Studies M170SL, Geography 130, 136, Honors Collegium 141, 174, Italian 124, Public Policy C115, Russian 122, Urban Planning M120, M121, or CM166 (3) one course selected from Atmospheric and Oceanic Sciences M101S, 104H, Earth, Planetary, and Space Sciences 101, Ecology and Evolutionary Biology 116, M131, M135, 176, Environment M115, M125, M126, M131, M133, 134, 150, M153, 157, C159, M161, M163, M164, M166, M167, or Environmental Health Sciences 10G. (4) one course selected from English 184, 195CE, 197, 198A, 198B, or 199 that culminates in a project focused primarily on literature from an ecocritical or other environmentally focused perspective.

Students may petition to substitute an internship course/independent study/directed research course (195CE, 197, 198A, or 199) for an elective course as long as it is clearly and predominantly relevant to the topics covered in the minor and falls within the discipline of the requirement for which it serves as a substitute. No more than one upper-division independent study/directed research course (4 or 5 units) may be applied toward the minor.

A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor. Each minor course must be taken for a letter grade, and students must have an overall grade-point average of 2.0 or better in the minor. Successful completion of the minor is indicated on the transcript and diploma.

Professional Writing Minor

The Professional Writing minor includes the study and practice of originating, designing, and communicating information and ideas. As a discipline, it is the core for creating, debating, and disseminating knowledge in the 21st-century multicultural economy. The minor enables students to expand their knowledge of the practices of writing in a diverse modern society.

Through courses that understand writing broadly—as encompassing written, oral, visual, and electronic multimodal communication—students in the Professional Writing minor acquire deep intellectual and practical skills needed to perform well as good writers within the professions they choose, or to become professional writers with specific areas of academic expertise. All Writing Programs courses in the minor include a segment on digital media.

To enter the minor, students must have an overall grade-point average of 2.0 or better, have satisfied the Writing II requirement, and submit a 500-word essay online explaining why they want to declare the minor, and how they expect it to relate to their professional lives. For more information, contact the Writing Programs adviser, 146 Kaplan Hall, 310-206-1145.

Required Lower-Division Courses (4-5 units): Any Writing II course or equivalent.

Required Upper-Division Courses (26-30 units): One core course from English Composition 130A through 130E; two courses selected from English 110A, 110C, 110E, 110P, 110V, M191P (or Comparative Literature M191P), M192 (or English Composition M192 or Environment M192), English Composition 131A, 131C, 131D, 132, 133, 134, 136, 137, or English M138 (or English Composition M138) when offered on a non-fiction topic; one course selected from African American Studies M194A (or Education M194A),
Asian American Studies C142A, C142C, C142M, Community Engagement and Social Change 165SL, Communication 109, 110, Digital Humanities 150, Ecology and Evolutionary Biology C179, Education 118, Film, Television, and Digital Media C144, Honors Collegium 101B, 101C, Life Sciences 110, 192A, Music Industry 102, 104A, 110, 122, Dance C184; one additional upper-division course selected from the lists above; and one capstone, cumulative portfolio, independent study, or community and corporate internship course from English 195CE, 197, 199, English Composition 195S, or 199.

A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor.

No more than one lower-division course may be applied to the minor. Students may petition to substitute courses other than those listed to satisfy elective requirements.

Each minor course must be taken for a letter grade (unless the course is graded on a P/NP basis; no more than four units of P/NP may be applied to the minor), and students must have an overall grade-point average of 2.0 or better in the minor. Successful completion of the minor is indicated on the transcript and diploma.

Graduate Study

Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Division website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Graduate Degrees

The Department of English offers Master of Arts (MA), Candidate in Philosophy (CPhil), and Doctor of Philosophy (PhD) degrees in English.

English

Lower-Division Courses

4HW. Critical Reading and Writing (Honors). (5) Lecture, four hours. Enforced requisite: English Composition 3 or 3H or English as a Second Language 36. Introduction to literary analysis, with close reading and carefully written exposition of selections from principal modes of literature: poetry, prose fiction, and drama. Minimum of 15 to 20 pages of revised writing. Satisfies Writing II requirement. Letter grading.

4W. Critical Reading and Writing. (5) Lecture, four hours. Enforced requisite: English Composition 3 or 3H or English as a Second Language 36. Introduction to literary analysis, with close reading and carefully written exposition of selections from principal modes of literature: poetry, prose fiction, and drama. Minimum of 15 to 20 pages of revised writing. Satisfies Writing II requirement. Letter grading.

4WS. Critical Reading and Writing (Service Learning). (5) Lecture, four hours; fieldwork, two hours. Enforced requisite: English Composition 3 or 3H or English as a Second Language 36. Introduction to literary analysis, with close reading and carefully written exposition of selections from principal modes of literature: poetry, prose fiction, and drama. Minimum of 15 to 20 pages of revised writing. Service learning component includes meaningful work off-campus agency selected by instructor. Satisfies Writing II requirement. Letter grading.

10A. Literatures in English to 1700. (5) Lecture, three hours; discussion, one hour. Enforced requisites: English Composition 3 or 3H, English 4W or 4HW. Survey of major works, with emphasis on tools for literary analysis such as close reading, argumentation, historical and social context, and critical writing. Minimum of three papers (three to five pages each) or equivalent required. P/NP or letter grading.

10B. Literatures in English, 1700 to 1850. (5) Lecture, three hours; discussion, one hour. Enforced requisites: English Composition 3 or 3H, English 4W or 4HW, 10A, 10B. Survey of major writers and genres, with emphasis on tools for literary analysis such as close reading, argumentation, historical and social context, and critical writing. Minimum of three papers (three to five pages each) or equivalent required. P/NP or letter grading.

10C. Literatures in English, 1850 to Present. (5) Lecture, three hours; discussion, one hour. Enforced requisites: English Composition 3 or 3H, English 4W or 4HW. Survey of major writers and genres, with emphasis on tools for literary analysis such as close reading, argumentation, historical and social context, and critical writing. Minimum of three papers (three to five pages each) or equivalent required. P/NP or letter grading.

11. Introduction to American Cultures. (5) Lecture, four hours; discussion, one hour (when scheduled). Requisites: English Composition 3, English 4W or 4HW or 4W4WS. Exploration of question of what is meant by America, and hence what is meant by American culture and American studies. Addresses concepts of origins (real or imagined beginnings of cultural formations, identities (narratives of people and places), and media (creative process as manifest in aesthetic forms, artistic movements, and information systems). P/NP or letter grading.

19. Fiat Lux Freshman Seminars. (1) Seminar: one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

20. Introduction to Creative Writing. (4) Lecture, four hours; discussion, one hour (when scheduled). Preparation: submission of creative or expository writing samples to screening committee. Enforced requisite: satisfaction of Entry-Level Writing requirement. English Composition 3. Not open for credit to students with credit for course 20W. Designed to introduce fundamentals of creative writing. Emphasis either on poetry, fiction, or drama, depending on wishes of instructor(s) during any given term. Readings from assigned texts and weekly writing assignments required. P/NP or letter grading.

20W. Introduction to Creative Writing. (5) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisites: satisfaction of Entry-Level Writing requirement, English Composition 3. Not open for credit to students with credit for course 20. Designed to introduce fundamentals of creative writing and writing workshop experience. Emphasis on poetry, fiction, drama, or creative nonfiction depending on wishes of instructor(s) during any given term. Readings from assigned texts, weekly writing assignments (multiple drafts and revisions), and final portfolio required. Satisfies Writing II requirement. Letter grading.

M30. Environmental Literature and Culture. (5) (Same as Environment M30S.) Lecture, three hours; discussion, one hour. Enforced requisite: satisfaction of Entry-Level Writing requirement. Introduction to core themes, questions, and methods within interdisciplinary field of environmental humanities. Examination of how different culture forms (e.g., fiction, journalism, poetry, visual art) represent environmental issues. May include bioethics, food, urban ecologies, postcolonial ecologies, environmental justice, and climate change. Service learning component includes meaningful work off-campus agency/ agencies selected by instructor. P/NP or letter grading.

M40. Structure of English Words. (5) Same as Linguistics M40. Lecture, four hours; discussion, one hour. Introduction to structure of English words of classical origin, including most common base forms and rules by which alternate forms are derived. Students may expect to achieve substantial enrichment of their vocabulary while learning about etymology, semantic change, and abstract rules of English word formation. P/NP or letter grading.

M50. Introduction to Visual Culture. (5) (Same as Film and Television M50.) Lecture, three hours; discussion, one hour; laboratory. Enforced requisite: satisfaction of Entry-Level Writing requirement. Study of how visual media, including advertising, still and moving images, and narrative films, influence contemporary aesthetics, politics, and knowledge. P/NP or letter grading.

70. Medievalisms: Medieval Literature and Contemporary Culture. (5) Lecture, four hours; discussion, one hour. Requisite: satisfaction of Entry-Level Writing requirement. Not open for credit to English majors or students with credit for any course in the 140 series. Introduction to medieval texts juxtaposed with modern texts and media to analyze how and why the medieval (in form of crusade, quest, romance, world-construction, etc.) is continually reproduced and transformed in large scale popular productions, novels, film, and television. Textual focus on medieval works in comparison to analysis of 20th- and 21st-century works may include Beowulf, Sir Gawain and the Green Knight, Le Morte Darthur, Lord of the Rings, Game of Thrones, and Harry Potter. P/NP or letter grading.

80. Major American Authors. (5) Lecture, three hours; discussion, one hour. Enforced requisite: satisfaction of Entry-Level Writing requirement. Not open for credit to English majors or students with credit for any courses in 170 series. Introduction to chief American authors, with emphasis on poetry, nonnarrative prose, and short fiction of such writers as Poe, Dickinson, Emerson, Whitman, Twain, Frost, and Hemingway. P/NP or letter grading.

85. American Novel. (5) Lecture, three hours; discussion, one hour. Enforced requisite: satisfaction of Entry-Level Writing requirement. Not open for credit to English majors or students with credit for any courses in 170 series. Development, with emphasis on form, of American novel from its beginning to present day. Includes works of such novelists as Hawthorne, Fitzgerald, Faulkner, Ellison, and Morrison. P/NP or letter grading.

88. Topics in American Cultures. (5) Seminar, three hours. Requisites: English Composition 3, English 4W or 4HW or 4WS. 11. Content varies. Introductory study of diverse peoples, histories, and ideas of America. P/NP or letter grading.

88A-88Z. Lower-Division Seminars: Special Topics in English. (5 each) Seminar, three hours. Limited to 15 students. Content varies. Students must petition for enrollment. Instructor for information. P/NP or letter grading. 88A. Medieval Literature; 88B. Renaissance Literature; 88C. 17th-Century Literature; 88D. 18th-Century Literature; 88E. Romantic Literature; 88F. 19th-Century British Literature; 88G. Colonial American Literature; 88H. 19th-Century American Literature; 88J. 20th-Century American Literature; 88K. History of English Language; 88L. Folklore and Mythology; 88M. Literature and Society; 88S. Service Learning Seminar. Seminar, three hours; fieldwork, three hours. Textual analysis, analytical discussion, and written as-
Upper-Division Courses

100. Ways of Reading Race. (5) Lecture, four hours; discussion, one hour (when scheduled). Required: English Composition 3. Introduction to interdisciplinary study of race and ethnicity, with primary focus on literature. Through examination of institutions that form understanding of race—citizenship, nationalism, class, gender, and labor—interrogation of how we come to think of ourselves and others as having race, and effects. May be repeated for credit with topic or instructor change. P/NP or letter grading.

M101B. Queer Literatures and Cultures, 1850 to 1970. (5) Same as Gender Studies M105B and Lesbian, Gay, Bisexual, Transgender, and Queer Studies M101B.) Lecture, four hours; discussion, one hour (when scheduled). Required: English Composition 3. Survey of discrete period of queer literature and culture from circa 1850 to 1970, with focus on authors such as Jeff Wall, Whitman, Radyelle, Fulle, and James Baldwin may be included. May be repeated for credit with topic or instructor change. P/NP or letter grading.

101C. Queer Literatures and Cultures after 1970. (5) Same as Gender Studies M105C and Lesbian, Gay, Bisexual, Transgender, and Queer Studies M101C.) Lecture, four hours; discussion, one hour (when scheduled). Required: English Composition 3. Examination of the evolution of queer literature from before Stonewall rebellion in New York in 1969, widely regarded as origins of the queer movement, to present day. May include authors such as Jean Toomer, Claude McKay, Langston Hughes, Nella Larsen, Zora Neale Hurston, Richard Wright, Ann Petry, James Baldwin, Gwendolyn Brooks, and Ralph Ellison. P/NP or letter grading.

M104A. Early African American Literature. (5) Same as African American Studies M104A.) Lecture, four hours; discussion, one hour (when scheduled). Required: English Composition 3 or 3H. Variable topics lecture course that presents a historical survey of African American literature from pre-Civil War to present covering range of genres, with emphasis on diversity of perspectives and styles that have emerged over past 30 years or so. Authors may include Toni Morrison, August Wilson, Octavia Butler, Anna Deavere Smith, June Jordan, Charles Johnson, and Rita Dove. P/NP or letter grading.

M104E. Topics in African American Literature and Culture. (5) Same as African American Studies M104E.) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisite: English Composition 3 or 3H. Variable topics lecture course that provides opportunity to cover African American literature from wide range of their African, American, and African American Satire. May be repeated for credit with topic or instructor change. P/NP or letter grading.

M105A. Early Chicana/Chicana Literature, 1400 to 1900. (5) Same as Chicana/Chicana Studies M105A.) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisite: English Composition 3 or 3H. Survey of Chicana/Chicana literature from conquest of Triple Alliance to end of Mexican Revolution (1920), including oral and written forms (poetry, corridors, testimonios, folklore, novels, short stories, and drama) by writers such as Sara Uruguaico, José Maria Labastida, Cabaña de Vaca, Lorenzo de Zavala, Maurna Amaro Ruiz de Burton, Eusebio Chácón, Daniel Venegas, and Lorenza Villagás de Magón. P/NP or letter grading.
105B. Chicana/Chicano Literature from Mexican Revolution to el Movimiento, 1920 to 1970s. (5) (Same as Chicana and Chicano Studies M105B.) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisite: English Composition 3 or 3H. Chicana/Chicano literature from 1920s through Great Depression and World War II, ending with Chicana/Chicano civil rights movement. Oral and written narratives by writers including Conrado Espinoza, Joaquín González, Angélica María Sánchez, Mario Suárez, Oscar Acosta, and Evangelina Vigil. P/NP or letter grading.

105C. Chicana/Chicano Literature since el Movimiento, 1970s to Present. (5) (Same as Chicana and Chicano Studies M105C.) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisite: English Composition 3 or 3H. Survey of Chicana/Chicano literature since 1970s, with particular emphasis on how queer and feminist activism as well as Central and South American migration have shaped 21st-century chicanidad. Oral, written, and graphic fiction, poetry, and drama by writers including Juan Rechy, Gloria Anzaldúa, Bros Hernández Castellanos, and Dagoberto Gilb. Guide exploration of queer and feminist studies, Reagan generation, immigration debates, and emerging Latina/Latino majority. P/NP or letter grading.

105D. Introduction to Latina/Latino Literature. (5) (Same as Chicana and Chicano Studies M105D.) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisite: English Composition 3 or 3H. Survey of Latina/Latino literature since 1920s through the 21st century. Focus on writing as adaptable, multifaceted professional skill as well as process, rewriting, and argument; minimum 15 to 20 pages of writing required. May not be repeated for credit. P/NP or letter grading.

105E. Studies in Chicana/Chicano and/or Latina/Latina Literature. (5) (Same as Chicana and Chicano Studies M105E.) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisite: English Composition 3 or 3H. Survey of U.S. Latina/Latino literature and introduction to its major critical trends, with emphasis on groups of Caribbean, Mexican, South American, and Central American origin. Representative works read in relation to such topics as relationship to Latina/ Latino populations and U.S. cultural sphere, struggle for self-determination, experiences of exile and migration, border zones, enclaves and language, and tzajte and its impact on cultural production. P/NP or letter grading.

105SL. Seminar: Chicana/Chicano and/or Latina/Latina Literature—Service Learning. (5) (Same as Chicana and Chicano Studies M105SL.) Seminar, three or four hours; research, three or four hours. Enforced requisite: English Composition 3 or 3H. Specialized studies in Chicana/Chicano and/or Latina/Latina literature. In-depth study of various topics related to Chicana/Latino communities in Southern California, including Chicana/Chicana visions of Los Angeles; immigration, migration, and exile; autobiography and historical change; Chicana/Chicano journalism; and labor and literature. Service learning component includes minimum of 20 hours of meaningful work with agency involved with Chicana/Chicana and/or Latina/Latina community and selected by instructor. P or letter grading.

106. Studies in Native American and Indigenous Literatures. (5) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisite: English Composition 3 or 3H. Study of Native American and/or transnational indigenous and multiethnic communities from earliest times to 14th century. P/NP or letter grading.

106A. Studies in Women’s Writing. (5) (Same as Gender Studies M106A.) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisite: English Composition 3. Focus on women writers that may include historical, regional, national, or thematic emphasis, with possible topics such as authorship, self-writing, sexuality, gender, and genre. May be repeated for credit with topic or instructor change. P/NP or letter grading.

107B. Studies in Gender and Sexuality. (5) (Same as Gender Studies M107B and Lesbian, Gay, Bisexual, Transgender, and Queer Studies M107B.) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisite: English Composition 3. Examination of literary and cultural production through lens of gender and sexuality. Depending on instructor, emphasis may be historical, regional, comparative, or thematic and include other intersectional vectors of identity and representation such as race and ethnicity. May be repeated for credit with topic or instructor change. P/NP or letter grading.

108. Interpersonal Encounters. (5) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisite: English Composition 3 or 3H. Study of literary, cultural, and/or cinematic texts produced by people from different ethnic and religious backgrounds and providing comparative cultural perspectives on living in multiethnic societies. May be repeated for credit with topic or instructor change. P/NP or letter grading.

109. Topics in Race, Ethnicity, Gender, and Sexuality Studies. (5) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisite: English Composition 3 or 3H. Consult Schedule of Classes for instructor, emphasis, with possible topics such as authorship, relationship to such topics as relationship to Latina/Latina populations and U.S. cultural sphere, struggle for self-determination, experiences of exile and migration, border zones, enclaves and language, and tzajte and its impact on cultural production. P/NP or letter grading.

110A. Writing in English Major: Analytical. (5) Lecture, four hours; discussion, one hour (when scheduled). Requisites: course 4W (or 4HW or 4WS), English Composition 3 or 3H. Study of topics in specific field. Depending on instructor, emphasis may be historical, regional, national, or thematic. May be repeated for credit with topic or instructor change. P/NP or letter grading.

110B. Writing in English Major: Adjunct. (2) Seminar, two hours. Students must be concurrently enrolled in affiliated English lecture course (consult Schedule of Classes for courses so designated). Improvement and refinement of writing about literature. Focus on writing as process, rewriting, and argument; minimum 15 to 20 pages of writing required. May not be repeated for credit. P/NP or letter grading.

110C. Public Readers, Public Writers: Writing about Books for 21st-Century Audience. (5) Lecture, four hours. Requisites: course 4W (or 4HW or 4WS), English Composition 3 or 3H or 3DS or 3SL. In-depth study and practice of literary and cultural criticism for general audience. Focus on writing as process, rewriting, and argument; minimum 15 to 20 pages of writing. May not be repeated for credit. P/NP or letter grading.

110E. Writing in English Major: Advanced Essay. (5) Seminar, three or four hours. Requisites: course 4W (or 4HW or 4WS), English Composition 3 or 3H. Study of developing complex critical arguments. Minimum 15 to 20 pages of revised writing required. May not be repeated for credit. P/NP or letter grading.

110F. Writing in English Major: Pre-Professional Portfolio. (5) Seminar, four hours. Requisites: course 4W, English Composition 3 or equivalent. Limited to American Literature and Culture and English majors. Writing for professionals. Study and written materials completed in previous English courses and development of new documents, projects, and writing samples relevant to success in variety of professions including postgraduate study, teaching portfolio of each student’s work. May not be repeated for credit. P/NP or letter grading.

110T. Writing in English Major: Transfer Students. (5) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisite: courses 4W (or 4HW), 10A, 10B, 10C, English Composition 3. Open only to English major transfer students. Not open for credit with courses 111A, 111B, 111C. Improvement and refinement of writing about literature and culture. Focus on writing as process, rewriting, and nuanced argument; minimum 15 to 20 pages of writing required. May not be repeated for credit. P/NP or letter grading.

110V. Variable Topics in Professional Writing. (5) Lecture, four hours. Requisites: course 4W (or 4HW or 4WS), English Composition 3 (or 3D or 3DS or 3SL). Focus on writing as multifaceted professional skill as well as process, rewriting, and argument; minimum 15 to 20 pages of writing. May not be repeated for credit. P/NP or letter grading.

111A. Hebrew Bible in Translation. (5) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisite: English Composition 3 or 3H. Literary study of Hebrew Bible (Old Testament), with emphasis on literary devices and narrative structures in relation to Judaic historical, political, psychological, philosophical, and theological themes. P/NP or letter grading.


111C. Topics in Biblical Literature. (5) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisite: English Composition 3 or 3H. Recommended: course 111A or 111B. Study of topics in Hebrew Bible and/or New Testament, with attention to particular thematic, literary, and modes of interpretation. Discussion of influence of Bible on discrete periods or individual authors in literatures in English. English may be repeated for credit with topic or instructor change. P/NP or letter grading.

112A. Oral Tradition. (5) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisite: English Composition 3 or 3H. Knowledge of Irish or Welsh not required. General course dealing with Celtic literature from earliest times to 14th century. P/NP or letter grading.

112B. Celtic Mythology. (5) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisite: English Composition 3 or 3H. Survey of early texts, myths pertaining to Gauls and Britons and their stories, with emphasis on techniques of mythological analysis. P/NP or letter grading.

112C. Survey of Medieval Celtic Literature. (5) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisite: English Composition 3 or 3H. Focuses on collaboration of Celtic literature from earliest times to 14th century. P/NP or letter grading.

112D. Celtic Folklore. (5) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisite: English Composition 3 or 3H. Folkloric traditions of modern Ireland, Scotland, and other Celtic countries, with attention to colonial and postcolonial issues and folkloristic methods. P/NP or letter grading.

112E. Food and Fantasy in Irish Tradition and Literature. (5) Lecture; four hours; discussion, one hour (when scheduled). Enforced requisite: English Composition 3 or 3H. Study of food including drinking as powerful cultural symbols in Irish oral and literary tradition from medieval to modern times. P/NP or letter grading.

113A. History of English Language. (5) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisite: English Composition 3 or 3H. Study directed toward English majors of main features in grammatical, lexical, and phonetic condition of English language in Indo-European time to present. P/NP or letter grading.
113B. Introduction to Structure of Present-Day English. (5) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisite: English Composition 3 or 3H. Introduction to techniques of linguistic description as applied to pronunciation, grammar, and vocabulary; P/NP or letter grading.

114. Lyric Histories. (5) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisite: English Composition 3 or 3H. Exploration of lyric poetry in English across centuries. Topics may include historical construction of aesthetic forms, changing conceptions of a dramatic persona, matter of literary influence, and complex relationship of individual lyric speakers to history and historical contexts. May be repeated for credit with topic or instructor change. P/NP or letter grading.

115A. American Popular Literature. (5) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisite: English Composition 3 or 3H. Exploration of British and American popular literature. May be repeated for credit with topic or instructor change. P/NP or letter grading.

115B. British Popular Literature. (5) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisite: English Composition 3 or 3H. Readings in British and American mass media from 16th-century broadsides to contemporary novels. Examination of social and cultural aspects of literature. P/NP or letter grading.

115C. Literature for Children and Adolescents. (5) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisite: English Composition 3 or 3H. Study of educational and cultural texts that theorize causes, effects, political justifications, and psychological texts that theorize causes, effects, political justifications, and cultural sublimations, and literary uses and critiques of violence. P/NP or letter grading.

116A. Experimental Fiction. (5) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisite: English Composition 3 or 3H. Study of novels and short stories that employ playful or experimental practices in language, narrative, hybridity (genre, medium), typography, and other material aspects of text such as binding and book design. Focus generally on texts from 20th century and later, but can include readings dating to beginning of novel. May be repeated for credit with topic or instructor change. P/NP or letter grading.

116B. Introduction to Electronic Literature. (5) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisite: English Composition 3 or 3H. Overview of literatures involving digital technology, such as hypertext fiction, interactive fiction, animated and interactive poetry, multimedia works, video game narrative, and works employing network protocols and print-based works influenced by digital culture. Basic introduction to new media theory. P/NP or letter grading.

117. Literature of California and American West. (5) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisite: English Composition 3 or 3H. Study of literature dealing with exploration, settlement, and emergent cultural awareness of Western U.S. P/NP or letter grading.

118A. Interdisciplinary Studies in Literature. (5) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisite: English Composition 3 or 3H. Study of literatures in English in relation to other disciplines such as sciences, history, politics, philosophy, music, and/or popular culture. May be repeated for credit with topic or instructor change. P/NP or letter grading.

118B. Literature and Other Arts. (5) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisite: English Composition 3 or 3H. Investigation of relationship of literature to one or more other arts, including music (opera, musical theater, popular music, jazz), painting, photography, other visual arts, sculpture, and cinema and performance art, dance, architecture. Topics vary and may include not only English literature but foreign literature in translation. May be repeated for credit with topic or instructor change. P/NP or letter grading.

118C. Studies in Visual Culture. (5) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisite: English Composition 3 or 3H. Study of visual images (photography, film, video) and their relation to literary and/or popular culture. Topics include adaptation, visual analysis, word and image, image and culture, film and visual culture. May be repeated for credit with topic or instructor change. P/NP or letter grading.

118E. Literature and Environment. (5) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisite: English Composition 3 or 3H. Study of literature from environmental perspectives, including eco-critical and interdisciplinary consideration of issues such as environmental justice, animal studies, food studies, gender studies, urban and postcolonial ecologies, climate change, cultural biophony and biophoria, and relationship of literature to sciences. May be repeated for credit with topic or instructor change. P/NP or letter grading.

119. Literary Cities. (5) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisite: English Composition 3 or 3H. Exploration of place of literary imagination in making of cities, with focus on questions of cultural exchange, development, migration, urban rebellion, and style. Topics may include meaning of urban space and time, city as urban village or cosmopolitan hub, segregated dystopia or post-modern future, and impact of exile, tourism, and migration in making of cities. Service learning component includes meaningful work with local nonprofit organizations selected in advance by instructor. May be repeated for credit with topic or instructor change. P/NP or letter grading.

119SL. Literary Cities—Service Learning. (5) Lecture, four hours; discussion, one hour (when scheduled); fieldwork, two hours. Enforced requisite: English Composition 3. Service learning course that examines history and development of one or more genres of popular literature, with attention to contemporary communities of readers and writers in specific contexts. May be repeated for credit with topic or instructor change. P/NP or letter grading.

120. History of Aesthetics and Critical Theory. (5) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisite: courses 10A, 10B. Investigation of texts and ideas in history of aesthetics, critical theory, and interpretation from Greeks through 18th century. Readings may include Plato, Aristotle, Longinus, Biblical hermeneutics, Hume, Descartes, Kant, Schiller, and Hegel. May not be repeated for credit. P/NP or letter grading.

121. Modern and Contemporary Aesthetics and Critical Theory. (5) Lecture, four hours; discussion, one hour (when scheduled). Requisites: courses 10A and 10B, or 11 and 87. Investigation of some dominant trends in 19th-century aesthetics, critical theory, and interpretation. Topics may include Marxism, psychoanalysis, structuralism, poststructuralism, feminism, and postcolonialism. May not be repeated for credit. P/NP or letter grading.

122. Keywords in Theory. (5) Lecture, four hours; discussion, one hour (when scheduled). Requisites: courses 10A, 10B, and 10C, or 11 and 87. Recommended: courses 120, 121. Taking its model from Richard Williams' classic text, this course considers the social, economic, and political dimensions of food and health and their role in social change. May be repeated for credit with topic or instructor change. P/NP or letter grading.

123. Theories of History and Historicism. (5) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisite: courses 10A, 10B, and 10C. Enforced requisites: courses 10A, 10B, and 10C, or 11 and 87. Recommended: courses 120, 121. Examination of theories of history and historicism that offer productive approaches to literary texts. Investigation of how literary critics negotiate the concepts of history and situated historical narratives, how histories are constructed, troped, and given authority, how histories constitute past and present in relationship to each other to stabilize tradition or induce change, and complex ways that literary texts operate within and on their historical contexts. May be repeated for credit with topic or instructor change. P/NP or letter grading.

124. Theories of Religion. (5) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisite: courses 10A, 10B, and 10C, or 11 and 87. Recommended: courses 120, 121. Examination of theologies and cultural approaches to reading, critical theory, and interpretation from Greeks through 18th century. Readings may include Gorgias, Plato, Aristotle, Longinus, Biblical hermeneutics, Hume, Descartes, Kant, Schiller, and Hegel. May not be repeated for credit. P/NP or letter grading.

125. Violence in Cultural Theory and Literature. (5) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisite: English Composition 3 or 3H. Recommended: courses 120, 121. Examination of literary, philosophical, and psychological texts that theorize causes, effects, political justifications, cultural sublimations, and literary uses and critiques of violence. P/NP or letter grading.

126. Feminist and Queer Theory. (5) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisite: English Composition 3 or 3H. Recommended: courses 120, 121. Examination of literary, philosophical, and psychological texts that theorize causes, effects, political justifications, cultural sublimations, and literary uses and critiques of violence. P/NP or letter grading.
127. Performance, Media, and Cultural Theory. (5) Lecture, four hours; discussion, one hour (when scheduled). Requisites: courses 10A, 10B, and 10C, or 11 and 87. Recommended: courses 120, 121. Examination of concepts and modes of performance, culture, and media to be studied. Evaluation of different modes of inquiry around one or more of these concepts, as well as their intersection, in various intellectual traditions, including fields of cultural studies, philosophy, literary analysis, and film theory. May be repeated for credit with topic or instructor change. P/NP or letter grading.

128. Postcolonial and Transnational Theory. (5) Lecture, two hours; discussion, one hour (when scheduled). Enforced requisites: courses 10A, 10B, 10C. Recommended: courses 130, 131. Exploration of methodological, aesthetic, and theoretical implications of postcolonial and transnational approaches to study of literature and culture. Topics may include theories of subaltern, orientalist, feminist, and/or indigenous representation and histories and may address representational issues of national sovereignty in wake of globalization and neocolonialism. May be repeated for credit with topic or instructor change. P/NP or letter grading.

129. Topics in Genre Studies, Interdisciplinary Studies, and Critical Theory. (5) Lecture, for discussion, one hour (when scheduled). Enforced requisites: courses 10A, 10B, 10C. Recommended: courses 120, 121. Consult Schedule of Classes for author, period, and specific study topics or themes. Dependent on instructor, emphasis may be historical, regional, national, comparative, or thematic. May be repeated for credit with topic or instructor change. P/NP or letter grading.

130. Introduction to Postcolonial Literatures. (5) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisites: courses 10A, 10B, 10C. Introduction to major themes and issues in postcolonial literatures. Comparison of cultural, intellectual, and political traditions. May be repeated for credit with topic or instructor change. P/NP or letter grading.

131. Studies in Postcolonial Literatures. (5) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisites: courses 10A, 10B, 10C. Strongly recommended: course 130. Survey of how colonialism and decolonization have shaped literary and cultural expression, with specific emphasis on regional or thematic concerns. Topics may include literatures of Anglophone writers from Africa, Caribbean, South Asia, and indigenous Pacific. May not be repeated for credit. P/NP or letter grading.

132. Culture and Imperialism. (5) Lecture, four hours; discussion, one hour (when scheduled). Requisites: courses 10A, 10B, and 10C, or 11 and 87. Exploration of relationship between culture and imperialism through lens of literary texts to raise questions about what study of empire tells about relationship between power and knowledge. Discussion of shifting patterns and paradigms of imperial rule, including both metropolitan and peripheral or colonial spaces. Emphasis on literary production itself. Texts may include cycles such as Empire, Caribbean contact zones, or literatures of indigenous Pacific. May be repeated for credit with topic or instructor change. P/NP or letter grading.

133. Transatlantic Literatures and Cultures. (5) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisites: courses 10A, 10B, and 10C, or 11 and 87. Study of literatures of Atlantic to examine cultural, political, and ideological issues that followed from transatlantic movement of people, ideas, commodities, and cultural artifacts. In addition to literatures of Britain and the U.S., coverage may include texts from Africa, Caribbean, Mexico, South America, Spain, and other parts of Europe. May be repeated for credit with topic or instructor change. P/NP or letter grading.

134. Nationalism and Transnationalism. (5) Lecture, four hours; discussion, one hour (when scheduled). Requisites: courses 10A, 10B, and 10C, or 11 and 87. Examination of how critical frameworks of nation and migration, transnationalism and globalization, and traditional and contemporary analysis of literary texts, particularly relationship between literature and national identity. Other topics may include nation building in diverse geographies and nations, and relationship between national identity and global identity. May be repeated for credit with topic or instructor change. P/NP or letter grading.

135. Literature of Americas. (5) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisites: courses 10A, 10B, 10C, or 11 and 87. Topics may include literatures of North America, Central America, and Caribbean forge distinct American perceptions of global affairs. Technicalities of their history from encounter to 19th-century U.S. American revolution and Latin American independence movements and beyond, considering such topics as empire, colonialism, slavery, immigration, and post-colonial cultural transformations among indigenous, European, and African civilizations. May be repeated for credit with topic or instructor change. P/NP or letter grading.

136. Creative Writing: Poetry. (5) Seminar, three or four hours; lecture, one or two hours (when scheduled). Composition 3 or 4H, English 4W or 4HW. Weekly exercises in writing of poetry, with practice in standard forms and meters and study of techniques. Classroom discussion based on students’ work. May be repeated for credit with topic change. P/NP or letter grading.

137. Creative Writing: Short Story. (5) Seminar, three or four hours; lecture, one or two hours (when scheduled). Composition 3 or 4H, English 4W or 4HW. Three average-length stories to be completed each term. Some stories may, with instructor’s consent, be substantial revisions or completion of other stories presented. Classroom discussion based on stories presented. Enrolment in more than one section per term not permitted. May be repeated for maximum of 15 units. No more than 10 units may be completed with same instructor. P/NP or letter grading.

138. Topics in Creative Writing. (5) Formerly numbered 138B. (Same as English Composition M138.) Seminar, three or four hours; lecture, one or two hours (when scheduled). Composition 3 or 3D or 3DS or 3SL. Introductory workshop in genre(s) of instructor’s choice, that may include mixed genres, playwriting, screenwriting, literary nonfiction, or genres not covered in 138A. Enrolment in more than one section per term not permitted. May be repeated for maximum of 10 units. May not be used to satisfy workshop requirements for English creative writing concentration. P/NP or letter grading.

139. Individual Authors. (5) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisites: Composition 3. Specialized study of work of one single Anglophone poet, dramatist, prose writer, or novelist. May be repeated for credit with topic or instructor change. P/NP or letter grading.

140A. Chaucer: Canterbury Tales. (5) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisites: courses 10A, 10B. Introductory study of Chaucer’s language, versification, and historical and literary background, including analysis and discussion of his long major poem, Canterbury Tales. P/NP or letter grading.

140B. Chaucer: Troilus and Criseyde and Selected Minor Works. (5) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisites: courses 10A, 10B. Intensive study of Chaucer’s poetry and some of his minor works. May include such books as: The Book of the Duchess, The House of Fame, or The Legend of Good Women, etc. P/NP or letter grading.

141A. Early Medieval Literature. (5) Formerly numbered 141A. Lecture, four hours; discussion, one hour (when scheduled). Enforced requisites: courses 10A, 10B. Major poetry and prose of early medieval Britain, including epic, romance, history, saints’ lives, and travel literature. Texts and topics include Beowulf, King Arthur, poems on women, Bede, and King Alfred. P/NP or letter grading.

141B. Introduction to Old English Language and Literature. (5) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisites: courses 10A, 10B. Introductory study of Old English language and literature, including grammar and vocabulary, reading and translation of poetry and prose, and discussion of literatures and cultures of Anglo-Saxon England. P/NP or letter grading.

141C. Topics in Old English. (5) Lecture, four hours; discussion, one hour (when scheduled). Requisites: course 10A, 10B. May be repeated for credit with topic or instructor change. P/NP or letter grading.

141D. Early Medieval Literature: Research Component. (5) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisites: courses 10A, 10B, Major poetry and prose of early medieval Britain, including epic, romance, history, saints’ lives, and travel literature. Substantial research component included. May be repeated for credit with topic or instructor change. P/NP or letter grading.

142. Later Medieval Literature. (5) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisites: courses 10A, 10B, Reading and historical explication of major writers of late medieval Britain (e.g., Gawain-poet, Langland, Gower, Margery Kempe, Malory, miracle and morality plays, prose, and lyrics). P/NP or letter grading.

142D. Later Medieval Literature: Research Component. (5) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisites: courses 10A, 10B, Reading and historical explication of major writers of late medieval Britain (e.g., Gawain-poet, Langland, Gower, Margery Kempe, Malory, miracle and morality plays, prose, and lyrics). P/NP or letter grading.

143. Drama to 1576. (5) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisites: courses 10A, 10B. English drama from its Latin and Anglo-Norman roots to opening of first public playhouse. P/NP or letter grading.

144. Medieval Romance and Literatures of Court. (5) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisites: courses 10A, 10B. Investigation of medieval court culture, exploring concepts of nobility, governance, love, loyalty, and power in specific genres: romance, chivalric romance, travel literature. Enforced research component included. May be repeated for credit with topic or instructor change. P/NP or letter grading.

145. Medieval Literatures of Devotion and Dissent. (5) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisites: courses 10A, 10B. Exploration of devotional genres and their complex relationships with traditions of dissent in medieval English culture, encompassing hagiography, vision, conversion narrative, introductory to trials, and Lollard manifestos and translations. Texts may include Dream of Rood, South English Legendary, Ancrene Wisse, Piers Plowman, Lollard writings, macro-poetry, devotional cycles and Lollard literature, and Book of Margery Kempe. May be repeated for credit with topic or instructor change. P/NP or letter grading.

146. Medieval Story Cycles and Collections. (5) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisites: courses 10A, 10B. Exploration of medieval story cycles and story collections as narrative forms. Medieval story cycles engage intertextual strategies, creating literary conventions or “cycles” in medieval cultures, periods, genres, and languages, while story collections often stage art of storytelling within narrative frame to invite self-consciousness about powers of literary production itself. Texts may include cycles such
as texts gathered as Matter of Britain, Matter of Rome, or Matter of France; also Mabinogi, manuscript collections such as Auchinleck manuscript or Exeter book, framed narratives such as Decameron, Canterbury Tales, One Thousand and One Nights, and Gower’s Confessions of Exempla. By the end, and dicta. May be repeated for credit with topic or instructor change. P/NP or letter grading.

147. Medieval Histories, Chronicles, and Records. (Spring). Lecture, four hours; discussion, one hour (when scheduled). Enforced requisites: courses 10A, 10B. Interpretation of histories, chronicles, and records. May be repeated for credit with topic or instructor change. P/NP or letter grading.

150A. Shakespeare: Poems and Early Plays. (Fall). Lecture, four hours; discussion, one hour (when scheduled). Enforced requisites: courses 10A, 10B. Exploration of postmedieval production, with emphasis on the period for scholarly study of Tudor and Stuart drama, or elegiac, elegy, elegy and elegy contact zones, including interactions between Celtic, Anglo, and Norman societies, and debates between Pagans, Jews, Christians, and Muslims. May be repeated for credit with topic or instructor change. P/NP or letter grading.

150B. Shakespeare: Later Plays. (Fall). Lecture, four hours; discussion, one hour (when scheduled). Enforced requisites: courses 10A, 10B. Intensive study of selected poems and representative comedies, histories, and tragedies through Hamlet, P/NP or letter grading.

151. Milton. (Fall). Lecture, four hours; discussion, one hour (when scheduled). Enforced requisites: courses 10A, 10B. Study of major works of Milton, with emphasis on Paradise Lost. P/NP or letter grading.

152. Literatures of English Renaissance and Early Modern Period. (Fall). Lecture, four hours; discussion, one hour (when scheduled). Enforced requisites: courses 10A, 10B. Topics may include professional and amateur performances in court, cities, churches, and countryside of varied sorts of texts—masques, religious drama, secular drama, charivari—alongside examination of texts, performances, and performance spaces from 1509 to 1642. May be repeated for credit with topic or instructor change. P/NP or letter grading.

154. Renaissance Worlds. (Spring). Lecture, four hours; discussion, one hour (when scheduled). Enforced requisites: courses 10A, 10B. Study of major works in their cultural context. May be repeated for credit with topic or instructor change. P/NP or letter grading.

155. Renaissance Subjects. (Spring). Lecture, four hours; discussion, one hour (when scheduled). Enforced requisites: courses 10A, 10B. Study of major works of Milton, with emphasis on Paradise Lost. P/NP or letter grading.
and exploration, religious communities, military en-
empowerment, slave trade, transnational economics, travel
to empire, international law, communication and trans-
ation, that may include structures and discourses of
vilities: courses 10A, 10B. Examination of 19th-cen-
tury discussion, one hour (when scheduled). Enforced req-
uests: courses 10A and 10B, or 11 and 87. Study of American
fiction (both novels and short stories) from its
beginning to end of 19th century. P/NP or letter
grading.

167. Major American Writers. (5) Lecture, four
hours; discussion, one hour (when scheduled). Requi-
sites: courses 10A and 10B, or 11 and 87. Study of
American fiction (both novels and short stories) from
its beginning to end of 19th century. P/NP or letter
grading.

168. Topics in Literature, circa 1700 to 1850. (5)
Lecture, four hours; discussion, one hour (when
scheduled). Requisites: courses 10A, 10B, or 11
and 87. Historical survey of American literature from
beginning to end of 19th century. Includes mainly
works that have traditionally been identified as
American classics and asks both what makes
American literature distinctive and what its
relations are to other literatures in English.
P/NP or letter grading.

169. Topics in Literature, circa 1700 to 1850: Re-
search Component. (5) Lecture, four hours; discus-
sion, one hour (when scheduled). Enforced requisites:
courses 10A and 10B, or 11 and 87. Examination of
literature from or about this time period. Consult Schedule of Classes for subject
to be studied in specific term. May be
repeated for credit with topic or instructor change. P/NP
or letter grading.

170. American Literature, 1865 to 1900. (5)
Lecture, four hours; discussion, one hour (when
scheduled). Enforced requisites: courses 10A and 10B,
or 11 and 87. Historical survey of American literature
from Civil War to beginning of 20th century, including
writers such as Howells, James, Twain, Norris, Dick-
inson, Crane, Chesnutt, Gilman, and others working in
modes of realist and naturalist novel, regional and
vernacular prose, and popular genre fiction. Milton,
Defoe, Blake, Coleridge, Shevchenko, Bowles, P/NP or
letter grading.

171. Later 19th-Century Poetry. (5) Lecture,
four hours; discussion, one hour (when scheduled).
Enforced requisites: courses 10A, 10B, or 11 and 87.
Survey of major British poets from 1900 to present.
P/NP or letter grading.

172A. Drama, 1850 to 1945. (5) Lecture, four
hours; discussion, one hour (when scheduled). En-
forced requisites: courses 10A, 10B, or 11 and 87.
Survey of major British novelists and short story
writers from 1900 to present. P/NP or letter grading.

172C. Contemporary American Fiction. (5) Lecture,
four hours; discussion, one hour (when scheduled).
Requisites: courses 10A, 10B, or 11 and 87. Study of American
fiction from beginning of 20th century to end of World War II. P/NP or letter
grading.

173B. American Poetry since 1945. (5) Lecture,
four hours; discussion, one hour (when scheduled).
Enforced requisites: courses 10A, 10B, or 11 and 87.
Study of American poetry since end of World
War II. P/NP or letter grading.

173C. Contemporary American Poetry. (5) Lecture,
four hours; discussion, one hour (when scheduled).
Requisites: courses 10A, 10B, or 11 and 87. Study of American
poetry, mostly by living authors, with emphasis on emergent issues and poetic forms.
May be repeated for credit with topic or instructor change. P/NP or letter grading.

174. American Fiction, 1900 to 1945. (5) Lecture,
four hours; discussion, one hour (when scheduled).
Requisites: courses 10A, 10B, or 11 and 87. Study of American
novels and short stories from begin-
ing of 20th century to end of World War II. P/NP or
letter grading.

174B. American Fiction since 1945. (5) Lecture,
four hours; discussion, one hour (when scheduled).
Requisites: courses 10A, 10B, or 11 and 87. Study of American
novels and short stories since end of
World War II. P/NP or letter grading.

174C. Contemporary American Fiction. (5) Lecture,
four hours; discussion, one hour (when scheduled).
Requisites: courses 10A, 10B, or 11 and 87. Study of American
novels and short stories, mostly by living authors, with emphasis on emergent issues and
aesthetics. May be repeated for credit with topic or
instructor change. P/NP or letter grading.

175. American Nonfictional Prose. (5) Lecture,
four hours; discussion, one hour (when scheduled).
Enforced requisites: courses 10A, 10B, or 11 and 87. Study of American
nonfictional prose (essays, autobiographies, travel narratives, and other). Partic-
ular genre and/or historical period vary with instructor. May be repeated for credit with topic or
instructor change. P/NP or letter grading.

176. Hemispheric American Literature. (5) Lecture,
four hours; discussion, one hour (when scheduled).
Enforced requisites: courses 10A, 10B, or 11 and 87. Examination of primarily North American
literature from hemispheric rather than nation-based perspec-
tive. Historic breadth in study of American literature
while posing such crucial theoretical issues as emer-
geance of US Empire or relationship between North America and global south, including Africa, Latin America, and Caribbean. May be repeated for credit with topic or instructor change. P/NP or letter grading.

177. Interdisciplinary Studies of American Culture. (5) Lecture, four hours; discussion, one hour (when scheduled).
Enforced requisites: courses 10A, 10B, or 11 and 87. Interdisciplinary study of American
literature in its relationships to other disciplines, including
art, architecture, film, history, anthropology and var-ious social sciences, with emphasis on application of
literary methodology to historical survey of American
culture. May be repeated for credit with topic or
instructor change. P/NP or letter grading.

179. Topics in Literature, circa 1850 to Present. (5)
Lecture, four hours; discussion, one hour (when scheduled).
Enforced requisites: courses 10A, 10B, or 11 and 87. Examination of major British
dramatic works from or about this time period. Consult Schedule of Classes for subject
to be studied in specific term. May be
repeated for credit with topic or instructor change. P/NP
or letter grading.
179R. Topics in Literature, circa 1850 to Present: Seminar, three or four hours. Enforced requisites: courses 10A, 10B, 10C, or 11 and 87. Consult Schedule of Classes for author, period, genre, or subject to be studied in specific term. May be repeated for credit with topic or instructor change. P/NP or letter grading.

180. Topics in Language and Literature. Seminar, three or four hours. Enforced requisites: courses 10A, 10B, 10C, or 11 and 87. Consult Schedule of Classes for author, period, genre, or subject to be studied in specific term. May be repeated for credit with topic or instructor change. P/NP or letter grading.

180R. Junior Research Seminar. Seminar, three hours. Enforced requisites: courses 10A, 10B, 10C. Strongly recommended for students who plan to enroll in capstone seminars. Study of range of approaches to literary and cultural research, including archival, literary critical, and theoretical to equip students with skills working with primary sources, secondary criticism, and online databases. Specific literatures vary with instructor. May not be repeated for credit. P/NP or letter grading.

181A. Topics in Genre Studies. Seminar, three or four hours. Requisites: courses 10A, 10B, and 10C, or 11 and 87. Consult Schedule of Classes for author, period, genre, or subject to be studied in specific term. May be repeated for credit with topic or instructor change. P/NP or letter grading.

181B. Topics in Interdisciplinary Studies. Seminar, three or four hours. Enforced requisites: courses 10A, 10B, 10C. Consult Schedule of Classes for author, period, genre, or subject to be studied in specific term. May be repeated for credit with topic or instructor change. P/NP or letter grading.

181C. Topics in Critical Theory. Seminar, three or four hours. Enforced requisites: courses 10A, 10B, 10C. Consult Schedule of Classes for author, period, genre, or subject to be studied in specific term. May be repeated for credit with topic or instructor change. P/NP or letter grading.

181D. Topics in Imperial, Transnational, and Postcolonial Studies. Seminar, three or four hours. Enforced requisites: courses 10A, 10B, 10C. Consult Schedule of Classes for author, period, genre, or subject to be studied in specific term. May be repeated for credit with topic or instructor change. P/NP or letter grading.

182A. Topics in Medieval Literature. Seminar, three or four hours. Enforced requisites: courses 10A, 10B, 10C. Consult Schedule of Classes for author, period, genre, or subject to be studied in specific term. May be repeated for credit with topic or instructor change. P/NP or letter grading.

182B. Topics in Renaissance and Early Modern Literature. Seminar, three or four hours. Enforced requisites: courses 10A, 10B, 10C. Consult Schedule of Classes for author, period, genre, or subject to be studied in specific term. May be repeated for credit with topic or instructor change. P/NP or letter grading.

182C. Topics in 18th-Century Literature. Seminar, three or four hours. Enforced requisites: courses 10A, 10B, 10C. Consult Schedule of Classes for author, period, genre, or subject to be studied in specific term. May be repeated for credit with topic or instructor change. P/NP or letter grading.

182D. Topics in 19th-Century Literature. Seminar, three or four hours. Enforced requisites: courses 10A, 10B, 10C. Consult Schedule of Classes for author, period, genre, or subject to be studied in specific term. May be repeated for credit with topic or instructor change. P/NP or letter grading.

182E Topics in 20th- and 21st-Century Literature. Seminar, three or four hours. Requisites: courses 10A, 10B, and 10C, or 11 and 87. Consult Schedule of Classes for author, period, genre, or subject to be studied in specific term. May be repeated for credit with topic or instructor change. P/NP or letter grading.

183A. Topics in Colonial America. Seminar, three or four hours. Requisites: courses 10A, 10B, 10C, or 11 and 87. Consult Schedule of Classes for author, period, genre, or subject to be studied in specific term. May be repeated for credit with topic or instructor change. P/NP or letter grading.

183B. Topics in 19th-Century American Literature. Seminar, three or four hours. Requisites: courses 10A, 10B, and 10C, or 11 and 87. Consult Schedule of Classes for author, period, genre, or subject to be studied in specific term. May be repeated for credit with topic or instructor change. P/NP or letter grading.

183C. Topics in 20th- and 21st-Century American Literature. Seminar, three or four hours. Requisites: courses 10A, 10B, and 10C, or 11 and 87. Consult Schedule of Classes for author, period, genre, or subject to be studied in specific term. May be repeated for credit with topic or instructor change. P/NP or letter grading.

184. Capstone Seminar: English, Seminar, three hours. Requisites: courses 10A, 10B, and 10C, or 11 and 87. Consult Schedule of Classes for author, period, genre, or subject to be studied in specific term. May be repeated for credit with topic or instructor change. P/NP or letter grading.

188A. Individual Studies for USIE Facilitators. Seminar, three hours. Requisites: courses 10A, 10B, and 10C, or 11 and 87, and completion of at least four upper-division courses required for major. Consult Schedule of Classes for author, period, genre, or subject to be studied in specific term. May be repeated for credit with topic or instructor change. P/NP or letter grading.

188B. Individual Studies for USIE Facilitators. Seminar, three hours. Requisites: courses 10A, 10B, and 10C. Consult Schedule of Classes for author, period, genre, or subject to be studied in specific term. May be repeated for credit with topic or instructor change. P/NP or letter grading.

188C. Individual Studies for USIE Facilitators. Seminar, three hours. Requisites: courses 10A, 10B, and 10C. Consult Schedule of Classes for author, period, genre, or subject to be studied in specific term. May be repeated for credit with topic or instructor change. P/NP or letter grading.

189HC. Honors Contracts. Seminar, one hour. Enforced requisite: course 198A. Limited to students in College Honors Program. Designated as Gender Studies M191E and Lesbian, Gay, Bisexual, Transgender, Queer Studies M191E.) Seminar, three or four hours. Enforced requisite: English Composition 3. Consult Schedule of Classes for author, period, genre, or subject to be studied in specific term. May be repeated for credit with topic or instructor change. P/NP or letter grading.

191H. Honors Research Seminars: English. Seminar, three hours. Enforced requisite: course 120 through 126. Open only to students who are eligible and apply for honors program in English. Introduction to research techniques and study of various approaches and applications of critical methodology as it relates to interpretation and evaluation of texts. Development and presentation of proposals for honors projects. Consult undergraduate adviser. May be repeated for credit. Letter grading.

191P. Careers in Humanities. Seminar, three hours. Enforced requisite: course 120 through 126. Open only to students who are eligible and apply for honors program in English. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be repeated for credit with different topic, different faculty mentor required. May not be repeated. Letter grading.

198HC. Honors Contracts. Tutorial, three hours. Limited to students in College Honors Program. Designed for major, minor, or senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to finalize course syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.

199H. Honors Research Colloquium in English. Seminar, three hours. Enforced requisite: courses 199A, or 198B. Designed to bring together students under-taking supervised tutorial research for departmental honors in seminar setting with one or more faculty members to discuss their own work in progress and critical readings related to honors projects. Led by one supervising faculty member. May be repeated for credit. P/NP grading.

M191A. Topics in African American Literature. Seminar, three or four hours. Enforced requisite: English Composition 3. Variable specialized studies course in African American literature. Topics may include Harlem Renaissance, African American literature in New Orleans, works of contemporary African American fiction, African American poetry. May be repeated for credit with topic or instructor change. P/NP or letter grading.

M191B. Topics in Chicana/Chicano and/or Latina/ Latino Literature. Seminar, three or four hours. Enforced requisite: English Composition 3 or 3H. Variable specialized studies course in Chicana/Chicano and/or Latina/Latino literature. Topics include labor and literature; Chicana/Chicano journalism; literary New Mexico; specific literary genres. May be repeated for credit with topic or instructor change. P/NP or letter grading.

M191C. Topics in American Literature. Seminar, three or four hours. Enforced requisite: English Composition 3 or 3H. Variable specialized studies course in Asian American literature. Topics may include genres (autobiography, novel, dramatic,) and cultural/ historical specific nationalities within Asian American community; themes of transnational migration; cross-cultural, interdisciplinary, or intercultural negotiation; and gender and queer politics. Reading, discussion, and development of culminating project. May be repeated for credit with topic or instructor change. P/NP or letter grading.

M191D. Topics in Queer Literatures and Cultures. Seminar, three or four hours. Enforced requisite: English Composition 3. Variable specialized studies course in Asian American literature. Topics may include genres (autobiography, novel, dramatic,) and cultural/ historical specific nationalities within Asian American community; themes of transnational migration; cross-cultural, interdisciplinary, or intercultural negotiation; and gender and queer politics. Reading, discussion, and development of culminating project. May be repeated for credit with topic or instructor change. P/NP or letter grading.

M191E. Topics in Gender and Sexuality. Seminar, three or four hours. Enforced requisite: English Composition 3. Variable specialized studies course in Asian American literature. Topics may include genres (autobiography, novel, dramatic,) and cultural/ historical specific nationalities within Asian American community; themes of transnational migration; cross-cultural, interdisciplinary, or intercultural negotiation; and gender and queer politics. Reading, discussion, and development of culminating project. May be repeated for credit with topic or instructor change. P/NP or letter grading.

M191P. Careers in Humanities. Seminar, three hours. Enforced requisite: course 120 through 126. Open only to students who are eligible and apply for honors program in English. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be repeated for credit with different topic, different faculty mentor required. May not be repeated. Letter grading.

M192. Undergraduate Practicum in English: Journals. Seminar, three hours. Enforced requisite: English Composition 192 and Environment M192.) Seminar, two hours. Training and supervised practicum for undergraduate student editors of campus journals supervised by faculty members in...
English, Institute of the Environment and Sustainability, and/or Writing Programs. May be repeated for credit. P/NP or letter grading.

193. Colloquia and Speakers’ Series Undergraduate Seminars: English. (1) Seminar, one hour. Limited to undergraduate students. Discussion of current critical and theoretical readings by chosen authors by students. May be repeated for credit. P/NP or letter grading.

195CE. Community and Corporate Internships in English. (4) Tutorial, to be arranged; fieldwork, eight to 10 hours. Limited to juniors/seniors. Internship in corporate, governmental, or nonprofit setting coordinated through Center for Community Learning. Students complete weekly written assignments, attend biweekly meetings with graduate student coordinator, and write final research paper. Faculty sponsor and graduate student coordinator construct series of reading assignments that examine issues related to internship site. May not be applied toward major requirements. May be repeated for credit with consent of Center for Community Learning. Individual contract with supervising faculty member required. P/NP or letter grading.

197. Individual Studies in English. (2 to 5) Tutorial, four to five hours. Directed study, with scheduled meetings to be arranged between faculty member and student. Assigned reading and tangible evidence of mastery of subject matter required. Individual contract required. P/NP or letter grading.


199. Directed Research or Senior Project in English. (2 to 8) Tutorial, to be arranged. Limited to juniors/seniors. Supervised individual literary research and creative projects under guidance of faculty mentor. Culminating paper or project required. May be repeated for credit. Individual contract required. P/NP or letter grading.

Graduate Courses


201A. Criticism and Interpretation from Classical Era to Renaissance. (4) Lecture, three hours. Examination of major texts in history of critical theory and interpretation from pre-Socratics to Descartes, including classical literary criticism (Plato, Aristotle, Horace, Longinus), biblical hermeneutics (Bible, Midevil, St. Paul, St. Augustine, St. Thomas Aquinas), and medieval and Renaissance theories of interpretation (Dante, Boccaccio, Sidney). S/U or letter grading.

201B. Aesthetics and Criticism from Enlightenment to Decadence. (4) Lecture, three hours. Continuation of course 201A, proceeding from neoclassical and Enlightenment critical theory through Victorian and decadent aesthetic and literary criticism. Readings may include texts by Burke, Pope, Hume, Kant, Schiller, the Schlegels, Coleridge, Hegel, Schelling, Arnold, Pater, Wilde, and Nietzsche. S/U or letter grading.

201C. Developments and Issues in Modern Critical Thought. (4) Seminar, four hours. Study of major figures and ideas in modern and contemporary critical theory. Readings vary from year to year but may include such figures as Freud, Durkheim, Saussure, Heidegger, Sartre, Benjamin, Adorno, Levi-Strauss, Lacan, Barthes, Derrida, Deleuze, Fanon, Foucault, Irigaray, Lyotard, Bourdieu, and Bhabha. S/ U or letter grading.


205A. Special Topics: History and Methods. (4) Same as Scandinavian M271.) Seminar, three hours. Examination of scholarly and literary attempts to study, define, analyze, promote, and/or appropriate original works of literature from the invention of vingins of vernacular literatures, European romantic (rediscovery of oral tradition, 20th-century heuristic models of oral composition, and modern-day electronic media and popular verbal genres, such as jok ing and rapping. S/U or letter grading.

205B. Collecting Oral Tradition. (4) (Same as Scandinavian M272.) Seminar, three hours. Description and evaluation of various modern approaches to collecting and documenting oral tradition as text, performance, and sociocultural event. Consideration of approaches ranging from written transcription and textualization to audio and video presentation. S/U or letter grading.

205C. Studies in Oral Traditional Genres. (4) (Same as Scandinavian M273.) Seminar, three hours. Exploration in depth of variety and history of, and scholarship on, particular oral traditional genre (e.g., ballad, song, epic, proverb, riddle, folktale, legend) or set of closely related oral traditional genres. S/U or letter grading.


211. Old English. (4) Lecture, four hours. Study of Old English grammar, lexicon, phonology, and pronunciation.enable students to read literature silently and aloud. Reading of as much of more interesting Old English prose and poetry as can be read in one term. S/U or letter grading.

212. Middle English. (4) Lecture, four hours. Requisite course 211. Detailed study of linguistic aspects of Middle English and of representative examples of better prose and poetry. S/U or letter grading.


215. Geography of Latin and Vernacular Manuscripts, 900 to 1500. (4) Same as Classics M218, French M210, and History M218.) Lecture, three hours; discussion, two hours. Introduction to history of Latin and vernacular manuscript book from 900 to 1500 to (1) train students to make informed judgments with regard to place and date of origin, (2) provide samples in specified genre (poetry, fiction, or drama), and (3) examine manuscript book as witness to changing society that produced it. Focus on relationship between Latin manuscripts and ver-nacular manuscripts with regard to their respective presentation of written texts. S/U or letter grading.


217A–217B. Medieval Welsh. (4) Lecture, four hours. Topics in various aspects of structure of modern English, especially syntax and semantics. May be repeated for credit. S/U or letter grading.

218A. Language and Literature. (4) Seminar, three hours. Application of linguistic methods to literary analysis. In- dividual seminars dealing with one historical period (medieval and Renaissance, neoclassical, or 19th cen-tury and modern), specific authors, or contributions of specific groups of linguists to literary analysis. S/U or letter grading.

244. Old and Medieval English Literature. (4) Seminar, four hours. Studies in poetry and prose of Old and Medieval English literature; limits of investigation set by individual instructor. May be repeated for credit. S/U or letter grading.

245. Chaucer. (4) Lecture, four hours. May be re-peated for credit. S/U or letter grading.


247. Shakespeare. (4) Lecture, three hours. May be repeated for credit. S/U or letter grading.


250. Restoration and 18th-Century Literature. (4) Seminar, three hours. Studies in English poetry and prose, 1660 to 1800; limits of investigation set by indi-vidual instructor. May be repeated for credit. S/U or letter grading.

251. Romantic Writers. (4) Seminar, three hours. May be repeated for credit. S/U or letter grading.

252. Victorian Literature. (4) Lecture, three hours. Studies in English poetry and prose of Victorian pe-riod; limits of investigation set by individual instructor. May be repeated for credit. S/U or letter grading.

253. Contemporary British Literature. (4) Lecture, three hours. May be repeated for credit. S/U or letter grading.


255. Contemporary American Literature. (4) Lecture, three hours. Studies in contemporary American poetry and prose; limits of investigation set by individual instructor. May be repeated for credit. S/U or letter grading.

256. Studies in Drama. (4) Lecture, three hours. Studies in drama as genre from its beginning to present; limits of investigation set by individual in-structor. May be repeated for credit. S/U or letter grading.
M257. Studies in Poetry. (4) Lecture, three hours. Studies in various themes and forms of poetry from Old English to present; limits of investigation set by individual instructor. May be repeated for credit. S/U or letter grading.

M258. Studies in Novel. (4) Seminar, three hours. Studies in evolution of genre from its beginning to present; limits of investigation set by individual instructor. May be repeated for credit. S/U or letter grading.

M259. Studies in Criticism. (4) Lecture, three hours. May be repeated for credit. S/U or letter grading.

M260. Topics in Asian American Literature. (4) (Same as Asian American Studies M260.) Seminar; three hours. Graduate seminar that examines and critically evaluates writings of Asian Americans. May be repeated for credit. S/U or letter grading.

M260A. Topics in Chicana/Chicano Literature. (4) (Same as Chicana and Chicano Studies M289.) Seminar, three hours. Intensive research and study of major themes, issues, and authors in Chicana/Chicano literature and culture. Examination of political, aesthetic, economic, and cultural context that emerged in Chicana and Chicano discourse; limits of investigation set by individual instructor. May be repeated for credit. S/U or letter grading.


M263. Celtic Literature. (4) Lecture, three hours. Preparation: knowledge of one ancient or modern Celtic language. Studies in poetry and prose of early and modern Celtic literatures, chiefly Irish and Welsh; limits of investigation set by individual instructor. May be repeated for credit. S/U or letter grading.

M264. Studies in Rhetoric. (4) Lecture, three hours. Special topics in classical and modern rhetoric, including substantial practice in rhetorical analysis of literary texts. May be repeated for credit. S/U or letter grading.

M265. Postcolonial Literatures. (4) Seminar, three hours. Study of aesthetic, historical, and social background of former British colonies that became independent after 1947. General issues related to way imperialism, colonialism, and postcolonialism have helped to shape and have been shaped by literature in English. May be repeated for credit. S/U or letter grading.

M266. Cultural World Views of Native America. (4) (Same as American Indian Studies M200B.) Seminar, three hours. Exploration of written literary texts from oral cultures and other expressive cultural forms—dance, art, song, religious and medicinal ritual—in selected Native American societies, as these traditional and tribal contexts have been translated into contemporary literary texts such as poetry, essay, and drama. Survey, from secondary sources, of interdisciplinary methodological approaches taken from literary analysis, structural anthropology, folklore, linguistics, and ethnomusicology. May be repeated for credit with instructor and/or topic change. Letter grading.

M270. Seminar: Literary Theory. (3) (Same as Comparative Literature M294.) Seminar, three hours. Advanced interdisciplinary seminar to explore philosophical, historical, and critical foundations of literary theory as well as current issues in literary and cultural studies. S/U or letter grading.

M290. Science Communications and Environmental Media. (4) (Same as Environment M242.) Seminar; three hours. Designed for graduate students in food, energy, and water systems (FEWS) training grant program to survey fields of science communications and environmental narrative from nonfiction to new media (multimedia journalism, documentary, social media, virtual reality, etc.) and to develop collaborative projects communicating student research to diverse public audiences. Course is part of National Science Foundation (NSF) graduate traineeship in integrated urban solutions for food, energy, and water systems (INFWEWS). Enrollment for non-NEPFEWS students in STEM graduate education and related sustainability majors/topics by consent of instructor. S/U or letter grading.

M298. Interdisciplinary Studies in 17th and 18th Centuries. (4) (Same as History M298.) Discussion, four hours. Topics vary according to participating faculty. May be repeated for credit. S/U or letter grading.

M299. Interdisciplinary American Studies. (6) (Same as History M299.) Discussion, four hours. Readings, discussion, and papers on common theme, taught by faculty members from different departments. Topics vary according to participating faculty. May be repeated for credit with consent of instructor. S/U or letter grading.

375. Teaching Apprentice Practicum. (1 to 4) Seminar, to be arranged. Preparation: apprenticeship personnel employment as teaching assistant, associate, or fellow. Teaching apprenticeship under active guidance and supervision of regular faculty member responsible for curriculum and instruction at UCLA. May not be substituted for any departmental enrollment requirements. May be repeated for credit. S/U grading.


495A. Supervised Teaching Preparation. (4) Seminar, three hours. Required of all applicants for teaching assistantships in English. Introduction to teaching of literature intended to prepare teaching assistants for their first assignments in leading discussion sections. Practical concerns of creating assignments, grading papers, and holding conferences. S/U grading.

495B. Supervised Teaching Preparation. (3) Seminar, two hours. Required of all teaching assistants in their initial quarter of teaching. Mentoring and group teaching assistant/mentor conferences. S/U grading.


502. MA Research and Thesis Preparation. (4 or 8) Tutorial, to be arranged. Limited to graduate students. May not be applied toward any course requirement for degree. S/U grading.

599. PhD Dissertation Research. (4 or 8) Tutorial, to be arranged. Limited to PhD students unable to enroll in seminars in their fields or to students concurrently enrolled in such seminars. (Exception to this rule must be requested by petition.) S/U grading.

ENGLISH COMPOSITION

See Writing Programs

ENTREPRENEURSHIP

Interdisciplinary Minor

John E. Anderson Graduate School of Management

149 Kaplan Hall
Box 951330
Los Angeles, CA 90095-1330

Entrepreneurship
310-825-1389
E-mail contact

Alfred E. Osborne, Jr., PhD, Chair

Faculty Committee

Alfred E. Osborne, Jr., PhD (Management)
Nathan M. Wilson, PhD (Management)
Shi Zhang, PhD (Management)

Scope and Objectives

The Entrepreneurship minor introduces undergraduate students to the field of entrepreneurship. A key element of entrepreneurship is the concept of opportunity recognition where individuals or teams pursue business concepts without regard to immediate access to resources utilizing lean start-up principles. Faculty members from applied fields in the professional schools and industry collaborate with faculty from academic disciplines across the campus to provide a critical framework for questioning and connecting topics related to entrepreneurship.

Through a carefully developed core curriculum and an integrative capstone experience, students in the minor obtain both breadth and depth in their understanding of the concepts, frameworks, and practical implications of entrepreneurship.

Undergraduate Study

Entrepreneurship Minor

To enter the Entrepreneurship minor, students must (1) have an overall grade-point average of 3.0 or better and (2) submit an application supporting their interest in pursuing the minor. Applications are accepted in fall, winter, and spring quarters. To help plan the course schedule and internship/field experience, students are expected to work closely with the academic advisor. Applications are available on the minor website.

Required Lower-Division Course (4 or 5 units): Communication 1 or any Writing II course.

Required Upper-Division Courses (24 or 25 units):

Management 160, 161, 199 (4 units minimum), and three elective courses selected from Ancient Near East M105, Communication 109, M117, 133, 156, Dance C184, Digital Humanities 101, 150, Economics 106E, 173A, 173B, Environment 163, Ethnomusicology 105, Management 162, 163, 164, 167, Sociology 172. At least two of the three elective courses must be selected from the management courses listed above.

A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor.

Each minor course must be taken for a letter grade, and students must have an overall grade-point average of 3.0 or better.
average of 3.0 or better in the minor. Successful completion of the minor is indicated on the transcript and diploma.

**ENVIRONMENT AND SUSTAINABILITY, INSTITUTE OF THE**

**Center for Interdisciplinary Instruction**

**College of Letters and Science**

300 La Kretz Hall
Box 951496
Los Angeles, CA 90095-1496

Environment and Sustainability
310-825-5008

Peter M. Kareiva, PhD, Director

Professors

- Paul H. Barber, PhD
- Daniel T. Blumstein, PhD
- William C. Boyd, JD, PhD
- Ann E. Carlson, JD
- Judith A. Carney, PhD
- Yoram Cohen, PhD
- Charles J. Corbett, PhD
- Magali A. Delmas, PhD
- Elizabeth M. DeLoughrey, PhD
- J.R. DeShazo, MSc, PhD
- Rajit Gadh, PhD
- Thomas W. Gillespie, PhD
- Alexander D. Hall, PhD
- Susanna B. Hecht, PhD
- Ursula K. Heise, PhD (Marcia H. Howard Term Professor of Literary Studies)
- Shailly Mahendra, PhD
- Timothy Malloy, JD
- James C. McWilliams, PhD
- Mary D. Nichols, JD, in Residence
- Gregory S. Okin, PhD
- Edward A. Parson, MSc, PhD (Dan and Rae Emmett Endowed Professor of Environmental Law)
- Suzanne E. Paulson, PhD
- Laurent G. Pilon, PhD
- Stephanie S. Pincetl, PhD, in Residence
- Michael L. Ross, PhD
- Lawren Sacik, PhD
- H. Bradley Shaffer, PhD
- Monica L. Smith, PhD
- Thomas B. Smith, PhD
- Victoria L. Sork, PhD
- Michael K. Stenstrom, PhD
- Irwin H. Suffet, PhD
- Claire Van Valkenburgh, PhD
- Alex Wang, JD
- Robert K. Wayne, PhD
- Yifang Zhu, PhD

Professors Emeriti

- Richard F. Ambrose, PhD
- Randall D. Crane, PhD
- J. Nicholas Entrikin, PhD
- John R. Froines, PhD
- Malcolm S. Gordon, PhD
- Patricia A. Gowaty, PhD
- William M. Hamner, PhD
- Stephen P. Hubbell, PhD
- David D. Jackson, PhD

Richard J. Jackson, MD, MPH
Paul M. Ong, PhD
Antony R. Orme, PhD
Philip W. Rundel, PhD
Keith D. Stolzenbach, PhD
Richard P. Turco, PhD
Richard R. Vance, PhD
Arthur M. Winer, PhD

**Associate Professors**

- Alan J. Barreca, PhD
- Allison B. Carmuth, PhD (Waldo W. Neikirk Term Professor)
- Deepak Rajagopal, PhD
- Aradhna K. Tripathi, PhD

**Assistant Professors**

- Liz Koslov, PhD
- Karen A. McKinnon, PhD
- Pablo E. Saide, PhD
- Robert Eagle Tripathi, PhD

**Adjunct Professors**

- Mark A. Gold, DENV
- Susan S. Szabo, PhD

**Adjunct Associate Professors**

- Travis R. Longcore, PhD
- Rebecca F. Shipe, PhD

**Adjunct Assistant Professors**

- Jon A. Christensen, PhD
- Trevor L. Fuller, PhD
- Ryan J. Harrigan, PhD
- Emily L. Lindsay, PhD
- Kevin Y. Njia, PhD
- Kristen C. Ruegg, PhD
- Virginia M. Zaunbrecher, JD

**Scope and Objectives**

The mission of the UCLA Institute of the Environment and Sustainability (IoES) is to advance cross-disciplinary research, teaching, and public service on matters of critical importance to the planet and the campus community. The environment is defined broadly to include the interrelated issues of global climate change, loss of biological diversity, and threats to human health and well-being from the use and misuse of natural resources, applying all the tools of scientific and policy analysis as well as moral and aesthetic values to the work. The environment is a crucial component of sustainability, which is defined as the simultaneous consideration of environmental, economic, and social concerns. Los Angeles itself is a vital asset to this mission. As an international mega-city located in one of the world’s most biologically diverse regions, Los Angeles is a magnet for scholars from around the world who are facing similar issues of pollution, access to potable water, demand for energy, fragmentation of habitat, and the need to restore ecological function to sprawling urban settlements in a manner that supports economic growth and that is socially just and equitable.

The IoES offers creative, multidisciplinary academic programs and courses that address the full complexity of current environmental problems and sustainable solutions. The Bachelor of Science degree in Environmental Science is an innovative dual-component degree program for students seeking a challenging and innovating science curriculum. The first component, the Environmental Science major, provides students with disciplinary breadth in several areas important to environmental science. The second component, a minor or concentration in one of seven environmental science areas, provides students with focused disciplinary depth in an area of their choosing. The minor in Environmental Systems and Society is designed for students who wish to gain a deeper understanding of the relationships between environmental science and associated social and political issues.

The IoES also sponsors Environment MIA, MIB, MICW and Clusters MIA, MIB, MICW titled Food: Lens for Environment and Sustainability. The cluster format is a series of three integrated freshman team-taught courses over the fall, winter, and spring quarters. The fall and winter quarter courses consist of lectures and discussions. The spring quarter consists of seminars and activities in which students explore specialized food-related environmental and sustainability topics such as sustainable agriculture, food culture and justice, and strategies for feeding the growing human population.

At the graduate level, the IoES offers two degree programs and a graduate certificate. The first program is the Environmental Science and Engineering (DEnv) professional doctorate program that was founded in 1973 by Nobel laureate Dr. Willard Libby, who perceived a need to train environmental scientists, engineers, and policymakers in a more interdisciplinary manner than is afforded by traditional PhD programs. The program is designed with an appropriate balance of breadth and specific skills, based on a strong master’s-level foundation in a science or engineering discipline. The curriculum consists of formal coursework across a full spectrum of relevant physical, biological, social, and engineering disciplines, as well as interdisciplinary research training and an off-campus residency where students complete their dissertation embedded in an agency, business, or non-profit organization. UCLA remains unique in the country in awarding the Doctor of Environmental Science and Engineering degree.

The second program is the Environment and Sustainability PhD program that was launched in 2018. The program equips students with diverse perspectives to develop profound new ideas, knowledge and answers to the most important concerns facing people and the planet. The program provides a deep understanding of how fundamental principles of environmental science and sustainability can be applied to research and address key environmental challenges that require skills in multiple disciplines—preparing students for a range of careers in academia, as well as public and private sectors. To promote interdisciplinary as the core of the program’s identity, each student’s program of study and dissertation research are guided by two advisors from distinct areas of research and scholarship.

The national award-winning Leaders in Sustainability graduate certificate program is free to UCLA graduate students pursuing degrees in any discipline. Companies, consumers, and governments across the world increasingly focus on making products, services, operations, and lives more sustainable. The certificate program gives students the tools to make that happen in a collaborative, action-oriented setting. By bringing together students and faculty from diverse academic fields, the program fosters cross-pollination for innovative ideas and solutions. Each graduate student takes a core sustainability class along with electives of their choos-
The Environmental Science major has the following Learning Outcomes:

- Students must formally apply to and be accepted by a particular department. With assistance from IoES staff, students are expected to contribute meaningfully to the analysis and solution of particular environmental science issues involving multiple disciplines and stakeholders with different perspectives. Those completing the major should possess critical thinking skills, problem-solving abilities, and familiarity with essential computational, data collection, and analysis skills, as well as demonstrate effective oral and written communication skills. Graduates should also be able to identify key ethical issues and analyze the consequences of various professional dilemmas, as well as work productively as part of a team.

**Environmental Science BS**

**Capstone Major**

The Environmental Science BS program represents strong collaboration between the Institute of the Environment and Sustainability and the departments of Atmospheric and Oceanic Sciences; Civil and Environmental Engineering; Earth, Planetary, and Space Sciences; Ecology and Evolutionary Biology; Environmental Health Sciences; and Geography. The program is designed for students who are deeply interested in the study of environmental science. There are two components to the program, and both must be completed to receive the degree. The first component, the Environmental Science major, requires completion of lower-division requirements grounded in basic natural sciences, a five-course upper-division environmental science requirement reflecting the disciplinary breadth of environmental science, three social sciences/humanities courses, participation in a sustainability-focused speaker series, and completion of an environmental science practicum. The second component is a minor or concentration in one of seven environmental science areas, each associated with a particular department. With assistance from IoES staff, students must formally apply to and be accepted by the associated department to receive the minor.

**Learning Outcomes**

The Environmental Science major has the following learning outcomes:

- Ability to apply theories or concepts from coursework to analysis of issues in the field
- Ability to make meaningful contribution to analysis and solution of particular issues involving multiple disciplines and stakeholders with different perspectives
- Critical thinking skills, problem-solving abilities, and familiarity with computational and data collection and analysis procedures essential to the field
- Ability to identify ethical issues raised by a particular issue
- Ability to analyze the consequences of various professional dilemmas
- Ability to work productively with others as part of a team
- Effective oral and written communication skills

**Preparation for the Major**

Required: Chemistry 14A, 14B, and 14BL (or 20A, 20B, and 20L), Environment 10, Geography 7, Life Sciences 7A, 7B, Mathematics 3A and 3B (or 31A and 31B, or Life Sciences 30A and 30B), Physics 5A and 5C (or 1A and 1B), Statistics 12 or 13 (or Life Sciences 40).

For the atmospheric and oceanic sciences minor, Chemistry and Biochemistry 14C (or 30A) or Mathematics 3C (or 32A) or Physics 1C (or SB) is also required.

For the conservation biology minor, Chemistry and Biochemistry 14C (or 30A) or Life Sciences 7C and 23L is also required.

For the Earth and environmental science minor, Chemistry and Biochemistry 14C (or 30A) or Mathematics 3C (or 32A) or Physics 1C (or SB), Earth, Planetary, and Space Sciences 1, and one course from 5, 13, 15, or 61 are also required.

For the environmental engineering minor, Mathematics 3C (or 32A) is also required.

For the environmental health concentration, Chemistry and Biochemistry 14C (or 30A) is also required.

For the environmental systems and society minor, one course from Chemistry and Biochemistry 14C (or 30A), Earth, Planetary, and Space Sciences 1, Life Sciences 7C (and 23L), Mathematics 3C (or 32A), and Physics SB (or 1C) is also required.

For the geography/environmental studies minor, one course from Chemistry and Biochemistry 14C (or 30A), Earth, Planetary, and Space Sciences 1, Life Sciences 7C (and 23L), Mathematics 3C (or 32A), and Physics SB (or 1C), plus Geography 5 and one course from 1, 2, 3, 4, or 6 are also required. Students should take these courses before enrolling in upper-division courses.

Each course applied toward requirements for preparation for the major must be passed with a grade of C– or better. Students receiving a grade below C– in two courses, either in separate courses or repetitions of the same course, are subject to dismissal from the major.

**Transfer Students**

Transfer applicants to the Environmental Science major with 90 or more units must complete as many of the following introductory courses as possible prior to admission to UCLA: two general chemistry courses with laboratory for majors, two general biology courses with laboratory for majors, two calculus courses, and two calculus-based physics courses.

Refer to the **UCLA transfer admission guide** for up-to-date information regarding transfer selection for admission.

**The Major**

The major consists of four requirements: physical and life science, social science and humanities, practicum/sustainability talks, and minor or concentration, as follows:

**Physical and Life Sciences Requirements**

- Required: Environment 175 and four additional courses from the following physical and life sciences areas. No more than two courses may be from any one department. Atmospheric and Oceanic Sciences 101, 102, 103, 104, M105, 107, 112, 130, 141, Chemical Engineering C118, Civil Engineering 153, 154, M166, Earth, Planetary, and Space Sciences 101, C113, 119, 139, 150, 153, Ecology and Evolutionary Biology 100, 109, 116, 151A, 154, Environment 121, 157, Environmental Health Sciences 100, C125, C152D, C164, Geography 101, M102, M103, 107, 116, 117, M118, 120, M126, 133.

**Social Sciences and Humanities Requirements**


**Practicum/Sustainability Talks Requirements**

- Required: Environment 180A, 180B, 180C, and two terms of 185A.

**Minor and Concentration Requirements**

A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor. Successful completion of a minor is indicated on the transcript and diploma.

For the atmospheric and oceanic sciences minor, seven 4-unit courses, including (1) three from Atmospheric and Oceanic Sciences M100, 101, 102, 103, 104, M105, M106, 107, C101, C115, M120, 130, 141, C144, 145, 150, 155, C160, C170, 180 and (2) four additional courses, two of which must be upper-division, from any of the above atmospheric and oceanic sciences courses beyond the minimum four required or from Atmospheric and Oceanic Sciences 1, 2, 3, 186 (must be taken twice), Chemistry and Biochemistry 103, 110A, 110B, 113A, C113B, 114, Earth, Planetary, and Space Sciences 15, Ecology and Evolutionary Biology 109, C119A, 122, 123A or 123B, 147, 148, Mathematics 115A, 115B, 122, 135, 136, 146, 170A, 170B, Physics 110A, 110B, 112, M122, 131, 132. Other relevant courses from related disciplines may be substituted with prior approval of the department. At least five courses approved for the minor must be upper-division. One course may be taken on a Passed/Not Passed basis.

The Environmental Systems and Society minor is designed for students who wish to augment their major program of study with courses addressing the relationships between environmental science and associated social and political issues. The minor seeks to impart a deeper understanding of environmental systems related to air, land, and water resources, providing a basis for sound professional decision making.

To enter the minor, students must be in good academic standing (2.0 grade-point average) and file a petition at the Institute of the Environment and Sustainability, 300 La Kretz Hall, 310-206-9913. Required Lower-Division Courses (8 units): At least two courses from Astronomy 3, Atmospheric and Oceanic Sciences 1, 2, 3, Earth, Planetary, and Space Sciences 1, 15, 16, 20, Ecology and Evolutionary Biology 10, 13, 25, Environment MA, 1B, 10, 12, 25, M30SL, Geography 1, 2, 5.

Required Upper-Division Courses (20 units): At least five courses from Environment MA11, MA12, MA26, MA131, 134, 150, MA135, 137, MA159, 160, MA162, 163, MA164, 166, MA167, 186 are required. A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor, and at least 16 units applied toward the minor must be taken in residence at UCLA. Transfer or substitution of credit for any of the above is subject to institute approval; consult with an academic adviser at the institute before enrolling in any courses for the minor. Each minor course must be taken for a letter grade, and students must have an overall grade-point average of 2.0 or better in the minor. Successful completion of the minor is indicated on the transcript and diploma.

Graduate Study

Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Division website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Graduate Degrees

The Institute of the Environment and Sustainability offers Master of Science (MS) and Doctor of Philosophy (PhD) degrees in Environment and Sustainability, and the Doctor of Environmental Science and Engineering (DEnv) degree.

Environment Lower-Division Courses

M1A-M1B-M1CW, Food: Lens for Environment and Sustainability, 6-6-6 (Same as Clusters M1A-M1B-M1CW) Course M1A is enforced requisite to M1B, which is enforced requisite to M1CW. Limited to first-year freshmen. Letter grading. M1A-M1B, Lecture, three hours; discussion, two hours. Food as lens for local and global environmental and sustainability issues. Integration of environmental, social, economic, and technological solutions for fair, sustainable, and healthy food production, food security, and access. Focus on human impacts on Earth’s biological and physical systems, including how food production and consumption contribute to, and is impacted by, global problems, including climate change, pollution, and overpopulation. Laboratory exercises included in discussions. M1CW, Special Topics Seminar, three hours.

Enrolled requisite: course M1B. Examination of specialized environmental and sustainability topics as they relate to food, including air, water, biodiversity, climate change, food access, food security, and health. Satisfies Writing II requirement.

10. Introduction to Environmental Science, 4 (Formerly numbered M10.) Lecture, three hours; laboratory, one hour. Limited to undergraduate students. Introduction to environmental science as discipline and as way of thinking. Discussion of environmental and societal issues at local and global scales. Fundamentals of physical, chemical, and biological processes important to environmental science. Laboratory exercises included to augment lectures. Letter grading.

12. Sustainability and Environment, 4. Lecture, three hours; discussion, one hour. Introduction to sustainability with emphasis on environmental component, including Earth’s physical, chemical, and biological processes as related to resource demands and management. Examination of application of scientific method in helping to understand and solve sustainability problems. Case studies illustrating how natural and social scientists work on environmental sustainability issues. Focus on global climate change, biodiversity, pollution, and water and energy resources pre- sented in context of creating sustainable human society that is environmentally sound, economically viable, and socially just and equitable. Letter grading.

19. Fiat Lux Freshman Seminars, 1 Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

25. Good Food for Everyone: Health, Sustainability, and Culture. (3) Lecture, three hours; discussion, one hour. Good food is healthy, sustainably produced, and culturally meaningful. Introduction to basic concepts and history of food systems, food science and nutrition, fair and sustainable food production, natural resources and environmental issues including climate change and biodiversity, agriculture and food policy and law, food distribution and access, cultural identity and artistic engagements with food. P/NP or letter grading.

M30. Environmental Literature and Culture. (5) (Same as English M30.) Lecture, three hours; discussion, one hour. Requiredquisite: satisfaction of Entry-Level Writing requirement. Introduction to core themes, questions, and methods within interdisciplinary field of environmental humanities. Examination of how different culture forms (e.g., fiction, journalism, poetry, visual art) represent environmental issues. Topics may include biodiversity, wilderness, food, urban ecologies, postcolonial ecologies, environmental justice, and climate change. Service learning component included meaningful work with off-campus agency/ agencies selected by instructor. P/NP or letter grading.

M30SL. Environmental Literature and Culture (Service Learning). (5) (Same as English M30SL.) Lecture, three hours; discussion, one hour; fieldwork, two hours. Enrolled requisite: satisfaction of Entry-Level Writing requirement. Introduction to core themes, questions, and methods within interdisciplinary field of environmental humanities. Examination of how different culture forms (e.g., fiction, journalism, poetry, visual art) represent environmental issues. Topics may include biodiversity, wilderness, food, urban ecologies, postcolonial ecologies, environmental justice, and climate change. Service learning component includes meaningful work with off-campus agency/ agencies selected by instructor. P/NP or letter grading.

89. Honors Seminars, 1 Seminar, three hours. Limited to honors students. Lower-division, lower-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

89HC. Honors Contracts, 1 Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to lower-division lecture course. In- individual study with lecture course instructor to explore
topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in related courses (excluding those courses). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Courses

M102. Soils and Environment. (4) (Formerly numbered M127.) (Same as Ecology and Evolutionary Biology M127 and Geography M102.) Lecture, three hours; discussion, one hour; field trips. General treatment of soils and environmental implications: soil development, morphology, and worldwide distribution of soil orders; physical, chemical, hydrologic, and biological properties; water use, erosion, and pollution; management of soils as related to plant growth and distribution. (4)

M102L. Soils and Environment: Field. (1) (Formerly numbered M127L) (Same as Ecology and Evolutionary Biology M127L and Geography M102L) Laboratory, one hour; field excursions. Corequisite: course M102, and permission of instructor. Demonstrations supporting material in course M102, including excavating, describing, and naming soils in field, soil forming processes, geosequences, and soils. P/NP or letter grading.

M103. Soil and Water Conservation. (4) (Formerly numbered M114.) (Same as Geography M103.) Lecture, three hours; discussion, one hour. Enforced requisites: one course from course 10, Geography 1, 2, Life Sciences 7B. Open for graduate/undergraduate. Systematic study of processes of and hazards posed by erosion, sedimentation, development, and pollution and techniques needed to conserve soil and maintain environmental quality. Scope includes agriculture, forestry, mining, and other rural uses of land. P/NP or letter grading.

M111. Earth and Its Environment. (4) (Same as Atmospheric and Oceanic Sciences M100.) Lecture, three hours. Overview of Earth as system of distinct, yet intimately related, physical and biological elements. Origins and characteristics of atmosphere, oceans, crust, and mechanism of evolution and of life on Earth, particularly in relation to evolution of physical world. Consideration of possibility of technological solutions to global environmental problems using knowledge gained during course. Letter grading.

121. Conservation of Biodiversity. (4) Lecture, three hours; discussion, two hours. Not open for credit to students with credit for Ecology and Evolutionary Biology 116. Examination of interrelation of natural biotic and human systems. Description of distribution of biodiversity and natural processes that maintain it. Critical analysis of various levels of threats and multidimensionality and challenges required for mitigating threats. Letter grading.

M125. Environmentalism: Past, Present, and Future. (4) (Formerly numbered M132.) (Same as Geography M125 and Urban Planning M165.) Lecture, three hours; discussion, one hour. Exploration of historical and origin of major environmental ideas, movements or countermovements they spawned, and new and changing nature of modern environmentalism. Introduction to theoretical perspectives and critical thinking and the current environmental challenges and the historical and political context in which they are situated. Critical analysis of major environmental movements and their contributions to environmental thinking and action. Letter grading.

M126. Environmental Change. (4) (Formerly numbered M130.) (Same as Geography M126.) Lecture, three hours; reading period, one hour. Designed for juniors/seniors. Examination of natural forces producing environmental changes over past two million years. How present landscape reflects past environments. Effects of environmental change on people. Increasing importance of human activity in environmental modification. Focus on impact of natural and anthropogenic changes on present conditions. Letter grading.

M131. Human Impact on Biophysical Environment. (4) (Formerly numbered M109.) (Same as Geography M131.) Lecture, three hours; reading period, one hour. examines the role of humans in interaction with biophysical environment, including global climate change, risks of pandemics, deforestation, and environmental justice impacts of warfare. Letter grading.

M152. Environmental Science. (4) (Former as Sociology M115 and Sociology M116.) Lecture, three hours; discussion, one hour. Relationship between society and environment. Analysis in detail of intersections between social factors (such as class, race, gender, and ethnicity) and environmental factors (such as pollution, sustainability, and global warming). P/NP or letter grading.

M133. Environmental Sociology. (4) (Same as Sociology M133 and Sociology M115.) Lecture, three hours; discussion, one hour. Relationship between society and environment. Analysis in detail of intersections between social factors (such as class, race, gender, and ethnicity) and environmental factors (such as pollution, sustainability, and global warming). P/NP or letter grading.

134. Environmental Economics with Data Analysis. (4) (Formerly numbered M134.) Lecture, three hours. Enforced requisites: one course from Economics 41, Life Sciences 40, Political Science 10, 12, 13 and other statistical analysis course approved by instructor. Examination of challenges of balancing environmental protection with needs and demands of people and economy. Focus on how to design efficient public policies that meet environmental goals. How to quantify cause-and-effect relationships, for example, between pollution and infant mortality, using non-experimental data. Letter grading.

140. Foundations of Environmental Policy and Regulation. (4) Lecture, three hours. Introduction to environmental policy and regulation in U.S. Provides basic knowledge and skills needed to work as professional in environmental problem solver. Exploration of environmental harms that are subject to regulation, role of science in informing policy and regulation, evolution of environmental regulation, different types of regulatory outcomes, rules, and alternative approaches to environmental decision making. Includes California Environmental Quality Act (CEQA), Proposition 65, Environmental Justice Act of 1990, and pollution control, and state's pioneering efforts in regulating greenhouse gas emissions. P/NP or letter grading.

150. Environmental Journalism, Science Communication, and Policy. (4) Lecture, three hours. Introduction to environmental journalism, science communications, and new media, including weekly guest lectures by prominent successful practitioners in wide variety of media. Focus on technologies, methods, genres, and theories of communicating environmental challenges, exploring solutions, and engaging public in newspapers, television, radio, magazines, books, and social media. Discussion of possibilities and limitations of different media and importance of communications for environmental science, policy, public understanding, and individual actions. Exploratory production of drafts of environmental communications in variety of media. P/NP or letter grading.

frustration. Emphasis on solutions involving integrated water supply and wastewater systems. Leadership development through writing instruction and negotiations and media training. P/NP or letter grading.

M167. Environmental Justice through Multiple Lenses. (4) (Same as Public Affairs M161 and Urban Planning M167.) Lecture, three hours. Examination of intersection between race, economic class, and environment in U.S., with focus on issues related to social justice. Broad focus on multiple inequality is high-level complex phenomenon, multidisciplinary and multi-population approach taken, using alternative ways of understanding, interpreting, and taking action. P/NP or letter grading.

170. Environmental Science Colloquium. (1) Seminar, 90 minutes; one field trip. Limited to undergraduate students. Study of current topics in environmental science, including participation in weekly colloquium series and field trips. May be repeated for credit. P/NP grading.

175. Programming with Big Environmental Datasets. (4) Lecture, three hours, discussion, two hours. Enrolled required: Statistics 12 or 13. Limited to Environmental Science majors who have completed 40 or more units of preparation for major courses, including statistics, and 12 or more units of upper-division courses toward major or minor requirements. Examination of case studies and presentation of tools and methodologies in environmental science, building on what students have been exposed to in other courses. Letter grading.

180A. Practicum in Environmental Science. (4) Lecture, three hours; fieldwork, two hours. Enrolled required: Statistics 12 or 13. Limited to Environmental Science majors who have completed 40 or more units of preparation for major courses, including statistics, and 12 or more units of upper-division courses toward major or minor requirements. Examination of case studies and presentation of tools and methodologies in environmental science, building on what students have been exposed to in other courses. Letter grading.

180B. Practicum in Environmental Science. (5) Lecture, one hour; laboratory, five hours. Required: course 180A. Course 180B is requisite to 180C. Limited to junior/senior Environmental Science majors. Investigation of various aspects of one environmental case study representing actual multidisciplinary issue. Particular emphasis on developing skills required for working as professionals in this field. Work may involve site investigations, original data collection and analysis, mapping and geographic information systems, and environmental policy and law issues. Course study to be conducted with faculty mentor and relevant stakeholders of local agency or nonprofit institution. Letter grading.

180C. Practicum in Environmental Science. (5) Lecture, one hour; laboratory, five hours. Required: course 180B. Limited to junior/senior Environmental Science majors. Investigation of various aspects of one environmental case study representing actual multidisciplinary issue. Particular emphasis on developing skills required for working as professionals in this field. Work may involve site investigations, original data collection and analysis, mapping and geographic information systems, and environmental policy and law issues. Course study to be conducted with faculty mentor and relevant stakeholders of local agency or nonprofit institution. Letter grading.

185A. Sustainability Talks. (1) Lecture, two hours. Analysis of principles of sustainability through series of lectures by distinguished environmental leadership, authors, environmentalists, entrepreneurs, policymakers, and progressive thinkers. May be repeated for credit. P/NP grading.

185B. Sustainability Action Research. (2) Lecture, two hours; fieldwork, six hours. Investigation of issues of campus sustainability, including energy efficiency, transportation, waste stream management, sustainable food practices, and more by student research groups. The group is composed of student researchers that, together with faculty members and UCLA staff, strive to make UCLA more sustainable community. May be repeated for credit. Letter grading.

185C. Sustainability Action Leaders. (3) Seminar, two hours; fieldwork, six hours. Students lead research teams to investigate issues of campus sustainability, including energy efficiency, transportation, waste stream management, sustainable food practices, and more. Teamwork required. Students and researchers that, together with faculty members and UCLA staff, strive to make UCLA more sustainable community. May be repeated for credit. Letter grading.

186. Comparative Sustainability Practices in Local/Global Settings. (4) Fieldwork and comparative analysis. Emphasis on comparing role of local and regional culture, geography, economic climate, and governmental policies on sustainability awareness and practices. Use of observations, interviews, and unobtrusive measures to document and analyze role and influence of local/global context on sustainability behavior of individuals, small businesses, and other institutions in everyday life. Letter grading.

188A. Special Courses in Environment. (4–2) Lecture, three hours; discussion, one hour (when scheduled—course 188A) and two hours (course 188B). Departmentally sponsored experimental or temporary courses and projects. May be repeated for credit, but only 4 units may be taken each term. Individual contract required. Letter grading.

188A. Special Courses in Environment. (4–2) Lecture, three hours; discussion, one hour (when scheduled—course 188A) and two hours (course 188B). Departmentally sponsored experimental or temporary courses and projects. May be repeated for credit, but only 4 units may be taken each term. Individual contract required. Letter grading.

188B. Special Courses in Environment. (4) Tutorial, to be arranged. Enforced prerequisite: Honors College 101E. Enrolled for USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to discuss selected USIE seminar topic, conduct preparatory research, and begin preparation of syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.

188B. Special Courses in Environment. (4) Tutorial, to be arranged. Enforced prerequisite: course 188A. Enforced prerequisite: Honors College 101E. Individual study in regularly scheduled meetings with faculty mentor to discuss selected USIE seminar topic, conduct preparatory research, and begin preparation of syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.

188C. Special Courses in Environment. (4) Tutorial, to be arranged. Enforced prerequisite: course 188B. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to finalize course syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.

188C. Special Courses in Environment. (4) Tutorial, to be arranged. Enforced prerequisite: course 188B. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to finalize course syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.

188D. Special Courses in Environment. (4) Tutorial, to be arranged. Enforced prerequisite: course 188C. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to finalize course syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.

188D. Special Courses in Environment. (4) Tutorial, to be arranged. Enforced prerequisite: course 188C. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to finalize course syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.

188E. Special Courses in Environment. (4) Tutorial, to be arranged. Enforced prerequisite: course 188D. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to finalize course syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.

188F. Special Courses in Environment. (4) Tutorial, to be arranged. Enforced prerequisite: course 188E. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to finalize course syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.

188G. Special Courses in Environment. (4) Tutorial, to be arranged. Enforced prerequisite: course 188F. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to finalize course syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.

188H. Special Courses in Environment. (4) Tutorial, to be arranged. Enforced prerequisite: course 188G. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to finalize course syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.

188I. Special Courses in Environment. (4) Tutorial, to be arranged. Enforced prerequisite: course 188H. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to finalize course syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.

188J. Special Courses in Environment. (4) Tutorial, to be arranged. Enforced prerequisite: course 188I. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to finalize course syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.

188K. Special Courses in Environment. (4) Tutorial, to be arranged. Enforced prerequisite: course 188J. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to finalize course syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.

188L. Special Courses in Environment. (4) Tutorial, to be arranged. Enforced prerequisite: course 188K. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to finalize course syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.

188M. Special Courses in Environment. (4) Tutorial, to be arranged. Enforced prerequisite: course 188L. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to finalize course syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.

188N. Special Courses in Environment. (4) Tutorial, to be arranged. Enforced prerequisite: course 188M. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to finalize course syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.

188O. Special Courses in Environment. (4) Tutorial, to be arranged. Enforced prerequisite: course 188N. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to finalize course syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.

190. Fieldwork, four hours. Designed for students in science, technology, engineering, and mathematics (STEM) field interested in nexus of food, energy, and water systems (FEWS) management and sustainability. Discussion of issues of science, technology, policy, economics, and law with experts in industry, academia, and government. Course development activities including conflict resolution, business and entrepreneurship. Course is part of National Science Foundation (NSF) graduate traineeship in integrated urban solutions for food, energy, and water systems (infEWS). Enrollment for non-infEWS students in STEM graduate education and related sustainability majors/topics by consent of instructor. S/U grading.

240. Food, Energy, and Water Systems Management Seminar. (1) Seminar, one hour. Designed for students in science, technology, engineering, and mathematics (STEM) field interested in nexus of food, energy, and water systems (FEWS) management and sustainability. Discussion of issues of science, technology, policy, economics, and law with experts in industry, academia, and government. Course development activities including conflict resolution, business and entrepreneurship. Course is part of National Science Foundation (NSF) graduate traineeship in integrated urban solutions for food, energy, and water systems (infEWS). Enrollment for non-infEWS students in STEM graduate education and related sustainability majors/topics by consent of instructor. S/U grading.

241. Food, Energy, and Water Systems Management in Urban Systems Field Laboratory. (4) Fieldwork, four hours. Designed for students in science, technology, engineering, and mathematics (STEM) field interested in nexus of food, energy, and water systems (infEWS) management and sustainability. Weekly visits to facilities related to FEWS, and discussion of issues of science, technology, policy, economics, and law in written report. Course is part of National Science Foundation (NSF) graduate trainee-
ship in integrated urban solutions for food, energy, and water systems (INFEWS). Enrollment for non-INFEWS students in STEM graduate education and related sustainability majors/topics by consent of instructor. S/U or letter grading.

M242. Science Communications and Environmental Media. (4) (Formerly numbered 242.) (Same as English M290.) Seminar, three hours. Designed for graduate students in food, energy, and water systems (FEWS) training grant program to survey fields of science communications and environmental narrative from nonfiction to new media (multimedia journalism, documentary, social media, virtual reality, etc.), and to develop collaborative projects communicating science to diverse public audiences. Course is part of National Science Foundation (NSF) graduate traineeship in integrated urban solutions for food, energy, and water systems (INFEWS). Enrollment for non-INFEWS students in STEM graduate education and related sustainability majors/topics by consent of instructor. S/U or letter grading.

250. Tools for Sustainability Assessment. (4) Lecture, three hours. Introduction to sustainability assessment techniques. Topics include social-ecological systems approach, sustainability indicators, and sustainability assessment frameworks. Prerequisites: CA 140A or consent of instructor. S/U or letter grading.

C259. Life-Cycle Assessment. (4) Lecture, three hours. Requisites: Life Sciences 30A and 30B, or Mathematics 3A and 3B (or 31A and 31B). Public discussion about current patterns of production and consumption of energy and various goods and services suggests such patterns are unsustainable. What is meant by sustainability and how is it quantified? Focus on concepts and tools to assess sustainability at micro-level of individuals, products, or firms using various techniques, including life-cycle assessment, input-output analysis, and cost-benefit analysis. Preparation for oral qualifying examination. S/U grading.


M413. Advanced Technical Writing. (2) Seminar, two hours. Development of advanced technical writing skills, with exercises focused on preparation of manuscripts for publication in peer-reviewed journal. S/U grading.


501. Cooperative Program. (2 to 8) Tutorial, to be arranged. Preparation: consent of UCLA graduate advisor and graduate dean, and host campus instructor, department chair, and graduate dean. Used to record enrollment of UCLA students in courses taken under cooperative arrangements with USC. S/U grading.


599. Doctoral Dissertation Research. (2 to 12) Tutorial, to be arranged. Limited to students who have advanced to doctoral candidacy. May not be applied toward any degree course requirements. May be repeated for credit. S/U grading.
The department offers MS and PhD degrees in Environmental Health Sciences and, through the Fielding School of Public Health, the MPH degree with a specialization in environmental health sciences (see Public Health Schoolwide Programs). The department also offers an area of focus on industrial hygiene for its MS and MPH degrees. A concurrent degree program (Environmental Health Sciences MPH/Urban Planning MURP) is also offered. The interdepartmental Molecular Toxicology program offers a PhD degree.

Graduate Study

Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Division website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Graduate Degrees

The Department of Environmental Health Sciences offers Master of Science (MS) and Doctor of Philosophy (PhD) degrees in Environmental Health Sciences.

Environmental Health Sciences

Lower-Division Courses

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

89. Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designated as adjunct to lower-division lecture course. Involves study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors credit noted on transcript. P/NP or letter grading.

89HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designated as adjunct to lower-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors credit noted on transcript. Letter grading.

99. Student Research Program. (1 to 2) Tutorial ( supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Courses

100. Introduction to Environmental Health. (4) Lecture, three hours; discussion, one hour. Preparation: one course each in chemistry and biology. Introduction to environmental health, including coverage of sanitary principles and chronic and acute health effects of environmental contaminants. P/NP or letter grading.

101. Fundamentals of Chemistry for Environmental Health. (3) Lecture, three hours; discussion, one hour. Guided tutorial on fundamental chemical concepts that are important for public health students that either do not have strong background in chemistry or who have not recently taken chemistry class and want to refresh their knowledge. Discussion of examples relevant to environmental health more broadly in each topic area and used to illustrate why understanding fundamental chemical concepts is important. Interactive study with focus on core chemical concepts. Recommended to be taken before or concurrently with introductory courses. P/NP or letter grading.

125. Atmophereic Chemistry. (4) Lecture, four hours. Preparation: one year of calculus, one course each in physics, organic chemistry, and physical chemistry. Designed for science, engineering, and public health students. Role of regional or long-range transport, and atmospheric lifetimes and fates of airborne chemicals in phenomena such as photochemical smog, acid deposition, stratospheric ozone depletion, accumulation of greenhouse gases, and regional and global distribution of volatile toxic compounds. Concurrently scheduled with course C225. P/NP or letter grading.

135. Environmental Policy for Science and Engineering. (4) Lecture, four hours. Limited to seniors and undergraduate and graduate students. Examination of theoretical underpinnings of several major types of regulatory policy, as well as practical issues involved in implementing and overseeing. Exploration of selection and impact of regulatory forms from variety of disciplines and viewpoints. Focus on traditional command and control regulation (including self-executing performance standards and permitting) versus market-based regulation (such as emissions trading), remediation, and emerging regulatory approaches such as management-based regulation and alternative assessment. Issues of compliance and enforcement. Concurrently scheduled with course C225. P/NP grading.

140. Fundamentals of Toxicology. (4) Lecture, four hours. Preparation: one course each in biology, organic chemistry, and biochemistry. Essential aspects of toxicology, with emphasis on human species. Absorption, distribution, excretion, biotransformation, as well as basic toxicologic processes and organ systems. Concurrently scheduled with course C240. Letter grading.

152D. Properties and Measurement of Airborne Particles. (4) Lecture, four hours. Preparation: one year each of chemistry, physics, and calculus. Basic theory and application of aerosol science to environmental health, including properties, behavior, sampling, and measurement of aerosols and quantitative problems. Concurrently scheduled with course C252D. P/NP or letter grading.

157. Risk Assessment and Standard Setting. (4) Seminar, four hours. Requisite: course C140. Designed to provide students with opportunity to review scientific basis for association of selected occupational and environmental exposures with disease. Special emphasis on critical evaluations of literature. Attention specifically to interface of science and regulatory standards. Concurrently scheduled with course C257. P/NP or letter grading.


166. Environmental Microbiology. (4) Same as Civil Engineering 166L. Lecture, four hours; discussion, two hours; outside study, six hours. Requisite: Civil Engineering 153. Microbial cell and its metabolic capabilities, microbial genetics and its potentials, growth of microbes and kinetics of growth, microbial ecology and diversity, microbiology of waste water treatment, probing of molecular of public health microbiology, pathogen control. Letter grading.

M166L. Environmental Microbiology and Biotechnology Laboratory. (1) Same as Civil Engineering M166L. Laboratory, two hours per week per unit. Two hours. Prerequisite: course M166. General laboratory practice within environmental microbiology, sampling of environmental samples, classical and modern molecular techniques for enumeration of microbes from environmental samples, techniques for determination of microbial activity in environmental samples, laboratory methods for studying environmental biotechnology. Letter grading.

C185A. Foundations of Environmental Health Sciences. (6) Lecture, six hours. Preparation: one year of undergraduate biology and chemistry. Introduction to field of environmental health sciences designed for students pursuing MS degrees. Examination of series of topics relevant to science of environmental health (e.g., population, agriculture/food, microbiology, energy, climate change, water, waste, air) by introducing scientific basis from ecological perspective and describing how topics relate to health on biochemical and molecular basis. Emphasis on scientific aspects of field, with focus on critique of primary literature and quantitative approaches for examination of topics to provide skills that are critical to perform research. Concurrently scheduled with course C200A. Letter grading.

C185B. Foundations of Environmental Health Sciences for Public Health Professionals. (2) Lecture/seminar, two hours. Preparation: 4 units each of undergraduate chemistry and biology. Future environmental health and public health leaders must understand vocabulary and systems related to local, regional, and global environmental factors affecting public health. Development of technical knowledge and thought processes to effectively analyze environmental health problems and development, implementation, and leading of actions to address these problems. Supplements content presented in Public Health 200A and 200B and Environmental Health 100. Concurrently scheduled with course C200C. Letter grading.

C185C. Foundations of Environmental Health Sciences. (6) Lecture, four hours; group project, two hours. Enforced requisite: course C185A or C185B. Multidisciplinary aspects of environmental health sciences in context of public health for environmental health majors. Concurrently scheduled with course C200C. Letter grading.

189. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Examination of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors credit noted on transcript. P/NP or letter grading.

189HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to upper-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors credit noted on transcript. Letter grading.

197. Individual Studies in Environmental Health Sciences. (2 to 4) Tutorial, four hours. Limited to juniors/seniors. Individual intensive study, with scheduled meetings to be arranged between faculty member and student. Assigned reading and tangible evidence of mastery of subject matter required. May be repeated for credit. Individual contract required. P/NP or letter grading.

Graduate Courses

C200A. Foundations of Environmental Health Sciences. (6) Lecture, six hours. Preparation: one year of undergraduate biology and chemistry. Introduction to field of environmental health sciences designed for students pursuing MS degrees. Examination of series of topics relevant to science of environmental health
200. Built Environment and Health. (4) Lecture, three hours; discussion, one hour. Limited to public health and urban planning graduate students. Interdisciplin- ary course on built environment and health and breaking down silos. U.S. and other developed, as well as developing countries are facing increasingly lethal and costly epidemics of acute and chronic dis- eases related to land use and built environment deci- sions. While hazards presented by air and water pollu- tion are well recognized for acute, intergenerational and toxico- biological illnesses, there is increasing recognition of hazards presented by building and community de- signs that fail to recognize human health. Land use and as well as built environment are facing an age group and social and racial minority. Impacts range from very acute (motor vehicle trauma) to long term (obesity, cancer, heart disease). Decisions have as their bases economic, financial, insurance, housing, and other factors. Analysis of each factor and related disease endpoints. S/U or letter grading.

209. Practical Applications in Environmental Health Sciences. (2) laboratory, two hours. Enforced requisites: courses C200A, C200B. Description of many leading environmental and occupational health problems that environmental health practitioners face today, con- ducted as seminars, assignments, hands-on field exercises, and group projects, to help students develop skills necessary to integrate concepts across disciplines in field of environmental health. May satisfy some requirements needed to qualify for Registered Environmental Health Specialist (REHS) certification. S/U or letter grading.

211. Applied Ecology. (4) Seminar, four hours. Preparation: one year of elementary biology. En- couraged requisite: Microbiology 101 or 102. Designed for environmental health scientists graduate students and students in UCLA Biosafety Program. Inter- active seminar with focus on critical concepts in in- and practical aspects of biosafety, biosecurity, risk as- sessment, and risk management that are needed for individuals wishing to serve as interns in UCLA bio- safety program and/or become biosafety profes- sionals. S/U or letter grading.


214. Children’s Environmental Health: Prenatal and Childhood Development. (4) Seminar, three hours; discussion, one hour. Examination of a wide variety of microbial topics. S/U or letter grading.
401A. Instrumental Methods in Environmental Science. (4) Lecture; four hours; discussion; two hours; other; two hours. Preparation: one year each of physics, chemistry, and biology. Theory and principles of instrumental methods through lectures and group discussions. Letter grading.

401B. Instrumental Methods Laboratory in Environmental Health Sciences. (4) Lecture; one hour; discussion; one hour; laboratory; four hours; other; two hours. Preparation: one year each of physics, chemistry, and mathematics. Requirements: courses C200A, C200B. Laboratory techniques and instrumentation used in preparation and analysis of biological, environmental, and occupational samples. Letter grading.

410. Environmental Health Sciences Seminar. (2) Seminar, two hours. Required of graduate environmental health sciences students for one term each year. Current topics in environmental health in science, policy, and leadership. Speakers who are leading thinkers at interface of health and environment ad- dress important subjects of environmental health. May be repeated for credit. S/U grading.

412. Effective Technical Writing. (2) Same as Environmental Health Sciences 296G. Lecture, four hours. Preparation: identical to graduate-level methods/statistics course, basic epidemiology, methods, statistics, and philosophy. Review and presentation of peer-reviewed journal. S/U or letter grading.

414. Effective Oral Presentation. (2) Same as Environmental Health Sciences 296J. Seminar, two hours. Development of advanced technical writing skills, with exercises fo-cused on preparation of excellent technical writing for publication in peer-reviewed journal. S/U grading.


454. Health Hazards of Industrial Processes. (4) Lecture, two hours; field trips, four hours. Requisite: course 255. Industrial processes and operations and occupational health hazards that arise from them. Letter grading.

461. Water Quality and Health. (4) Lecture, three hours; discussion; one hour; assignments, three hours. Preparation: principles of biochemical monitor- ing and health surveillance to assess occupational and environmental exposures to organic and inorganic chemicals and physical factors. Letter grading.

471. Improving Worker Health: Social Movements, Policy Debates, and Public Health. (4) Same as Community Health Sciences 260H. Lecture, three hours; discussion, two hours. Introduction to oral presentations. Development of oral presentation skills, including content structure, visual aids, delivery, and audience interaction. S/U grading.

495. Teacher Preparation in Environmental Health Sciences. (2) Seminar, two hours. Preparation: 18 units of cognate courses in area of specialization. May not be applied toward master's degree minimum total course requirement. May be repeated for credit. S/U grading.

496. Directed Individual Study or Research. (2 to 8) Tutorial, to be arranged. Limited to graduate students. Individual guided studies under direct faculty supervi- sion. Only 4 units may be applied toward MPH and MS minimum total course requirement. May be re- peated for credit. S/U grading.

507. Preparation for Master's Comprehensive or Doctoral Qualifying Examinations. (2 to 8) Tutorial, to be arranged. Limited to graduate students. May not be applied toward any degree course requirements. May be repeated for credit. S/U grading.
Epidemiology

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Scope and Objectives
Epidemiology is the study of the distribution and determinants of disease in human populations. Epidemiologists study variations of disease incidence in relation to factors such as age, sex, race, environmental factors, lifestyle, demographic variables, occupational and social characteristics, place of residence, susceptibility, exposure to specific agents, or other pertinent characteristics. Also of concern are the temporal and special distribution of disease, examination of trends, and intervals between exposure to causative factors and onset of disease. The scope of the field extends from study of the patterns of disease to the causes of disease with the goal of control or prevention of disease. What distinguishes epidemiology from other clinical sciences is the focus on health problems in populations rather than in individuals, with the focus on public health.

Epidemiology is a young field with constantly expanding boundaries. The range of activities includes identifying determinants of population health, investigation and control of disease outbreaks, study of environmental and industrial hazards, evaluation of preventive or curative programs or treatments, and evaluation of the effectiveness and efficiency of intervention or control strategies. Many tools of epidemiology are shared with other fields such as microbiology, immunology, medicine, statistics, demography, and medical geography.

There is a growing core of epidemiologic methodology that includes the principles of study design and conduct, and statistical methods. Epidemiologic tools have become relevant for many other fields that study groups of people, e.g., genetics and epigenetics, global health, pharmacology, medicine, and many others.

Epidemiologists work in many settings, including academia, international health agencies, state and local health departments, federal government agencies and health programs, health maintenance organizations, and numerous research projects privately and publicly sponsored.

The objectives of the Department of Epidemiology fall into three broad categories—research, teaching, and community service. Degrees offered include the MS and PhD in Epidemiology, and, through the Fielding School of Public Health, the MPH with a specialization in epidemiology (see Public Health Schoolwide Programs).

Graduate Study
Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Division website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Graduate Degrees
The Department of Epidemiology offers Master of Science (MS) and Doctor of Philosophy (PhD) degrees in Epidemiology.

Epidemiology

Lower-Division Courses
19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.
99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Courses
100. Principles of Epidemiology. (4) Lecture, four hours; discussion, two hours. Preparation: one full biological sciences course. Introductory course to provide qualified undergraduate students with broad and comprehensive overview of concepts of epidemiology including elucidating public health problems in terms of magnitude, time, person, and place; critiquing epidemiologic studies; identifying and accessing key sources of data for epidemiologic assessment; using epidemiologic methods and calculating basic epidemiology measures for operational purposes; and communicating basic principles of epidemiology such as definitions of populations, sources of bias, causation for morbidity and mortality, risk and protective factors, and basics of study design. Letter grading.
CM175. Terrorism, Counterterrorism, and Weapons of Mass Destruction: Practical Approach. (5) (Same as Honors Collegium M175.) Seminar, three hours. Terrorism, its origins, and ways of addressing terrorism at local, national, and global levels. Guest speakers from variety of UCLA departments and from Los Angeles. Concurrently scheduled with course C275. P/NP or letter grading.
188SA. Individual Studies for USIE Facilitators. (1) Tutorial, to be arranged. Enforced corequisite: Honors Collegium 101E. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to discuss selected USIE seminar topics, conduct preparatory research, and begin preparation of syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.
188SB. Individual Studies for USIE Facilitators. (1) Tutorial, to be arranged. Enforced prerequisite: course 188SA. Enforced corequisite: Honors Collegium 101E. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor.
197. Individual Study in Epidemiology. (2 to 4) Tutorial, four hours. Limited to juniors/seniors. Individual intensive study, with scheduled meetings to be arranged between faculty member and student. Assigned reading and evidence of mastery of subject matter required. May be repeated for credit. Individual contract required. P/NP or letter grading.

Graduate Courses

200A. Methods I: Basic Concepts and Study Designs. (6) Lecture, three hours; discussion, one hour. Introduction of basic concepts and methods in epidemiology with emphasis on measuring disease occurrence, study design, and assessing causal relationships. Letter grading.


230. Epidemiology of Sexually Transmitted Diseases. (4) Lecture, four hours. Requisite: courses 100 or 200A, or Public Health 200A and 200B. Introduction to range of different methodologies used in epidemiologic research of cancer in recent stages. Analytical approaches to research on lifestyle determinants of health and disease. Consideration of how exposures at one stage of human lifespan influence health outcomes at multiple life stages. Analytical approaches to research on lifestyle determinants of health. S/U or letter grading.

246. Epidemiology of Aging. (2) Lecture, two hours. Pre requisites: course 100 or 200A, or Public Health 200A and 200B. Biological, quantitative, philosophical, and administrative considerations in epidemiologic cancer research. Hypothet e contraction and phrase of study design. Uses of descriptive epidemiology, cohort studies, case control studies, cluster design, and cancer control. S/U or letter grading.

249. Genetic Epidemiology I. (4) Lecture, two hours. Preparation: at least one course in epidemiology, biostatistics, and genetics. Basic concepts in emerging field of genetic epidemiology, with principal focus on genetic study of complex diseases, determining genetic contributions to disease, identifying genes and characterizing their main effects and interactions with environmental factors. S/U or letter grading.

M254. Nutritional Epidemiology I. (4) (Same as Community Health Sciences M251.) Lecture, two hours; discussion/laboratory exercise, one hour. Preparation: introductory biostatistics and epidemiology courses. Overview of all aspects of contemporary nutrition sciences that require application of epidemiologic principles and methods to foodborne outbreak investigation to evidence-based regulatory assessment of health claims for foods. Experiences in actual world of collecting, analyzing, and interpreting data related to nutritional and health or disease outcomes. S/U or letter grading.

environmental hazards. Topics include air pollution, pesticides, drinking water contaminants, use of GIS. Review of recently completed environmental studies published in peer-reviewed literature. S/U or letter grading.


255. Epidemiologic Methods in Occupational and Environmental Health. (4) Lecture, three hours. Introduction to epidemiologic methods applied to evaluation of human health consequences of occupational and environmental hazards, including study design, exposure assessment, and statistical techniques commonly encountered in research focused on assessing adverse health effects resulting from occupational and environmental exposures. Topics include clusters, meta-analysis, risk assessment, and policy development. Illustrated by case studies, with focus on technical critiques to critically evaluate and interpret current literature. Letter grading.

266. Global Health and Tropical Medicine. (4) Lecture, four hours. Introduction to tropical diseases and global health issues. Topics include the history of global health, global and regional political and economic factors associated with general susceptibility of populations to disease and subsequent mortality. Letter grading.

267. Methodologic Issues in Reproductive Epidemiology. (2) Seminar, two hours. General discussion of methodologic issues important to epidemiologic studies of reproductive outcomes, including fertility, low birth weight, prematurity, birth defects, pregnancy loss, and perinatal mortality. Approaches to study design and exposure assessment and identification of potential sources of bias illustrated through review of recent studies and discussion of special methodologic considerations for particular focus on occupational and environmental exposures and birth cohorts. S/U or letter grading.

268. Introduction to Pharmacoepidemiology, (2) Lecture, two hours. Requisites: course 100 or 200A, or Public Health 200A and 200B. Pharmacoepidemiology is application of epidemiologic knowledge, reasoning, and methods to study of effects and uses of drugs. Survey of basic roles of pharmacoepidemiology in drug development and public health, with historical background of its evolution and projections of future prospects. S/U or letter grading.

270. Behavioral Epidemiology. (4) Lecture, four hours. Requisites: courses 100, 200A, or Public Health 200A and 200B. Introduction to range of different methods of collection and analysis of behaviors studied in epidemiology research. Survey of methods to analyze, and interpret public on behaviors that can be associated with disease outcomes, including methods to collect survey data (i.e., design of questionnaires, interviewing techniques, use of technology to collect data) and methods to collect and analyze qualitative data (e.g., ethnographic interviews, focus groups, systematic observations). Overview information on epidemiology of key behavioral factors including, but not limited to, sexual risk behaviors, substance use, physical activity, and healthcare utilization. S/U or letter grading.

M272. Social Epidemiology. (4) Same as Community Health Sciences Lecture, two hours; discussion, one hour. Requisite: course 100 or Public Health 200A and 200B. Relationship between sociocultural, cultural, and psychosocial factors in etiology, occurrence, and control of morbidity and mortality. Emphasis on lifestyles and other socioeconomic factors associated with general susceptibility to disease and subsequent mortality. Letter grading.

273. Responsible Conduct of Research in Global Health Environmental Ethics. (2) Same as Public Health M273.) Lecture, two hours. Requisite: Community Health Sciences 200. Introduction to fundamental principles of public health ethics, current ethical procedures, guidelines, and requirements, and ethical issues facing public health professionals working in developing countries.

History of public health is presented with unique ethical issues of research in developing countries, the roles of ethical implications of informed consent, responsibility to study community, mechanisms of study approval, role of funders, and role and responsibilities of review boards. S/U or letter grading.


293. International HIV/AIDS Seminar. (2) Seminar, two hours. Requisites: courses 200A, 200B, and 200C (or 100) and/or 2620. Introduction to demands that go beyond pure science, with focus on issues such as risk communication, potential influence (and ethics) of oversight panels and external review groups on presenting results and conclusions, and interest of government agencies. S/U or letter grading.

295. Seminar: Epidemiology—Cancer. (2) Seminar, two hours. Requisite: course 100 or 200A, or Public Health 200A and 200B. Introduction of basic concepts of cancer epidemiology and review of current epidemiologic research in cancer in recent medical and epidemiologic literature. May be repeated for credit. S/U or letter grading.

375. Teaching Apprentice Practicum. (1 to 4) Seminar, to be arranged. Preparation: apprentice personnel employment as teaching assistant, associate, or fellow. Teaching apprenticeship under active guidance and supervision of regular faculty member responsible for course instruction at UCLA. May be repeated for credit. S/U grading.

400. Field Studies in Epidemiology. (4) Fieldwork, to be arranged. Field observation and studies in selected community or occupational health promotion, medical care. Students must file field placement and program training documentation on form available from Student Affairs Office. May not be applied toward MS minimum course requirement; 4 units may be applied toward 44-unit minimum total required for MPH degree. Letter grading.

401. Applied Epidemiologic Analysis. (4) Lecture, three hours. Requisites: course M403, Biostatistics 110B, Public Health 200A, 200B. Combines lectures, discussions, and laboratory assignments to offer conceptual understanding of analytic methods in epidemiology. Students develop basic proficiency in methods by conducting statistical analysis using epidemiologic data, with expectation that students pursue courses 200A and 200B in second year and develop expertise in methods they will use for their own research. S/U or letter grading.

403. Computer Management and Analysis of Health Data Using SAS. (4) (Same as Biostatistics M403B.) Lecture, two hours; laboratory, two hours. Introduction to practical issues in management and analysis of health data using SAS programming language. Cross-sectional and longitudinal population-based data sets to be used throughout to illustrate principles of data management and analysis for addressing biomedical and health-related hypotheses. Letter grading.


407A. Epidemiologic Research Using R. (2) Lecture, two hours; discussion, one hour. Requisite: course 100 or 200A, or Public Health 200A and 200B, or consent of instructor. Designed to broadly offer R coding experience, with emphasis on current data management, visualization, and analysis. Introduction of new concepts each week through guided interactive tutorials. May be repeated for credit. S/U grading.

407B. Applied Epidemiologic Research Using R. (2) Lecture, two hours. Requisite: course 407A. Designed to broadly offer R coding experience, with emphasis on data management, data description using tables and figures, and data analysis. Introduction of various concepts with data to facility interactive learning each week through guided R programming tutorials. Weekly R data analysis, in which students present their research for progress and feedback using real data. Each student performs secondary data analysis and prepares abstract, brief introduction, methods, and results part of submitable brief communication paper. Ongoing discussion of worldwide pandemic of HIV/AIDS, with emphasis on problems of surveillance, reporting, and intervention. Discussion of recent literature. Presentations by fellows from other countries. S/U or letter grading.

410. Management of Epidemiologic Data. (2) Letter, two hours. Data management for various epidemiologic study designs, confidentiality concerns; data management systems; introduction to mainframe computer. S/U or letter grading.

412. Public Health Surveillance. (2) Lecture. Requisites: course 100 or 200A, and Biostatistics 101A, or Public Health 200A and 200B. Overview of public health surveillance methodology, including (1) the implementation of surveillance systems, (2) analysis and interpretation of surveillance data, and (3) application of surveillance methods to specific health-related outcomes. S/U or letter grading.

413. Methods of Scientific Communication. (2) Lecture, two hours. Requisite: course 100 or 200A. Principles of scientific writing and communication. Application of principles to developing research proposals, and visual presentations of epidemiologic research findings. Communication issues arising in conduct of research, including informed consent process. S/U or letter grading.

420. Field Trials of Health Interventions in Low-Resource Settings. (4) Lecture, four hours. Requisite: course 200A, or Public Health 200A and 200B. Introduction to practical concepts and issues in conducting epidemiologic field research in developing countries, including formulating research questions, study site selection, ethical considerations, and logistics of data and specimen collection. S/U or letter grading.

495. Teacher Preparation in Epidemiology. (2) Seminar, two hours. Preparation: 18 units of cognate courses in area of specialization. May not be applied toward master’s degree requirement. May be repeated for credit. S/U grading.

501. Cooperative Program. (2 to 8) Tutorial, to be arranged. Preparation: consent of UCLA graduate adviser and graduate dean; and host campus instructor, department chair, and graduate dean. Used to record enrollment of UCLA students in courses taken under cooperative arrangements with USC. No more than 8 units may be applied toward master’s degree minimum course requirement. May be repeated for credit. S/U grading.

596. Directed Individual Study or Research. (2 to 8) Tutorial, to be arranged. Limited to graduate students. Individualized study under faculty supervision. Only 4 units may be applied toward MPH and MS minimum total course requirement. May be repeated for credit. S/U or letter grading.
Adjunct Assistant Professor
Supena I. Adler, PhD

Scope and Objectives

Ethnomusicology involves the study of all kinds of music from all over the world, using a variety of disciplinary perspectives. The Department of Ethnomusicology, the largest and first of its kind in a U.S. university, offers courses that cover the music of virtually every region of the world and of many ethnic groups in the U.S., as well as courses on popular music and film music. Most courses combine an interest in music as an art form with questions about how musical art and practice relate to other aspects of culture, society, politics, and economics. Courses are also given on the philosophy and aesthetics of music. In addition to lecture courses, the department offers performance ensemble courses in several world and American music traditions. At the undergraduate level, most of the performance courses are open to nonmajors, and many academic courses target nonmajors; prior knowledge of music is not expected or required. The Ethnomusicology Department is aligned with the departments of Music and Musicology and aspires to promote productive collaboration between performance and scholarship, a cross-cultural global understanding of the art of music, and preparatory training for a broad range of careers in music after students graduate.

The undergraduate major in Ethnomusicology emphasizes general world music, performance/composition, public ethnomusicology, and scholarly research. Admission requires an audition/interview. The major provides students with a wide-ranging liberal arts education in music. At its core, this includes (1) comprehensive knowledge of music cultures of the world; (2) understanding of the interrelationship of music, society, and culture; (3) grounding in the basics of Western music theory and musicianship; and (4) the experience of playing in one or several musical ensembles from various traditions around the world.

Beyond the core and emphasis requirements, students in the world music concentration may, through elective courses, prepare for a variety of career goals, including the study of ethnomusicology in graduate school, composing and performing music, working in the music industry, serving society in the nonprofit sector, or becoming a K through 12 music teacher.

At the graduate level, the department offers MA and PhD degrees in Ethnomusicology, with a specialization in systematic musicology or music and anthropology. Both degree programs train students for future university teaching careers, as well as careers in library science and archiving, the music industry, public service, and music technology. The department provides fellowships, teaching assistantships, and research assistantships for qualified students.

Undergraduate Study

The Ethnomusicology major is a designated capstone major. The capstone project is individualized to each student and requires a creative process either through music performance/composition, a research project, or an internship with a self-reflective journal detailing the process. Through that process, students are expected to demonstrate a broad knowledge base and competency in performance, writing, and/or composition and ability to apply knowledge and experience to the specific requirements of the capstone; conceive and successfully complete a project that is expressive of their specific interests and acquired expertise; and display, through written documentation or live presentation, the requisite communication and, in some cases, teamwork required by work in the field.

Ethnomusicology BA

Capstone Major

Learning Outcomes

The Ethnomusicology major has the following learning outcomes:

- Demonstrated broad knowledge and competency in performance, writing, and/or composition.
- Demonstrated ability to apply knowledge and experience to capstone requirements.
- Conception and successful completion of a project that is individually expressive of the student’s specific interests and acquired expertise.
- Written document or live presentation that displays requisite communication and teamwork required by work in the field.

Admission

Applicants are reviewed individually, based on a questionnaire, grade-point average, two letters of recommendation, test scores, a personal statement of purpose, and an on-campus interview/audition. Applicants who are unable to travel to UCLA have the option of a Skype interview/audition.

Preparation for the Major

All entering freshmen are required to take the Music Theory Assessment Examination either during New Student Orientation or during zero week of fall quarter. The examination score is used to determine eligibility and placement in first-year music core courses (Ethnomusicology M6A and Music 20A, 20B, 20C), and Music 20A, 20B, 20C). Examination results may require enrollment in Music 3 as a requisite to both Ethnomusicology M6A and Music 20A. Entering transfer students with fewer than 15 units of prior music theory must take the Music Theory Assessment Examination.

Required: Ethnomusicology M6A, M6B, M6C, with grades of C– or better; Music 20A, 20B, 20C, with grades of C or better; and 12 units of ethnomusicology world music performance organizations (courses 91A through 91Z), private instruction in music (course 92), and/or world music specializations (courses 68A through 68Z).

The Major

Required: Ethnomusicology 175 or 181, 183; 12 units from courses 161A through 161Z, 162, and/or 168A through 168Z; a minimum of eight upper-division ethnomusicology courses (32 to 36 units); and a capstone project in either (1) performance/compo-
sition, (2) public ethnomusicology, (3) scholarly research, or (4) other potential emphasis concepts in consultation with a faculty adviser.

Performance/Composition Capstone: Students must fulfill the capstone final project requirement (4 units) through a public recital (performance). Students must enroll in Ethnomusicology 199 (2 units) and pass a recital permission jury. Instrumental and vocal performers must present a portion of their recital performance, and composers must present excerpts from their recital scores in front of two faculty members. Students also enroll in Ethnomusicology 186 (2 units) during the term in which they perform their recital or their composition(s) are performed.

Public Ethnomusicology Capstone: Students must fulfill the capstone internship requirement, which consists of 8 units of Ethnomusicology 198, in an institution approved by the faculty sponsor. Students must write a final research paper (at least 10 pages) at the completion of each internship.

Scholarly Research Capstone: Students must write a capstone thesis (25 to 30 pages) and enroll in Ethnomusicology 199 (2 units minimum) for at least one term while writing the thesis.

Independent Capstone: In consultation with a faculty adviser, students can propose capstone projects in other potential emphasis concepts such as technologies, film scoring, interactive arts, dance, and more. Students must enroll in Ethnomusicology 199 (2 units minimum).

Ethnomusicology Minor

The Ethnomusicology minor is designed for students who wish to augment their major program with a group of related courses that provide a systematic introduction to the study of world music and performance.

To enter the minor, students must have an overall grade-point average of 2.0 or better and be in good academic standing; have completed one lower-division course with a grade of C or better; and have successfully completed at least two (2) quarters of the same lower-division ensemble course (Ethnomusicology 91A though 91Z).

Optional focus in Iraqi music: Students must select 91L as the lower-division ensemble course.

Required lower-division courses (9-10 units): Ethnomusicology 5 or M25, and one course from 7, M12A, M12B, 15, 30, M35, 40, 45, M50A, M50B, 60, or M73.

Required upper-division courses (22 units): Ethnomusicology 101; three courses (6 units) from the same performance ensemble course numbered from 161A to 161Z; and three upper-division elective courses from the department. No more than one course from 195A to 199 may be applied to the minor.

Optional focus in Iranian music: Ethnomusicology CI41, I42, I43, and three courses (6 units) of 161L.

A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor.

Each minor course must be taken for a letter grade, and students must have an overall grade-point average of 2.0 or better in the minor. Successful completion of the minor is indicated on the transcript and diploma.

Graduate Study

Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Division website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Graduate Degrees

The Department of Ethnomusicology offers Master of Arts (MA), Candidate in Philosophy (CPhil), and Doctor of Philosophy (PhD) degrees in Ethnomusicology.

Ethnomusicology

Lower-Division Courses

5. Music Around World. (5) Lecture, four hours; discussion, one hour; outside study, 10 hours. Overview of world’s musical traditions by selecting one or two case studies from each of nine world musical regions: Pacific, East Asia, Southeast Asia, South Asia, Middle East, Africa, Europe, Latin America, and U.S. and Canada. P/NP or letter grading.

M6A-M6B-M6C. Introduction to Musicianship. (2–2–2) Same as Music M6A-M6B-M6C and Musicology M6A-M6B-M6C.) Laboratory, four hours. Preparation: placement examination. Course M6A is enforced requirement to M6B. Students must receive grade of C- or better to proceed to next course in sequence. Introduction to musicianship through in-depth exploration of basic common musical elements and training in aural recognition, sight singing, dictation, and keyboard skills. Focus on topics such as tonal and modal harmony, rhythm, improvisation, composition, notation, and ear training to prepare students for later theory courses, participation in music ensembles, advanced study in music, and professional careers. Letter grading.

7. Introduction to Music and Culture of Iran. (4) Lecture, four hours; examination of Persian music in historical, social, linguistic, and cultural contexts. Discussion of musical forms, rules of improvisation, structure of modal system and rhythmic cycles, religious music, and modern Persian music. Consideration of interrelationships between musical genres and other art forms (dance, theater, visual arts, and literature) and analysis of how these types of music have intersected with issues of race, class, gender, religion, ritual, politics, social movements, and cultural identity. Includes detailed introduction to musical terms and concepts throughout. Letter grading.

M12A-M12B. African American Musical Heritage. (5–6) Formerly numbered M110A. (Same as African American Studies M12A-M12B and Global Jazz Studies M12A-M12B.) Lecture, four hours; discussion, one hour. P/NP or letter grading. M12A. Sociocultural history and survey of African American music covering Africa and its impact on America; music of 17th through 19th centuries; minstrelsy and its impact on representation of blacks in film, television, and theater; religious music, including hymns, reception, and development of gospel; black music of Caribbean and Central and South America; and music of black Los Angeles. M12B. Sociocultural history and survey of African American music covering blues, pre-1947 jazz styles, rhythm ‘n’ blues, soul, funk, disco, hip-hop, and symbiotic relationship between recording industry and effects of cultural politics on black popular music productions.

15. American Life in Music, (4) Lecture, three hours. Impact of ethnicity, race, gender, and other social processes on American music in late 20th century; use of and creativity in music to respond to and shape contemporary social processes. P/NP or letter grading.

19. Performance Studies in Jazz. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

20A-20B-20C. Musical Cultures of World. (5–5–5) Lecture, four hours; discussion, one hour; outside study, 10 hours. Enforced requisite: Music 20C with grade of C or better. Traditional and popular music from many different countries; introduction to basic ethnomusicological concepts and development of listening and analytical skills. Each course may be taken independently for credit. Letter grading. 20A. Europe and Russia; 20B. Africa and Near East; 20C. Asia.

M25, Global Pop. (5) (Formerly numbered 25.) (Same as Global Jazz Studies M25.) Lecture, four hours; discussion, one hour. Development of world music or world beat, including its meaning and importance to contemporary culture as well as its history and impact. P/NP or letter grading.

30. Music and Media. (5) Lecture, four hours; discussion, one hour. Exploration of ways music is mediated to people by industry, technologies, and corporations. Survey of trends in popular music and media, and exploitation of case studies. P/NP or letter grading.

M35. Blues, Society, and American Culture. (5) (Formerly numbered 35.) (Same as Global Jazz Studies M35.) Lecture, four hours; discussion, one hour. Sociocultural history and survey of blues music tradition from its roots in West Africa to its emergence in African American oral culture, with emphasis on philosophical underpinnings and social and political impact of blues and its influence on development of country, jazz, gospel, rhythm and blues, rock, hip-hop music, and other mediums. P/NP or letter grading.

40. Music and Religion. (5) Lecture, four hours; discussion, one hour. Survey of nature, role, and power of music in religious rituals around world, covering music and ritual of Hinduism, Buddhism, Judaism, Christianity, and Islam, as well as religious traditions of Native Americans and syncretic religious practices in Americas such as African American gospel music, Brazilian Candomble, Cuban Santeria, and Haitian vodou. Letter grading.

45. Music of Bollywood and Beyond. (5) Lecture, four hours; discussion, one hour; outside study, 10 hours. History and development of South Asian film scores in their filmic context, especially omnipresent songs that most distinctively characterize this genre. P/NP or letter grading.

M50A-M50B. Jazz in American Culture. (5–5) (Formerly numbered 50A-50B.) (Same as Global Jazz Studies M50A-M50B.) Lecture, four hours; discussion, one hour. Course M50A is not requisite to M50B. Survey of development of jazz in American culture. Discussion of different compositional/performance techniques and approaches that distinguish different sub-styles of jazz from one another, as well as key historical figures that shaped development of jazz from its early years through modern jazz. Important historical social issues (segregation, Depression, World War II, Civil Rights Movement) that intersect with history of U.S. and jazz music. P/NP or letter grading. M50A. Late 19th Century through 1940s; M50B. 1940s to Present.

60. J.S. Bach in His World and Ours. (5) Lecture, four hours; discussion, one hour. Examination of life and music of J.S. Bach in historical and cultural context of his era through its musical manifestations in present, including changes in performance styles, scholarly studies, reception, and contemporary fan culture. P/NP or letter grading.

68A-68B. World Music Specializations. (2–2) Activity; three hours; outside practice, three hours. Performance of specializations in traditional vocal music, instrumental music, and dance. May be repeated for credit without limit. P/NP or letter grading.

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M73. Music and Religion in Popular Culture. (9) (Same as American History M73.) Lecture, four hours; discussion, one hour. Survey of popular music in religious traditions since the 1970s. Growth of music in Jewish denominations, including Orthodox, Reform, and Conservative, and Christian contemporary music, from evangelical to cross-over artists performing in mainstream. Credit for both courses M73 and M713 not allowed. P/NP or letter grading.

89. Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to lower-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors credit noted on transcript. P/NP or letter grading.


92. Private Instruction in Music. (2) Studio, one hour. Limited to Ethnomusicology majors. Private or semiprivate music instruction with distinguished composition-based instructor that must be arranged by students and approved by instructor. May be repeated for credit without limitation. Letter grading.

99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP or letter grading.

Upper-Division Courses

C100. Audiospatial Archiving in 21st Century. (4) Seminar, three hours. Designed for Ethnomusicology majors. Examination of history, present state, and future of audiovisual media with specific focus on music, video, film, and digital culture. Access and issues related to technology, space, ethics, copyright, contracts, fieldwork, preservation, and access by musicians, students, and scholars who use music in their work. P/NP or letter grading.


106B. Contemporary North American Indian Music. (4) Lecture; three hours; discussion, one hour. Contact Native North American musical expression, including popular styles (folk, country, rock, intertribal) and Indian musical genres (powwow), rhythmic music, and traditional/historic Pan-Indian music. P/NP or letter grading.

M101A-108B. Music of Latin America. (5 to 9) Lecture, four hours; discussion, one hour. Course M101A is not required to 108B. Survey of traditional and contemporary musical culture. P/NP or letter grading. M101A. Mexico, Central America, and Caribbean Islands. (Same as Chicana and Chicano Studies M108A;). 108B. Latin South America.

M109. Women in Jazz. (4) (Same as African American Studies M109, Gender Studies M109, and Global Jazz Studies M109.) Lecture, four hours; discussion, one hour. Scope of 20th century changes in jazz and musical traditions from 1880s to present. Survey of women vocalists, instrumentalists, composers, arrangers, and producers and impact on development of jazz. P/NP or letter grading.

M111. Ellingtonia. (4) (Same as African American Studies M111 and Global Jazz Studies M111.) Lecture, three hours. Music of Duke Ellington, his life, and far-reaching influence of his efforts. Ellington's music, known as Ellingtonia, is one of largest and perhaps most significant bodies of music ever produced in U.S. Covers many contributions of other artists who worked with Ellington, such as composer Billy Strayhorn and musicians Johnny Hodges, Cootie Williams, and Mercer Ellington. P/NP or letter grading.

113. Music of Brazil. (4) Lecture, three hours. History of ethnic and art music in Brazil, with some reference to Portuguese antecedents. P/NP or letter grading.

M115. Musical Aesthetics in Los Angeles. (4) (Same as Chicana and Chicano Studies M115.) Lecture, four hours; discussion, one hour. Historical and analytical examination of musical expression of Latino peoples who have inhabited present geographical boundaries of U.S. P/NP or letter grading.

117. American Popular Music. (4) Lecture, four hours; discussion, one hour. Survey of history and characteristics of American popular music and its relationship to American culture, with emphasis on 20th-century popular music and its major composers, including comparison between traditional pre-1950 popular music and trends in post-1950 popular music. P/NP or letter grading.

118. Development of Rock. (5) Lecture, four hours. Examination of historical and stylistic development of rock from 1950s to present, with attention to its sociocultural and political impact on American society and beyond. P/NP or letter grading.

M119. Culture of Jazz Aesthetics. (4) (Same as African American Studies M119 and Global Jazz Studies M119.) Lecture, four hours; discussion, one hour. Introduction to development of rap music and hip-hop culture, with emphasis on musical and cultural issues, philosophical and political ideologies, gender representation, and influences on cinema and popular culture. P/NP or letter grading.

C120. Bibliography and Research Methods in Rap Music/Hip-Hop Studies. (4) Seminar, three hours. Requisite: course M119. Designed for juniors/seniors conducting research on hip-hop in preparation for capstone projects such as honors or senior thesis. Introduction and examination of intellectual history of rap music/hip-hop studies scholarship. Examination of readings related to intellectual history of rap music scholarship and allied traditions (including breakdance and graffiti), exploration of broad range of research methods and archival/library centers specific to hip-hop studies. Concurrently scheduled with course C220. Letter grading.

128. Exploration in Rhythms. (2) (Formerly numbered 128.) (Same as Global Jazz Studies M128.) Lecture, two hours; outside study, four hours. Preparation: ability to read melodic or rhythm notation. Investigation of and performance in rhythm in 20th- and 21st-century classical, jazz, world, and popular music. Concepts explored include meter, pulse, rhythmic cycles, hemolias, and polyrhythms. P/NP or letter grading.

M130. Culture of Jazz Aesthetics. (4) (Same as Anthropology M130 and Global Jazz Studies M130.) Lecture, three hours. Requisite: course 20A or 20B or 20C or Anthropology 3 or 4. Aesthetics of jazz as point of view in which ideas shaped as jazz as art form in 20th century. Listening to and interacting with professional jazz musicians who answer questions and give musical demonstrations. Analytical research and written examination of works of musicians and ethnomusicologists combined with those interested in jazz as cultural tradition. P/NP or letter grading.

M131. Development of Latin Jazz. (4) (Same as Global Jazz Studies M131 and Music M131.) Lecture, four hours; discussion, one hour. Survey of history and stylistic development of musical style referred to today as Latin jazz. P/NP or letter grading.

133. European Musics: Politics, Identities, Nationalisms. (5) Lecture, four hours; outside study, 12 days. (Same as Ethnomusicology, Music History, and European Studies majors. Europe, folk, popular, and classical music as practices that define national identity and as tool of political domination and resistance. Letter grading.

M134. Introduction to Armenian Music. (4) (Same as Armenian M134 and Music M134.) Lecture, three hours. Some amount of formal music study and experience as vocalist or instrumentalist desirable but not essential. Introduction to history, tradition, and scope of music of Armenia. Focus on number of different genres and approaches as they relate to the intersection of music and culture, and society, history. P/NP or letter grading.

136A. Music of Africa. (5) Lecture, four hours; discussion, one hour; outside study, 10 hours. Introduction to music of Africa through general discussion of select topics such as continent and its peoples, function, musician, instruments, musical structure and related arts, and contemporary music. P/NP or letter grading.

C136B. Music of Africa. (4) Lecture, four hours; outside study, eight hours. Introduction to music of various African cultures and regions. Through readings, lectures, viewing of films, and music, students gain understanding of diverse musical traditions found on African continent and become more cognizant of contributions that people of Africa have made to world music. Concurrently scheduled with course C236B. Letter grading.


141. Music of Turkey and Iran. (4) Seminar, three hours. Limited to junior/senior Ethnomusicology majors. Comparative study of music of Iran and other re-
142. Music and Culture in Afghanistan and Central Asia. (4) Lecture, four hours. Survey of music of Afghanistan, Turkmenistan, Tajikistan, Uzbekistan, and Xinjiang, including traditional and popular styles. Examination of modal systems and specific music genres of these regions, and exploration of cultural contexts including functional forms, styles, instruments, and musical philosophies. Consideration of interrelationships among musical genres and other art forms (dance, theater, visual arts, and literature) and analysis of how these types of music interact with issues of race, class, gender, religion, ritual, politics, social movements, and cultural identity. Includes detailed introduction to musical terms and concepts throughout. Letter grading.

143. Musical Traditions around Iran: Baluchistan, Kurdistan, Azerbaijan, and Iraq. (4) Lecture, four hours. Introduction to selected types of music around Iran with particular attention to Baluchistan, Kurdistan, Azerbaijan, and Iraq. Study of musical structures and genres of music in urban and rural communities. Examination of how music-making relates to aspects of current Middle Eastern life such as religious observance, gender relations, ethnic identity, national identity, and process of globalization. Letter grading.

146. Folk Music of South Asia. (4) Lecture, three hours; laboratory, one hour. Illustrated survey of some regional genres, styles, and musical instruments found in India and Pakistan, with special reference to religious, social, economic, and cultural context of their occurrence. P/NP or letter grading.

147. Survey of Classical Music in India. (4) Lecture, four hours. Examination of melodic, metric, and formal structures of Indian music in context of its religious, sociocultural, and historical background of country. P/NP or letter grading.


C155. Intangible Cultural Heritage Worldwide. (4) Lecture, three hours. Designed for Ethnomusicology, Music History, and World Arts and Cultures majors. Through critical reading of publications by scholars, officials, and activists involved in intangible cultural heritage policy and practice, examination of history of heritage conservation; concepts of tangible and intangible heritage; pioneering roles of Japan, South Korea, and UNESCO in making intangible cultural heritage focal point of much cultural policy worldwide; tensions among international ideals, nation-state nationalism, regionalism, ethnicity, and indigeneity in cultural heritage policies in different settings; U.S. equivalents to intangible cultural heritage policies and practices in other countries; roles of private individuals, community initiative, and professional organization in cultural preservation schemes; and related concept of sustainability. Concurrently scheduled with course C255. Letter grading.


C156A. Lectures, three hours. Limited to Ethnomusicology majors. Survey of traditional, popular, and Western-influenced musics currently widespread in China, including musical analysis of different contexts in which they exist. Investigation of profound effect of Confucian and Communist ideologies on music. Concurrently scheduled with course C256A. 156B. Lecture, three hours. Required concurrently C156A. Introduction to various notational systems. Analysis of representative styles.


C159. Music on China's Periphery. (4) Lecture, four hours; outside study, eight hours. Designed for under- and graduate Ethnomusicology, Music History, and World Arts and Cultures majors. Survey of musics from China's border regions and neighboring countries: technical musical characteristics and important contextual issues related to traditional and modern styles from Mongolia, Uighurs of Xinjiang, Tibet, Beto-Burman peoples, Hmong, and indigenous peoples of Taiwan. Concurrently scheduled with course C259. P/NP or letter grading.


162. Introduction in Ethnomusicology. (2-2) Studio, one hour; outside practice, five hours. Preparation: two years of courses 91A through 91D or 92. Limited to Ethnomusicology majors. Advanced private or semiprivate music instruction with distinguished community-based musician, that must be arranged by students and approved by course instructor. May be repeated for credit without limitation. Letter grading.


C165. Selected Topics in Composition. (4) Lecture, four hours; outside study, eight hours. Evaluation of important musical concepts and approaches to enable students to develop greater compositional technique and understanding. Ways composers of both European classical, and other musical genres have successfully approached use of extended compositional forms. Examination of way in which world music traditions have interacted with jazz and other types of music to create new musical languages. Use of concepts, structural paradigms, and inspiration from literature and visual arts in developing visual compositions. May be repeated once for credit. Concurrently scheduled with course C270. Letter grading.


181. Anthropology of Music. (4) Lecture, four hours. Designed for Ethnomusicology, Music History, and Anthropology majors. Cross-cultural examination of music in context of social behavior and how musical patterns reflect patterns exhibited in other cultural systems, including economic, religious, and social structure. P/NP or letter grading.

CM182. Music Industry. (4) (Same as Music CM182, Musicology CM186, and Music Industry M182) Lecture, four hours; discussion, one hour; outside study, seven hours. Limited to Ethnomusicology, Music History, and Musicology majors. Examination of influence of music industry on way music is created, performed, listened to, evaluated, and used today. Historical approach taken, beginning with music published in 18th century and continuing through development of audio recordings to MTV and popular music today. Concurrently scheduled with course CM288. Letter grading.

183. Study of Ethnomusicology. (4) Lecture, three hours; outside study, nine hours. Designed for Ethnomusicology majors. How music industry functions and how products are created, marketed, and consumed. Techniques of pure research, basic and theoretical in nature, contrasted with those of applied research, practical and policy-oriented in approach. Concurrently scheduled with course CM288. Letter grading.

185. Information Literacy and Research Skills. (1) Tutorial, one hour. Limited to Ethnomusicology majors. Designed to assist students with becoming information literate. How to locate, identify, and critically evaluate and use print and electronic information effectively and ethically. P/NP grading.

186. Senior Recital or Project. (2) Tutorial, one hour. Limited to seniors. Final project for students who, with approval from their faculty advisors, perform one-hour recital or have their composition performed in one-hour recital. Organization and arrangement of rehearsal schedule with appropriate accompaniment and preparation of program for performance. Grades are assigned in term recital is performed or composition is completed and performed. P/NP grading.

188. Special Courses in Ethnomusicology. (4) Lecture, four hours; outside study, eight hours. Selected topics in ethnomusicology. Schedule of Classes for topics and instructors. May be repeated for credit. P/NP or letter grading.
188SA. Individual Studies for USIE Facilitators. (1) Tutorial, to be arranged. Enforced corequisite: Honors Collegium 101E. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to discuss selected USIE seminar topic, contact information, and begin preparation of syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.

188SB. Individual Studies for USIE Facilitators. (1) Tutorial, to be arranged. Enforced corequisite: course 188SA. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to finalize course syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.

188SC. Individual Studies for USIE Facilitators. (2) Tutorial, to be arranged. Enforced corequisite: course 188SB. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor and student. Individual contract with faculty mentor required. May not be repeated. Letter grading.

195A. Community or Corporate Internships in Ethnomusicology. (2 to 4) Tutorial, six to 12 hours. Limited to seniors with minimum cumulative 3.0 grade-point average. Internship in supervised setting in community agency or private business. Students meet on regular basis with instructor and provide periodic reports of their experience. May be repeated for maximum of 8 units. Individual contract with supervising faculty member required. P/NP or letter grading.

195B. Community or Corporate Internships in Publ Ethnomusicology. (2 to 4) Tutorial, six to 12 hours. Limited to seniors in public ethnomusicology emphasis. Internship in supervised setting in community agency or private business. Students meet on regular basis with instructor and provide weekly reports of their experience. May be repeated for maximum of 8 units. Individual contract with supervising faculty member required. P/NP or letter grading.

195C. Community or Corporate Internships in Publ Ethnomusicology. (2 to 4) Tutorial, six to 12 hours. Limited to seniors in public ethnomusicology emphasis. Internship in supervised setting in community agency or private business. Students meet on regular basis with instructor and provide weekly reports of their experience. May be repeated for maximum of 8 units. Individual contract with supervising faculty member required. P/NP or letter grading.

196. World Music Teaching Practicum, (4) Seminar, two hours; fieldwork, three hours; outside study, seven hours. Limited to junior/senior Ethnomusicology majors. Integration of academic work and hands-on teaching. Participation in theoretical discussions of world music education and application of these theories in elementary and secondary music and social studies classrooms, and letter grading.

197E. Individual Studies in Ethnomusicology. (2 to 4) Tutorial, one hour; outside study, five to 11 hours. Preparation: 3.0 grade-point average. Limited to seniors. Individual intensive study in ethnomusicology, with scheduled meetings to be arranged between faculty member and student. Tangible evidence of mastery of subject matter resulting in final research project required. May be repeated for maximum of 8 units. Individual contract required. P/NP or letter grading.

197S. Individual Studies in Systematic Musicology. (2 to 4) Tutorial, one hour; outside study, five to 11 hours. Preparation: 3.0 grade-point average. Limited to seniors. Individual intensive study in systematic musicology, with scheduled meetings to be arranged between faculty member and student. Tangible evidence of mastery of subject matter resulting in final research project required. May be repeated for maximum of 8 units. Individual contract required. P/NP or letter grading.

199. Directed Research or Senior Project in Ethnomusicology. (2 to 4) Tutorial, to be arranged. Limited to junior/senior Ethnomusicology majors. Supervised individual research or investigation under guidance of faculty mentor. Culminating paper or project required. May be repeated for maximum of 8 units. Individual contract required. Letter grading.

Graduate Courses

C200. Audiovisual Archiving in 21st Century. (4) Seminar, three hours. Designed for Ethnomusicology majors. Examination of history, present state, and future of audiovisual archives, with specific focus on ethics, copyright, contracts, fieldwork, preservation, and access and issues related to technology, space, budgets, and staffing. Concurrently scheduled with course C100. S/U or letter grading.

201. History of Ethnomusicology. (4) Seminar, three hours; outside study, nine hours. Limited to graduate ethnomusicology students. Basic literature and schools of thought in field of ethnomusicology from late 19th century to 1980s. Letter grading.

202. Current Issues in Ethnomusicology. (4) Seminar, three hours; outside study, nine hours. Limited to graduate ethnomusicology students. Current issues, basic literature, in the fields of ethnomusicology from 1980s to present. Letter grading.


205. Seminar: Information Technology and Research Skills. (4) Seminar, three hours. Limited to graduate ethnomusicology students. Lecture, demonstration, practice. Basic skills for research on and about music that is essential to student careers as ethnomusicologists, specifically information technology skills, research, and representation tools for nonlinguistic acoustic phenomena. Basic understanding of acoustics, ability to represent sounds in various graphic forms appropriate to them, and ability to locate and organize information sources related to field of ethnomusicology. Letter grading.

206. Integrating Theory with Ethnography. (4) Seminar, three hours. Designed to show how theory and primary research cannot exist without each other, and how various theoretical methodological writings and ideas with their ethnographic or historical data. Reading of several recent ethnographies, mostly about music and possibly historical studies, in tandem with theoretical writings that inform arguments of these books. Letter grading.


215A-215B. Ethnomusicological Perspectives and Paradigms I, II. (4–4) Seminar, three hours; outside study, nine hours. Limited to graduate ethnomusicology students. Basic research techniques and perspectives on conducting research and writing it up in ethnomusicology. 216B. Introduction to basic ethnographic methods and practices in ethnomusicology.


228. Seminar: Balkan Music. (4) Seminar, three hours. Major issues in many areas of Balkan music, including song text analysis, music instruments, dance music, rituals and customs, minorities, and ideology. S/U or letter grading.

230. European Musics: Politics, Identities, Nationalisms. (4) Seminar, three hours; outside study, nine hours. Designed for graduate students. European classical, popular, and traditional musics, with particular attention to way in which music mirrors, negotiates, and challenges ideas about and practices of national and other forms of identity, ideas developed in other domains of discourse and practice such as philosophy, history, literature, art, and folklore. Examination of way musicians, ordinary people, and politicians have used music to affect political processes involved in contesting and resolving tensions created between and among these identity formations. Historical period covered primarily from 18th to mid-20th centuries, with examples from all over European continent. Letter grading.


C236B. Music of Africa. (4) Lecture, four hours; outside study, eight hours. Introduction to music of various African cultures and regions. Through readings, lectures, viewing of films, and analysis of music, students gain greater understanding of diverse musical traditions found on African continent and become more cognizant of contributions that people of Africa have made to world music. Concurrently scheduled with course C118B. Letter grading.


C241. Music of Turkey and Iran. (4) Seminar, three hours. Limited to graduate ethnomusicology students. Comparative study of music of Iran and related areas, including Turkey, with particular reference to their historical and cultural background, sources on music theory and aesthetics, instruments, style, technical improvement, and contemporary practice. Concurrent participation in Near East performance ensemble (course 91N or 161N) required. Concurrently scheduled with course C141. S/U or letter grading.

248. Classical Music of India. (4) Lecture, three hours; outside study, nine hours. Requisite: course 146 or 147. Study of history, theory, and practice of north and south Indian classical music. Emphasis on history and theory of Hindustani and Carnatic styles, with present-day forms, styles, techniques, and musical instruments. Concurrent participation in Indian performance group (course 91F) required. S/U or letter grading.

250. Music and Politics in East Asia. (4) Lecture, four hours. Designed for graduate students. Political imperatives have long had direct and often explicit impact on music sound and context in East Asia. Examination of interaction of ideology and musical practice in medieval Korea and in contemporary Korea, Japan, Taiwan, and China. Concurrently scheduled with course C150. Letter grading.

251. Music of Indonesia. (4) Lecture, three hours; outside study, nine hours. Requisite: course 20C. Emphasis on music and related performing arts of Java, Bali, and other Indonesian islands. Concurrent participation in performance group (course 91B or 91H) required. S/U or letter grading.


255. Intangible Cultural Heritage Worldwide. (4) Lecture, three hours. Designed for ethnomusicology, music history, and world arts and cultures graduate students. Through critical reading of publications by scholars, officials, and culture-bearers involved in intangible cultural heritage policy and practice, examination of history of heritage conservation; concepts of tangibility; significance; roles of UNESCO, Japan, South Korea, and UNESCO in making intangible cultural heritage focal point of much cultural policy worldwide; tensions among international ideals, nation-states, regionalism, ethnicity, and indigeneity in creating intangible cultural heritage policies in different settings; U.S. equivalents to intangible cultural heritage policies and practices in other countries; recent developments, community initiatives, and professional organizations in cultural preservation schemes; and related concept of sustainability. Concurrently scheduled with course C155. Letter grading.


C259. Music on China's Periphery. (4) Lecture, four hours; outside study, eight hours. Designed for graduate Ethnomusicology, Music, Musicology, and World Arts and Cultures majors. Survey of musics from China's direct and neighboring countries, with technical musical characteristics and important contextual issues related to traditional and modern styles from Mongolia, Uighurs of Xinjiang, Tibet, Tibetans of Sichuan, and indigenous peoples of Taiwan. Concurrently scheduled with course C159. S/U or letter grading.

M261. Gender and Music in Cross-Cultural Perspective. (4) (Same as Gender Studies M261.) Seminar, three hours. Designed to foster in-depth understanding of gender in study of music as culture. Topics range from ethnomusicology of gender and sexuality, deconstruction of messages of resistance, and gender representation to gendered politics via musical production. S/U or letter grading.

262. Musical Ethnography. (4) Seminar, three hours; outside study, nine hours. Examination of selected book-length ethnographies, most published in last 10 years, as both literary genre and research procedure. S/U or letter grading.

263. Perspectives in Popular Music Research. (4) Seminar, three hours; outside study, nine hours. Cross-cultural examination of role of music as political medium and as artistic expression in world's religions. S/U or letter grading.

266. Charles Seeger's Life and Thought. (4) Seminar, three hours; outside study, nine hours. Charles Seeger's (1886 to 1979) major writings and influence on three fields he helped to found (ethnomusicology, systematic musicology, historical musicology), as well as his interest in applied musicology and American composition in 20th century. S/U or letter grading.

267. Music and Ecstasy. (4) Seminar, three hours; outside study, nine hours. Relationship between music and consciousness in different world cultures and role music plays in ecstatic experiences. Phenomena include trance, spirit possession, shamanism, religious ecstasy, mysticism, and artistic inspiration. S/U or letter grading.

268. Modernity and Musical Experience. (4) Seminar, three hours; outside study, 10 hours. Limited to graduate students. Examination of possibilities for subject-centered musical ethnography to account for fragmented musical experience in modern world. Consideration of local and world musics in relation to modernity, postmodernity, globality, notions of self and subject, power, and media images. Letter grading.

C270. Selected Topics in Composition. (4) Lecture, four hours; outside study, eight hours. Limited to graduate students. Exploration of possibilities for subject-centered musical composition to account for fragmented musical experience in modern world. May be repeated once for credit. Concurrently scheduled with course C165. Letter grading.

271. Seminar: Acoustics of Music. (6) Seminar, three hours. Requisite: course 170. Selected topics in acoustics, including laboratory methodologies and practical applications. Topics include Western and non-Western instruments, tuning systems, psychoacoustics, and methods of spectral analysis. May be repeated once for credit. S/U or letter grading.

273. Seminar: Psychology of Music. (6) Seminar, three hours. Emphasis in music psychology, music, and cognitive science. Topics include music perception, learning, cognition, memory, therapy, affect, meaning, and measurement. May be repeated once for credit. S/U or letter grading.

275. Seminar: Aesthetics of Music. (6) Seminar, three hours. Specific topics in Western and non-Western aesthetic thought, including value, meaning, theories, history of aesthetic thought in Western and non-Western cultures, and techniques of aesthetic evaluation and analysis. May be repeated once for credit. S/U or letter grading.

274. Seminar: Systematic Musicology. (4) Seminar, three hours. Requisite: course 170. Exploration of specific topics in general field of systematic musicology covering disciplines such as anthropology, aesthetics, music perception, philosophy, organology, sociocultural and experimental musicology. May be repeated for credit. S/U or letter grading.


281A-281B. Seminars: Field and Laboratory Methods in Ethnomusicology. (6-8) Seminar, three hours; laboratory, two hours. Requisites: courses 201, 202. Fieldwork concepts and methods using technical equipment, conducting interviews, dealing with ethical issues, and designing research projects. S/U or letter grading.


285. Seminar: Comparative Music Theory. (6) Seminar, three hours. Comparative study of codified music theories of select cultures—Western and non-Western—considered in themselves and as expressions of their societies. Theory considered as science of music; its place between cultural values and artistic practice in different civilizations. S/U or letter grading.

C286. Public Ethnomusicology. (4) Lecture, four hours; outside study, eight hours. Designed for Ethnomusicology majors. History and evolution of public musics and how they are marketed, marketed, and consumed. Techniques of pure research, basic and theoretical in nature, contrasted with those of applied realizations, policy-oriented in approach. Concurrently scheduled with course C184. Letter grading.


CM288. Music Industry. (4) (Same as Music CM282 and Musicology CM288.) Lecture, four hours; discussion, one hour; outside study, eight hours. Limited to Ethnomusicology, Music, and Musicology majors. Examination of influence of music industry on way music is created, performed, listened to, evaluated, and used. Historical approach taken, beginning with music published in 18th century and continuing through development of audio recordings to MTV and popular music today. Concurrently scheduled with course CM182. Letter grading.

299. Research Design and Grant Writing in Ethnomusicology. (4) Seminar, three hours; outside study, nine hours. Design of dissertation research proposal, locating and applying for dissertation fieldwork grants, organizing and presenting advanced academic proposals with sophisticated methods and professional writing skills. S/U or letter grading.


291. Ethnomusicology Colloquium Series. (1) Research group meeting, one hour. Limited to graduate ethnomusicology students. Introduction to new courses and issues in discipline of ethnomusicology in effort to
strengthen and stimulate intellectual community within department. Topics vary from term to term and consist of presentations by guest lecturers, faculty members, and students. May be repeated for credit. S/U grading.

292A–292Z. Seminars: Special Topics in Ethnomusicology. (4 each) Seminar, four hours. Designed for graduate students. Utilization of special interests and expertise of regular and visiting faculty; topics of current interest presently offered in ethnomusicology program. S/U or letter grading.

375. Teaching Apprentice Practicum. (1 to 4) Seminar, to be arranged. Preparation: apprenticeship under active guidance and supervision of regular faculty member responsible for curriculum and instruction at UCLA. May be repeated for credit. S/U grading.

495A. Teaching Apprentice Practicum. (2) Eight weekly two-hour seminar sessions, plus intensive training session during Fall Quarter registration week. Preparation: appointment as teaching apprentice in Ethnomusicology Department. Required of all new teaching apprentices. Special course dealing with problems and practices of teaching ethnomusicology and systematic musicology at college level. May not be applied toward degree requirements. S/U grading.

495B. Teaching with Technology. (2) Seminar, three hours; outside study, three hours. Limited to graduate ethnomusicology students. Training in presentation, spreadsheet, web design, and digitization software, and its application in classroom and in preparation of electronic teaching portfolio. S/U grading.

596. Directed Individual Studies. (2, 4, or 6) Tutorial, to be arranged. Only 4 units may be applied toward MA minimum course requirements. S/U or letter grading.

597. Preparation for Master’s Comprehensive Examination or PhD Qualifying Examinations. (2 or 4) Tutorial, to be arranged. May be repeated for credit. S/U grading.

598. Guidance of MA Thesis. (4, 8, or 12) Tutorial, to be arranged. May be repeated for credit. S/U grading.

599. Guidance of PhD Dissertation. (4, 8, or 12) Tutorial, to be arranged. May be repeated for credit. S/U grading.

European Studies
See International and Area Studies

Family Medicine
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Theresa Nevarez, MD, MBA, Director, Harbor-UCLA
Carol A. Stewart, MD, Director, Clínica Sierra Vista
John K. Su, MD, Director, Kaiser-Sunset

Scope and Objectives
The Department of Family Medicine provides all students with a basic introduction to family-centered care in both the inpatient and ambulatory settings. During the basic clerkship, students develop (1) an appreciation of the breadth and scope of family medicine, (2) a basic knowledge in the broad content areas of family medicine, and (3) fundamental clinical skills appropriate to family medicine, including the coordination and management of patients with multiple chronic diseases. The overall goal is to provide students with the opportunity to gain an understanding and appreciation of the central role of family physicians in the healthcare system, and to offer advanced clinical training for those students interested in pursuing careers in family medicine. Further, the basic curriculum includes an overview of healthcare issues facing underserved and immigrant populations in urban America.

Family medicine faculty members are in leadership roles in the teaching and research program. All first-year students are assigned to work with a family medicine preceptor once a month on a longitudinal basis for the entire year as part of the teaching program. In the third and fourth (clinical) years, required and elective opportunities exist. All students are required to spend four-week clerkship in the third year, which is offered at over 10 teaching sites.

The department offers paid six-week electives known as Summer Research Fellowships after the first year of medical school. This program teaches students how to collect data and submit applications for federal designation as underserved areas. It includes journal articles reviews on healthcare reform and disparities, as well as the geographic distribution of physicians and the shortage of primary care physicians in South Los Angeles. Students can also participate in a clinical experience. At the end of the project, the students present their work on a poster, joining approximately 80 classmates doing other summer projects supported by the dean’s office.

For more details on the Department of Family Medicine, see the department website.

Family Medicine Lower-Division Courses

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of current and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work). Three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Course

199. Directed Research in Family Medicine. (2 to 8) Tutorial, two hours. Limited to juniors/seniors. Supervised individual research or investigation under guidance of faculty mentor. Culminating paper required. May be repeated for credit. Individual contract required. P/NP or letter grading.

Film, Television, and Digital Media
School of Theater, Film, and Television
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Ellen C. Scott, PhD
Jasmine N. Trice, PhD
C. Fabian Wagmister, MFA

Assistant Professors
Rory M. Kelly, MFA
Veronica A. Paredes, PhD
Scope and Objectives
The purpose of the Department of Film, Television, and Digital Media is to develop in its students a scholarly, creative, and professional approach to film, television, and digital art forms. The aim of the department is to train graduates who will eventually make original contributions in their chosen field.

The department offers an undergraduate minor in Film, Television, and Digital Media; an undergraduate program leading to the Bachelor of Arts in Film and Television; and graduate programs leading to the Master of Arts, Master of Fine Arts, and PhD degrees in Film and Television.

For current or specific information about the programs and faculty members, see the department website.

Undergraduate Study
The Film and Television major is a designated capstone major. Undergraduate students are required to complete one departmentally sponsored internship course as well as coursework related to the senior thesis concentration area. All courses, including capstone senior thesis projects, involve workshopping of individual projects. Group participation in the creation and production of each student’s project is core to the curriculum. Specific student learning objectives vary based on concentration area.

Film and Television BA

Capstone Major
The undergraduate Film and Television major encourages development of a personal vision that incorporates creative, practical, intellectual, and aesthetic values. Within the context of a liberal arts education, the program provides a broad background in the field and in the diversity of film and television practice, including courses in history and theory, critical thinking, animation, screenwriting, and the fundamentals of film, video, and television production.

Learning Outcomes
The Film and Television major has the following learning outcomes:

- Mastery of fundamentals of preproduction, production, and postproduction of film, television, and digital media
- Demonstrated advanced understanding of one or more areas of study in cinema and media studies, filmmaking, screenwriting, animation, digital media, and producing

Admission
Students are admitted for fall quarter only. Admission is highly competitive, and only a limited number of students can be accepted each year. In addition to the UC Application for Admission and Scholarships, freshman and transfer applicants must submit a School of Theater, Film, and Television supplemental application. For information about the supplemental application, see the major website.

Transfer Students
Transfer applicants to the Film and Television major with 90 or more units must meet UCLA transfer requirements and, before arriving at UCLA, must complete the School of Theater, Film, and Television general education requirements by either (1) taking college courses that satisfy the school general education requirements or (2) completing the Interssegmental General Education Transfer Curriculum (IGETC) at a California community college or (3) achieving UC reciprocity through completion of general education requirements at another UC campus while a student there.

In addition to the UC Application for Admission and Scholarships, transfer applicants must submit a School of Theater, Film, and Television supplemental application. For information about the supplemental application, see the major website.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

Preparation for the Major
Required: Film and Television 4, 6A, 10A, 33, 51, 84A, and one course from Theater 10, 1S, 20, 28A, 28B, 28C, or 30.

The Major
Required: Film and Television 101A, 106B or 106C, 134, 150, 154, 155, 163; one cinema and media studies elective from 107, 108, 109, M111, 112, 113, 114, M117, or 122N; one capstone departmentally sponsored internship (course 195) taken concurrently with course 191E; and a senior concentration (20 units) of advanced film coursework selected from among any one or more of the following areas of study, including at least two courses from within one area:

- Screenwriting: Film and Television C135A, C135B, C135C.
- Producing: Film and Television C146, C147, C183A, C183B, C183C, C184B.
- Animation: Film and Television C181A, C181B, C181C.
- Digital Media: Film and Television C142, C144, C145, C146.
Courses taken to satisfy the senior concentration may not also be applied toward other course requirements in the major.

Students should be mindful of the exigencies inherent in filmmaking and be prepared to meet the additional demands of time and costs.

Students are required to perform assignments on each other’s projects. In addition, the department reserves the right to hold for its own purposes examples of any work done in classes and to retain for distribution such examples as may be selected.

**Film, Television, and Digital Media Minor**

The Film, Television, and Digital Media minor is designed for students who wish to augment their major program of study with a series of courses that promote the study of film, television, and digital media as art forms with social, political, cultural, and economic significance. The minor consists of a selection of lower and upper-division courses that introduce students to the practice and critical study of film, television, and digital media.

To enter the minor students must have declared a major other than the Film and Television BA, be in good academic standing, have a minimum 3.0 grade-point average, have completed at least three film and television courses with grades of B or better, and file an application at the Student Services Office, 103 East Melnitz Building, 310-206-8441. For information about the minor, see the minor website. All degree requirements, including the specific requirements for this minor, must be fulfilled within the unit maximum set forth by each student's school or college.

**Required Lower-Division Courses (8 to 11 units):** Two courses selected from Film and Television 4, 6A, 10A, 33, M50, 51, or 64A.


A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor. All units applied toward the minor must be taken in residence at UCLA. Film and television courses taken at other institutions cannot be applied toward the minor.

Each minor course must be taken for a letter grade, and students must have an overall grade-point average of 2.0 or better in the minor. Successful completion of the minor is indicated on the transcript and diploma.

**Graduate Study**

Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Division website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

**Graduate Degrees**

The Department of Film, Television, and Digital Media offers Master of Arts (MA), Master of Fine Arts (MFA), Candidate in Philosophy (CPHIL), and Doctor of Philosophy (PhD) degrees in Film and Television.

**Film and Television**

**Lower-Division Courses**

1A-1B-1C. Freshman Symposium. (1–1–1) Laboratory, three hours. Course 1A is enforced requisite to 1B, which is enforced requisite to 1C. Limited to Film and Television majors. Structured forum in which freshmen meet on regular basis to discuss curricular issues, meet with faculty members from department, and have exposure to array of guest speakers from media industries.

4. Introduction to Art and Technique of Filmmaking. (Formerly numbered 122B.) Lecture, four hours; discussion, one hour. Students acquire understanding of practical and aesthetic challenges undertaken by artists and professionals in making of motion pictures and television. Examination of film as both art and industry; storytelling, sound and visual design, casting and performance, editing, finance, advertising, and distribution. Exploration of American and world cinema from filmmaker’s perspective. Honing of analytical skills and development of critical vocabulary for study of filmmaking as technical, artistic, and cultural phenomenon. P/NP or letter grading.

6A. History of American Motion Picture. (6) Lecture/screenings, eight hours; discussion, one hour. Historical and critical survey, with examples, of American motion picture both as developing art form and as medium of mass communication. Letter grading.

10A. American Television History. (5) Lecture/screenings, five hours; discussion, one hour. Critical survey of American television history from its inception to the present. Emphasis on program forms, industrial paradigms, social trends, and culture. Starting with television’s hybrid origins in radio, television, and film, contextualization, viewing, and discussion of key television shows, as well as Hollywood films that comment on radio and television. Consideration of television programs and series in terms of sociocultural issues (consumerism, lifestyle, gender, race, national identity) and industrial practice (programming, policy, regulation, business). Letter grading.

19. Fiat Lux Freshman Seminars. (Seminar) one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

33. Introductory Screenwriting. (4) Lecture, three hours; discussion, one hour. Open for credit to students with credit for course C132/C430. Structural analysis of feature films and development of professional screenwriters’ vocabulary for constructing, deconstructing, and reconstructing their own work. Screenings of films and selected film sequences in class and by assignment. P/NP or letter grading.

M50. Introduction to Visual Culture. (Same as English M50) Lecture, three hours; discussion, one hour; laboratory, two hours. Enforced requisite: satisfactory of Entry-Level Writing requirement. Study of how visual media, including advertising, still and moving images, and narrative films, influence contemporary aesthetics, politics, and knowledge. P/NP or letter grading.

51. Digital Media Studies. (5) Lecture, three hours; laboratory, one hour. Introduction to history, theory, and authoring skills of digital media, art, and culture. P/NP or Letter grading.

72. Production Practice in Film, Television, and Digital Media. (2 to 4) Lecture, three hours; laboratory, three hours. Exploration of research, analysis, and conceptualization of digital media, and laboratory experience in one or more various aspects of contemporary production and postproduction practices for entertainment media, including theater, film, video, and digital media. May be repeated for maximum of 8 units. Letter grading.

75. Lighting for Film and Television. (2) Laboratory, 10 hours. Offered as one-week intensive course. Introduction to concepts and practice of lighting for film through discussion and intensive hands-on, laboratory experience for directors of photography, camera operators, gaffers, key grips, assistant camera, and grips. Crew rotation changes per camera setup. Review of devices. Offered in summer only. Letter grading.

84A. Overview of Contemporary Film Industry. (4) Lecture, three hours; discussion, one hour. Examination of evolving economic structures and business practices in contemporary Hollywood film industry, with emphasis on independent distribution companies, their development, marketing, and distribution systems, and their relationship to independent producers, talent, and agencies. Letter grading.

89. Honors Seminars. (Seminar) three hours. Limited to 20 students. Designed as adjunct to lower-division lecture course. Exploration of topics in greater depth through supplemented readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

**Upper-Division Courses**

101A. Junior Symposium. (Seminar) three hours. Course 101A is enforced requisite to 101B, which is enforced requisite to 101C. Limited to Film and Television majors. Structured forum in which juniors meet on regular basis to discuss curricular issues, meet with faculty members, and have exposure to array of guest speakers from within film industry. Letter grading.

102A-102B-102C. Senior Symposium. (1–1–1) Laboratory, three hours. Enforced requisite: course 101A. Course 102A is enforced requisite to 102B, which is enforced requisite to 102C. Limited to Film and Television majors. Structured forum in which seniors meet on regular basis to discuss curricular issues, meet with faculty members, and have exposure to array of guest speakers from within film industry. Letter grading.

106B. History of European Motion Picture. (6) Lecture/screenings, eight hours; discussion, one hour. Historical and critical survey, with examples, of European motion picture both as developing art form and as medium of mass communication. Letter grading.


107. Experimental Film. (6) Lecture/screenings, eight hours; discussion, one hour. Study and analysis of unconventional developments in motion pictures. P/NP or letter grading.
108. History of Documentary Film. (6) Lecture/ 
screenings, eight hours; discussion, one hour. Philosoph-
y of documentary approach in motion pictures. Develop-
ment of critical standards and examination of techniques of teaching and persuasion used in se-
lected documentary, educational, and propaganda films. Letter grading.

109. Advanced Topics in Documentary: New Docu-
mentary Forms. (4) Lecture, three hours; discussion, 
one hour; screenings, three hours. Examination of 
today’s documentary modes of representation and 
generics focusing on rise and diversification of nonfic-
tion modes since new millennium. From short form to 
series based, virtual reality to interactive, crisis-
to-sourced to interactive, study of new documentary 
forms and platforms as situated within complex media 
environment. Exploration of theoretical models 
through which documentaries can be understood, 
questioned, and critically approached. Letter grading.

M111. Women and Film. (6) (Same as Gender 
Studies M111.) Lecture, eight hours; discussion; one 
hour. Historical issues and critical approaches to 
women and cinema that may include authorship, 
standards, female genres, and images of women in Hol-
lywood cinema, alternative cinema, and independent 
film from silent era to present. Letter grading.

112. Film and Social Change. (6) Lecture/screen-
ings, eight hours; discussion, one hour. Development of 
documentary and dramatic films in relation to 
and as force in social development. Letter grading.

113. Film Authors. (5) Lecture/screenings, five 
hours; discussion, one hour. In-depth study of specific film 
author (director or writer). P/NP or letter grading.

114. Film Genres. (5) Lecture/screenings, five 
hours; discussion, one hour. Study of specific film genre (e.g., 
Western, gangster, musical, comedy, social drama). P/NP or letter grading.

M117. Chicanos in Film/Video. (5) (Same as Chicana 
and Chicano Studies M114.) Lecture/screenings, five 
hours; discussion, one hour. Goal is to gain nuanced 
understanding of Chicana/o cinema as political, socio-
economic, and aesthetic practice. Emphasis on 
representation of Mexican Americans and Chi-
canos in four Hollywood genres—silent greaser films, 
social problem films, Westerns, and gang films—that 
are major genres that account for films about or with 
Mexican Americans produced between 1908 and 
1980. Examination of recent Chicano-produced films 
that subvert or signify on these Hollywood genres, 
including Born in East L.A. and Gregorio Cortez and Born 
in East L.A. Consideration of shorter, more experi-
mental work that critiques Hollywood image of Chi-
canos. Guest speakers include both pioneer and up-
and-coming Chicana/o filmmakers. P/NP or letter grading.

C118. Intermediate Cinematography. (4) Lecture, 
two hours; laboratory, four hours. Enforced requisite: 
course 101A. Intermediate study of principles of cine-
matics, with emphasis on exposure, lighting, 
and selection of film, camera, and lenses. Concurrently 
scheduled with course C416. Letter grading.

C120. Digital Cinematography. (4) Lecture, 
three hours. Prerequisites: courses 100A, 185. Advanced 
study of principles of digital cinematography, with em-
phasis on electronic exposure control, lighting, for-
mats, cameras, and lenses. Concurrently scheduled with 
course C420. Letter grading.

122D. Film Editing: Overview of History, 
Technique, and Practice. (4) Lecture, four 
hours; laboratory, three hours. Concurrently 
scheduled with course C122E. Digital exhibition, filtration, multiple-camera shooting. P/NP or letter grading.

122E. Digital Cinematography. (4) Lecture, 
three hours. With lectures, screenings, and demonstrations, 
study of principles of digital cinematography. How 
tools and techniques affect visual storytelling process. 
Topics include formats, aspect ratios, cameras 
lenses, special effects, internal menu picture manipu-
lation, lighting, composition, coverage, high definition, 
digital acquisition, filtration, multiple-camera shooting. P/NP or letter grading.

122F. Writing for Animation Series. (5) Lecture, 
three hours. Introduction to craft and business of writing an-
imation for television. Overview of history of animation 
produced specifically for this medium, along with lit-
ary formats. Business model has changed radically 
over past five decades, as have types of shows that 
have been created. Designed to put shows in histor-
ical perspective, with eye toward industry is heading 
towards history and networking (and growing) scrutiny of outside forces such as cor-
porations and FCC. Letter grading.

122J. Disney Feature: Then and Now. (5) Lecture, 
three hours; discussion, three hours. Study and anal-
ysis of Disney’s approach to traditional and new 
animated films. Overview of Disney’s animated features have dominated until re-
cently and ramifications of this domination on anima-
tion and society. Letter grading.

122M. Film and Television Directing. (4) Lecture, 
three hours. Through discussions, screenings, demon-
strations, and guests, exploration of script, previsual-
ization, directing actors, directing camera coverage 
in relationship to story, practical on-set directing, and 
direc-
ting for camera. P/NP or letter grading.

122N. History of Animation in American Film and 
Television. (5) Lecture, six hours. Survey of art of ani-
mation in America from its precinema origins to recent 
films of Disney, Pixar, DreamWorks, Ghibli, and others. 
Place of animation in pop culture, racial imagery and 
ethnic stereotypes, growth of art form, and how it re-
ffects American society. P/NP or letter grading.

M124. Sex, Race, and Difference in Transnational 
Film. (4) (Same as Chicana and Chicano Studies 
M124.) Lecture, three hours; discussion, one hour. Drawing on feminist media studies, training of students in media literacy so 
they acquire necessary skills to critically interrogate film 
media and understand how film provides lens to examine some of most crit-
ical issues of our time. Development of understanding 
of transnational and translocal and how they interact 
in contexts of capital, labor, and commodities transact, render problem-
atic, and sometimes reinforce national borders. Exam-
ination of role of film in both exemplifying and repre-
senting these conditions of transnationality. How films 
enable understanding of historical and contemporary 
relationships between mobility, coercion, and migra-
tion; colonialism and settler colonialism; Orientalism, 
globalization, and commodity culture; cultural identity and dias-
pora; transnational conceptions of sexual desire and 
embodiment; immigration and religious difference; 
and criminalization of racial difference. P/NP or letter grading.

123. Acting for Film and Television. (4) Studio, six 
hours. Projects in acting for television, video, and film. 
May be repeated twice for credit. P/NP or letter grading.

123A. Intermediate Television Writing Workshop. (4) 
Lecture, three hours; laboratory, three hours. Introductory 
hands-on investigation of techniques of digital still 
imaging and aesthetics of digital image, in context of ex-
amining dynamics of cultural constructions and visual 
practices. Students conceive and produce several digital 
image visualizations. May be repeated once for credit. 
Concurrently scheduled with course C242. Letter grading.

123B. Motion Digital Image. (4) Lecture, three 
hours; laboratory; three hours. Investigation of dif-
ferent ways of creating and manipulating linear moving 
images (digital video) on desktop computers, ex-
ploring both creative and theoretical aspects of this 
production environment. Students conceive and pro-
duce number of short projects. Concurrently sched-
uled with course C243. Letter grading.

123C. Creative Authoring for World Wide Web. (4) 
Lecture, three hours; laboratory, three hours. Exploration 
of creative aspects of World Wide Web as me-
dium for personal/collective expression. Students pro-
duce Web works and serve them online. Contextual-
ization of medium by looking at its history, embedded 
ideology, and sociopolitical consequences. May be 
repealed once for credit. Concurrently scheduled with 
course C244. Letter grading.

146. Art and Practice of Motion Picture Producing. 
(4) Lecture, three hours; discussion; one hour. Ex-
ploration of role of producer as both artist and business 
person. Comparative analysis of screenplays and 
completing films. Emphasis on assembly of creative 
team and analysis of industrial context, both inde-
pendent and studio. Screenings viewed outside of class 
and on reserve at Powell Library. Letter grading.

C147. Planning Independent Feature Production. 
(4) Lecture, three hours; laboratory, three hours. Analysis of 
procedure, problems, and budgets in planning fea-
ture-length script for film and television production, 
with emphasis on role of producer and creative organi-
izational techniques of planning concurrently sched-
uled with course C247. Letter grading.
C148. Advanced Digital Media Workgroup. (4) Laboratory, two hours; discussion, four hours. Designed for students with previous laboratory course experience to provide opportunity to create larger-scale digital media works with advanced software tools and techniques. Emphasis on three-dimensional, creative workshop environment. May be repeated twice for credit. Concurrently scheduled with course C248. Letter grading.

C158. Digital Workflow. (2 to 4) Lecture, three hours; laboratory, two hours. Requisites: courses 52, 185. Limited to departmental majors. Through discussions, demonstrations, and laboratory assignments, students learn the technical and artistic considerations of digital workflow. Students plan, schedule, and budget their overall workflow in preproduction. May be repeated once for credit. Concurrently scheduled with course C454C. Letter grading.


164. Directing Actors. (4) Laboratory, four hours. Exercises in analysis of script and character for purpose of directing actors. Emphasis on eliciting best possible performance from actors. Offered may be repeated twice for credit. P/NP or letter grading.

C168. Creative Location Film Production. (8) Lecture, four hours; discussion, four hours; laboratory, to be arranged. Limited to directing or producer's production majors. Basic introduction to story and exploration of proper technique for evaluating screenplays and teleplays through writing of coverage. May be taken independently for credit. Letter grading.

C173. Producing II: Entertainment Economics. (4) Lecture, three hours; discussion, one hour. Open to nonmajors. Critical analysis of contemporary entertainment industries and practical approach to understanding and implementing producer's role in development of feature film and television scripts. Through scholarly and trade journal readings, in-class discussions, script analysis, and guest speaker exposure, open to various entities that comprise feature and television industries. Concurrently scheduled with course C481C. P/NP or letter grading.

C175A-175B. Undergraduate Film Production. (12–4) Laboratory, six hours; fieldwork, four to six hours. Concurrently scheduled with course C417. Letter grading.

176. Film and Television Production Laboratory. (2 to 8) Laboratory, to be arranged. Supervised laboratory experience. Exploration of theoretical frameworks and development of critical perspective, while studying industrial processes through which movies and television programs are produced and exploited. Concurrently scheduled with course C181A. Letter grading.

180A. Animation Fundamentals. (5) Lecture, six hours; laboratory, six hours. Fundamentals of animation through exercises and preparation of short animated film. Students create 10-second film in one of traditional techniques (non-computer), with music and/or sound effects. Offered in summer only. Letter grading.

180B. Writing for Animation. (4) Lecture, two hours; laboratory, six hours. Analysis of writing for animated film. Offered in summer only. Letter grading.

180C. Stop Motion Fundamentals Workshop. (3) Workshop, to provide opportunities for students to rehearse, perform, and evaluate scenes. Three different performance styles to which performers may need to adjust are (1) preproduction rehearsals with director, (2) single-camera experience, and (3) multiple-camera experience. May be repeated twice for credit. Letter grading.


181B. Writing for Animation. (4 or 8) Formerly numbered 181B.) Lecture, six hours; studio, to be arranged. Requisites: course C181A or consent of instructor. Completion of writing and planning for animated film. May be repeated for maximum of 16 units. Concurrently scheduled with course C481B. P/NP or letter grading.


183A. Producing I: Film and Television Development. (4) Lecture, three hours; discussion, one hour. Open to nonmajors. Critical understanding of strategies and operating principles that drive revenue for entertainment industry. Exploration of theoretical frameworks and development of critical perspective, while studying industrial processes through which movie and television programming are financed and exploited. May be taken independently for credit. Letter grading.

183B. Producing II: Marketing, Distribution, and Exhibition. (4) Lecture, three hours; discussion, one hour. Open to nonmajors. Critical understanding of strategies and operating principles that drive revenue for entertainment industry. Exploration of theoretical frameworks and development of critical perspective, while studying industrial processes through which movie and television programming are financed and exploited. May be taken independently for credit. Letter grading.

184B. Overview of Contemporary Television Industry. (4) Lecture, three hours; four units of credit. Examination of evolving economic structures and business practices in contemporary Hollywood television industry, with emphasis on operations of networks and cable companies, series development, marketing, and network branding from 1947 to present. Letter grading.

185. Intermediate Undergraduate Film Production. (8) Laboratory, six hours; requisites: courses 52, 154, 155, 163. Limited to Film and Television majors. Instruction and exercises in all stages of film production. Letter grading.

C186A. Advanced Documentary Workshop. (4) Formerly numbered 186A.) Lecture, three hours; laboratory, three hours; fieldwork, four to six hours. Requisite: course 185. Course 186A is requisite to 186B, which is requisite to 186C. Introductory viewing and discussion of selected documentaries and instruction in various production skills necessary to create video documentaries. Completion of series of exercises from conceptualization through postproduction, culminating in a short, feature-length documentary. Concurrently scheduled with course C403A. Letter grading.

C186B. Advanced Documentary Workshop. (4) Formerly numbered 186B.) Lecture, three hours; laboratory, three hours; fieldwork, four to six hours. Requisite: course 185. Course 186A is requisite to 186B, which is requisite to 186C. Introductory viewing and discussion of selected documentaries and instruction in various production skills necessary to create video documentaries. Completion of series of exercises from conceptualization through postproduction, culminating in a short, feature-length documentary. Concurrently scheduled with course C403A. Letter grading.

C187. Lighting for Film and Television. (4) Lecture, two hours; laboratory, six hours. Requisite: course 52. Limited to Film and Television majors. Lecture will include discussions on stage or in exterior, screenings of scenes, and discussions aimed at learning to master lighting to create appropriate mood or atmosphere of preconceived scene recorded on film or through electronic systems. May be repeated twice for credit. Concurrently scheduled with course C417. Letter grading.

C190. Stop Motion Fundamentals Workshop. (3) Lecture, six hours; laboratory, six hours. Analysis and practice of effective visual storytelling through creation of three production storyboards. Offered in summer only. Letter grading.

C280. Motions Capture. (4) Laboratory, six hours; fieldwork, four to six hours. Concurrently scheduled with course C260. P/NP or letter grading.

C260. Mocap Production Workshop. (4) Laboratory, six hours; fieldwork, four to six hours. Concurrently scheduled with course C280. P/NP or letter grading.

C301. Introduction to Film Studies. (3) Lecture, three hours; discussion, one hour. Examinations of selected documentaries and in various production skills necessary to create video documentaries. Completion of series of exercises from conceptualization through postproduction, culminating in a short, feature-length documentary. Letter grading.
215B. Seminar: Text and Context in Intermedia Age. (6) Seminar/screenings, five hours. Theoretical and methodological approaches to media texts and contexts beginning with theories that located aesthetic, ideological, and cultural meanings in literary, theatrical, film, or television texts or group of texts and to latter approaches from within material, social, and industrial contexts from which media texts emerge. Letter grading.

216. Film, Costume, and Character. (6) Seminar, three hours; screenings, three hours. Exploration of integration of costume design into filmmaking process and illumination of work required to bring characters from page to life. Discussion of practice of costume design. Analysis of films from various genres. Letter grading.

217A. Seminar: American Television History. (6) Seminar, three hours; screenings, four hours. Critical survey of U.S. television industry from its inception to present. Examination of programming and changes within industry by considering range of technological, economic, aesthetic, social, and cultural dimensions. Letter grading.

217B. Seminar: Selected Topics in Television History. (6) Seminar, three hours; screenings, three hours. Advanced critical seminar, with focus on specific topic or area (historical period, industry, programming, genre, or area) in domestic or international television. Letter grading.

218. Seminar: Culture, Media, and Society. (6) Seminar, three hours; screenings/discussion, four hours. Emphasis on discourse of other(s); (1) schematization of aesthetic difference rather than similarity or identity—how with other cultures enter into politics of representation and repre- sentation of politics through metaphors of (1) difference without opposition, (2) heterogeneity without hi- erarchy, and/or (3) otherness without ethnocentrism. Examination of how women, national minorities, and Third World peoples have been rendered others; place of cinematic representation as process and how aca- demization of others is positioned vis-à-vis mainstream critical discourse. Letter grading.

219. Seminar: Film and Society. (6) Seminar, three hours; film screenings, four to six hours. Designed for graduate students. Study of ways film affects and is affected by social behavior, belief, and value systems; considered in relation to role of media in society. May be repeated once for credit with different emphasis. Letter grading.

220. Seminar: Television and Society. (6) Seminar, four hours; screenings/discussion, three hours. Designed for graduate students. Study of ways television forms affect and are affected by social behavior, belief, and value systems. Emphasis on technological and eco- nomic aspects of medium. May be repeated once for credit. S/U or letter grading.

221. Seminar: Film Authors. (6) Seminar, three hours; film screenings, four to six hours. Designed for graduate students. Intensive examination of works of outstanding creators of films. May be repeated twice for credit. S/U or letter grading.

222. Seminar: Film Genres. (6) Seminar, three hours; film screenings, four to six hours. Designed for graduate students. Studies of patterns, styles, and themes of such genres as Western, gangster, war, science fiction, comedy, etc. May be repeated twice for credit. S/ U or letter grading.

223. Seminar: Visual Perception. (6) Seminar, three hours; film screenings, three hours. Aesthetic, psycho- logical, physiological, and phenomenological ap- proaches to vision as they relate to ways in which viewers experience and see film, television, and digital media. Letter grading.

224. Computer Applications for Film Study. (6) Lecture, three hours; film screenings, three hours. Survey of computer applications relevant to film study, princi- pally computer-assisted design of visual images and image capture technology. S/U or letter grading.

225. Seminar: Videogame Theory. (6) Seminar, three hours; laboratory, three hours. Videogame theory, with emphasis on narrative structure, rather than looking at history, industrial practice, social effects, or any other of many interesting questions that games also raise.

226. Seminar: Film Criticism. (6) Seminar, three hours; screenings/discussion, three hours. Designed for graduate students. Study of major works of fiction in television and film and television studies seminar with major hands-on laboratory component that explores impact of new digital technolo-gies and image capture technology without opposition, (2) heterogeneity without hi-erarchy, and/or (3) otherness without ethnocentrism. Examination of how women, national minorities, and Third World peoples have been rendered others; place of cinematic representation as process and how aca- demization of others is positioned vis-à-vis mainstream critical discourse. Letter grading.

227. Seminar: Television Criticism. (6) Seminar, four hours; screenings/discussion, three hours. Designed for graduate students. Analysis of major forms of tele- vision production and criticism it has elicited. May be repeated once for credit. S/U or letter grading.

228. Seminar: Contemporary Film and Television. (6) Seminar, four to six hours. Designed for second-year Film and Television Ph.D. students. Examination of general principles that govern formulation of research questions and preparation of prospects for Ph.D. dissertation. S/U or letter grading.

229. Seminar: Non-Western Films. (6) Seminar, three hours (additional hours as required); film screenings, three hours. Designed for graduate stu- dents. Study of aesthetic and ideological impulses of selected films from Asia, Africa, and Latin America. S/ U or letter grading.


231. TV Development 1. (6) Seminar, three hours. Basic tenets and analysis of television scripted shows and contemporary industry production and business practices. Development of original show concepts and production and feedback by class, instructor, and guests. Letter grading.

232. TV Development 2. (4) Seminar, three hours. Advanced analysis of television scripted shows and contemporary industry production and business prac- tices. Continued development of original show con- cepts and series proposals for review and feedback by class, instructor, and guests. Letter grading.

233A. Fundamentals of Writing for Television. (4) Lecture, three hours. Comprehensive overview of today’s television landscape for writers, with emphasis on new structures and formats ushered in by on-demand, digital television revolution. Letter grading.

233B. Writing Half-Hour Comedy Pilot and Series Bible. (6) Seminar, three hours. Requisite: course 233A. Examination of basics of half-hour pilot format, style, and content, and learning of principles behind network needs and choices in choosing pilots. Work- shopping in which to discuss ideas and issues with class and instructor. Weekly progress on original half-hour pilot and series bible required. Letter grading.

233C. Running Television Comedy Room. (4) Sem- inar, three hours. Enrolled requisite: course 233A. Prerequisite: critical awareness and ability to be writer/executive producer of half-hour comedy show. Focus on community building, collaboration, and leadership skills needed to successfully function in writers’ room, as well as breaking stories, writing, and rewriting television scripts. Letter grading.

234A. Writing One-Hour Drama Speculative Epi- sode. (4) Seminar, three hours. Basic tenets and anal- ysis of television drama shows and contemporary in- dustry production and business practices. Continued development of original show concepts and series bible required. Letter grading.

234B. Writing One-Hour Drama Pilot and Series Bible. (6) Seminar, three hours. Requisite: course 233A. Examination of basics of drama pilot format, style, and content, and learning of principles behind network needs and choices in choosing pilots. Workshop in which to discuss ideas and issues with class and instructor. Weekly progress on original drama pilot and series bible required. Letter grading.

234C. Running Television Drama Room. (4) Sem- inar, three hours. Enrolled requisite: course 234A. Prerequisite: critical awareness and ability to be writer/executive producer of one-hour drama show. Focus on community building, collaboration, and leadership skills needed to successfully function in writers’ room, as well as breaking stories, writing, and rewriting television scripts. Letter grading.
289A. Research and Development I. (4) Seminar, three hours. Introduction for first-year producers and program students to producer's role in navigating unique dynamic between art and commerce in entertainment industry. Overview of development, production, sales, and distribution. Examination and analysis of creative and physical production processes. May be repeated once for credit. S/U or letter grading.

289B. Research and Development II. (4) Seminar, three hours. Focus on development strategy set and project, with emphasis on applying this knowledge to individual student projects. S/U or letter grading.

290A. Introduction to Art and Business of Producing I. (4) Seminar, three hours. Introduction for first-year producers program students to producer's role in navigating unique dynamic between art and commerce in entertainment industry. Overview of development, production, sales, and distribution. Examination and analysis of creative and physical production processes. May be repeated once for credit. S/U or letter grading.

290B. Introduction to Art and Business of Producing II. (4) Seminar, three hours. Focus on development strategy set and project, with emphasis on applying this knowledge to individual student projects. S/U or letter grading.

291A. Studios versus Independents: Navigation Processes. (4) Lecture, three hours. Tools necessary for producer to navigate Hollywood entertainment industry. Topics discussed through lectures and guest speakers, exposure to various entities that comprise industry, and new technology, with emphasis on applying this knowledge to individual student projects. S/U or letter grading.

291B. Feature Film Financing. (4) Seminar, three hours. Course 291A is not requisite to 291B. Examination of various groups that are responsible for specific marketing components and make up marketing departments. Distribution and in-theater marketing, trailers, publicity, promotions, research, and media. Mechanics and levels of intuition required to make sure a film is both marketable and profitable. S/U or letter grading.

292A. Advanced Television Development Workshop. (4) Seminar, three hours. Focus on students who have completed previous television production classes and are ready to continue to develop their own television projects. S/U or letter grading.

293. Independent Spirit: Creative Strategies for Financing and Distributing Independent Features. (4) Lecture, three hours. Course 292B is not requisite to 293C. Key insights into financing and distribution of independent or specialty films. Topics include film finance, production, marketing, distribution, agents, and new technology, with emphasis on applying this knowledge to individual student projects. S/U or letter grading.

294. International Financing and Distribution. (4) Lecture, three hours. Course 294B is not requisite to 294C. Legal-based course dealing with independent finance from distribution. Topics include fundamentals of film financing, domestic distribution, international distribution, European coproductions, role of foreign sales agents and of bankers and commercial banks, and box office tracking. S/U or letter grading.

296A. Role of Talent Agencies. (4) Lecture, three hours. Examination of different forms of representation offered by agents, managers, business managers, and lawyers and of legal rights and responsibilities of each. Exercises require students to represent rights holders in series of potential projects. S/U or letter grading.

297A. Digital Media Producing 1. (4) Seminar, three hours. Overview of changing world of storytelling through development of new technologies and new methods of creative writing and delivery of original, digital media concepts with interactive or participatory story elements for review and feedback by class, instructor, and guests. S/U or letter grading.


299A. Special Studies in Film and Television. (2 to 4) Seminar, three hours; film screenings, three hours. Designed for graduate students. Seminar study of problems in film and television, organized on topic basis. May be repeated once for credit. S/U or letter grading.

375. Teaching Apprentice Practicum. (1 to 4) Seminar, to be arranged. Preparation: apprentice personnel employment as teaching assistant, associate, or fellow. Teaching apprenticeship under active guidance and supervision of a designated faculty member responsible for curriculum and instruction at UCLA. May be repeated for credit. S/U or letter grading.

400. Film Image Design Laboratory. (4) Lecture, two hours; laboratory, six hours. Limited to graduate film and television students. Conception and design of nonnarrative film imagery. One-minute experiments in relation of meaning to technique, including manipulation of optics, photochemistry, elements of electronic processing, and display of time and motion. May be repeated once for credit. S/U or letter grading.

400B. Introduction to Cinematography II. (2) Lecture, three hours; laboratory, three hours. Continuation of study of cinematography with emphasis on lighting. Instructor meets individually with teams of director/cinematographer to prepare for shooting six-minute projects. Letter grading.
401. Film Analysis for Filmmakers. (4) Lecture/ screenings, five hours. Limited to graduate film and television students. Drawing heavily from a history of historical examples, examination of many expressive strategies useable in creation of moving image art forms. Understanding and practice, presentation of approach to viewing great films of past that empowers filmmakers to use sound and images to tell original stories in present. Focus on strategic decision making in areas of writing, design, cinematography, editing, sound, and performance to enable filmmakers to discover their own personal style for telling stories on screen. Letter grading.

402A-402B. Advanced Narrative Directing Workshops. (4 or 8) Limited to nine graduate film and television students. Production of 10- to 15-minute fiction film or project. Letter grading; 402A. Laboratory, six or 12 hours; fieldwork, to be arranged. Requisite: courses 405, 409, 410A, 410B, 410C, 433. Students budget and preproduce their projects by end of term. 402B. Laboratory, 12 hours; fieldwork, to be arranged. Requisite: course 402A. In second term students must complete photography on location and/or in studio.

402C. Advanced Narrative Directing Workshop. (4) Laboratory, four hours. Requisites: courses 402A, 402B. Conception, development, and production on projects started in courses 402A and 402B. Letter grading.

403A-C403B-C403C. Advanced Documentary Workshops. (4 to 8 each) (Formerly numbered 403A-403B-403C.) Lecture/discussion/laboratory, 16 to 24 hours; fieldwork, to be arranged. Requisites: courses 409, 410A, 410B, 410C, 433. Limited to graduate film and television students. Production of advanced individual documentary film or video projects. Students conceptualize, research, write, shoot (on location), and edit projects to completion. May be repeated once for credit. Concurrently scheduled with courses C186A-C186B-C186C. S/U or letter grading.

404. Emerging Techniques and Technologies in Cinematography. (4) Lecture, two hours; laboratory, two hours. Requisite: course 410B. Designed to keep students abreast of ever-changing tools and techniques of cinematography. Exploration of developing concepts and familiarization with emerging technology and equipment. Focus may change to reflect changes in current technology. May be repeated twice for credit. Letter grading.

404A-404B. Advanced Abstract/Experimental Media Workshops. (8-8) Lecture/discussion/laboratory, 12 hours; fieldwork, to be arranged. Requisites: courses 405, 409, 410A, 410B, 410C, 433. Limited to 10 students. Production of 20-minute abstract or experimental film, video, or multimedia project. Students plan, design, and shoot their projects in first term and work as crew for each other in rotating assignment. In second term students must complete postproduction of their projects. S/U or letter grading.

404C. Advanced Abstract/Experimental Media Workshop. (8) Lecture/discussion/laboratory, 12 hours; fieldwork, to be arranged. Requisites: courses 404A, 404B. Completion of all stages of production and postproduction on projects started in courses 404A and 404B. Letter grading.

405. Digital Image Manipulation on Set and Post. (4) Lecture, two hours; laboratory, two hours. Requisite: course 410B. Students achieve greater understanding and command of tools and techniques of color correction and matte compositing (both on set and in post production) through lectures, discussions, workshops, and screenings. Increases student's appreciation and skill set in art of digital image manipulation in cinematography. May be repeated once for credit. Letter grading.


408A-408B. Avid Editing. (4–4) Studio, four hours; laboratory, to be arranged. Individual instruction in Avid nonlinear editing system. S/U or letter grading.

409. Directing Actors for Camera Workshop. (4) Workshop, six hours; laboratory, to be arranged; laboratory preparations. Limited to MFA production program students. Team-taught with five weeks designed to give director actor/camera techniques, and five weeks to offer basic strategies to elicit good performances from actors. Emphasis on problems students faced when directing actors for film. S/U or letter grading.

410A. Symposium. (2) Seminar, three hours. Limited to and required of first-year MFA production program students. Exploration of principal concepts of film and television production within context of preproduction, production, and postproduction, providing forum for synthesis of knowledge gained in various first-year technical craft courses. Exploration of strategies for learning production within academic environment. May be repeated for credit. Letter grading.

410B. Cinematography. (2) Seminar, three hours. Limited to and required of first-year MFA production program students. Production workshop designed to give hands-on experience in all aspects of film production (tools and practicum of medium) as each student writes/directs/edit six-minute film. May be repeated for credit. Letter grading.

410C. Postproduction. (2) Seminar, three hours. Limited to and required of first-year MFA production program students. Production workshop designed to give hands-on experience in all aspects of film production (tools and practicum of medium) as each student writes/directs/edit six-minute film. May be repeated for credit. Letter grading.


410E. Production. (12) Lecture, three hours; fieldwork, 24 to 40 hours. Requisites: courses 401, 409, 410A through 410C. Limited to and required of first-year MFA production/directing students. Designed to give hands-on experience in film production. Students prepare and direct six-minute films and serve in preassigned crew positions for each other. Letter grading.


4117. Lighting for Film and Television. (4) (Formerly numbered 417.) Lecture, two hours; laboratory, six hours. Limited to graduate film and television students. Lectures, supervised exercises on stage or in exterior, screenings of scenes, and discussions aimed at learning to master lighting to create appropriate mood or atmosphere of presented scene recorded on film or through electronic system. May be repeated twice for credit. Concurrently scheduled with course C117. Letter grading.

418. Cinematography and Directing. (4) Lecture, two hours; laboratory, four hours. Requisite: course 417. Limited to graduate film and television students. Supervised filming of short dramatic projects on sound stage and at exterior locations that explore complete process of production and collaboration essential to both directing and photography in its varied technical, production, and creative aspects. Letter grading.

419. Advanced Cinematography. (4) Lecture, two hours; discussion, one hour; laboratory, one hour. Requisites: courses 417, 418. Limited to graduate film and television students. Advanced study of principles of cinematography, with emphasis on exposure, lighting, and selection of film, camera, and lenses. S/U or letter grading.


423B. Advanced Direction of Actors for Film and Television. (4) Studio laboratory, six hours. Requisite: course 410B. Designed to graduate film and television students. Advanced study and practice of directing actors before camera. Emphasis on developing techniques to immediately enhance communication between director and actor on set in order to maintain continuity from shot to shot. S/U or letter grading.

430. Introduction to Film and Television Writing. (4) (Formerly numbered C430.) Lecture, three hours. Introduction to film and television writing. S/U or letter grading.

431. Introduction to Film and Television Screenwriting. (4) Lecture, three hours. Limited to graduate film and television students. Introductory course in problems of film and television screenwriting. S/U or letter grading.


435. Advanced Writing for Short Film and Television Screenplays. (4) Discussion, three hours. Requisite: course 410C. Limited to graduate film and television students. Conception, development, and writing of dramatic film script to be produced as advanced thesis project. Letter grading.

436. Advanced Storytelling Tools for Screenwriters: Storyboarding Practice. (8) Lecture, three hours. Recommended requisite: course C430 or C431. Instruction in identification and application of specialized narrative tools common to screenplays. Students view and analyze well-known films that employ these devices to significant and enduring effect. Students also read screenplays (or portions thereof) of these films to analyze how screenwriters convey each device in written form. Students write original plays that demonstrate their practical mastery of these tools as they relate to their own development as screenwriters. S/U or letter grading.

437. Adaptation for Screen. (8) Seminar, three hours. Requisites: courses C430, 431. Students analyze techniques of dramatic adaptation and apply them by writing their own scripted adaptations. Students read selected texts and view their filmed versions in order to learn various approaches. Students workshop their own screenplays adapted from preselected list of stories. Letter grading.

452B. Postproduction Sound. (2) Laboratory, three hours. Limited to Production MFA students. Technical and aesthetic aspects of postproduction sound recording, editing, and re-recording for film and television. Letter grading.

C452C. Digital Location Postproduction. (4) Lecture, three hours; laboratory, three hours. Limited to Film and Television majors. Through discussion, demonstrations, and laboratory assignments, exploration of digital audio tools and procedures available to today’s filmmaking students. Use of many technical, equipment-related, and software step-by-steps, with emphasis on creative process. Concurrently scheduled with course C152C. Letter grading.

453. Postproduction Sound Design. (2 to 4) Lecture, three hours. Designed to give film students insight into world of postproduction sound and to provide knowledge and tools necessary to complete postwork on their projects. Exploration of all areas of postproduction sound design from editing to final mixing. How to effectively use sound design to enhance storytelling capability of films, evaluate music choices, pick composer, music edit, create sound design to enhance story points, discover design opportunities, and select right sound effects. How to edit dialogue, prep for Automatic Dialogue Replacement and Foley sound effects; mounting on supervise final sound mix; Screening of numerous film clips to provide examples of postsound choices that demonstrate effective use of sound design. S/U or letter grading.

C454B. Advanced Film Editing. (4) Lecture, three hours; laboratory, four hours; supervised exercises in television multi-camera direction, with emphasis on creative use of composition and sound, and communication with those in front of and behind camera. Letter grading.

454A-454B. Screenwriting for Film and Television. (4–4) Lecture, four hours; laboratory, three hours. Limited to graduate film and television students. Analysis and exploration, with specific scenes, of differences and many similarities in directorial approach to same literary material in theater, film, and television. S/U or letter grading.


468. Creative Location Film Production. (8) Lecture, four hours; discussion, four hours; laboratory, to be arranged. Limited to directing or producer’s program students. Problems of location, production, direction, and cinematography in various real-life practical locations. Practical application of solving problems and communication within limitations of production experience. Concurrently scheduled with course C168. Letter grading.

472. Commercials. (4) Lecture, four hours. Limited to MFA students. Designed to give students opportunity to explore one very specific kind of filmmaking. Through example, envisioning, and advertising, students gain knowledge about what kind of work is salable in American and foreign markets and how to work within distinct confines of commercial genre. Letter grading.

480. Timing for Animation. (4, 4) Lecture, three hours; laboratory, three hours. Process of animation timing through lectures and assignments. Letter grading.


C481B. Writing for Animation. (4 or 8) Lecture, six hours; studio, to be arranged. Requisite: course C481A or consent of instructor. Research and practice in creative writing and planning for animated film. May be repeated for maximum of 16 units. Concurrently scheduled with course C181B. S/U or letter grading.

C481C. Animation Workshop. (4 or 8) Studio, six hours; Preparation: storyboard at first class meeting. Requisite: course C181A. Organization and integration of various creative arts used in animation to form complete study of selected topic. May be repeated for maximum of 16 units. Concurrently scheduled with course C181C. S/U or letter grading.

482A-482B. Advanced Animation Workshops. (4 or 8 each) Lecture, three hours; studio, to be arranged. Requisites: courses 191A, 191B, 191C. Advanced organizational and technical knowledge of various creative arts used in animation, resulting in production of complete animated film. May be repeated for maximum of 16 units. S/U or letter grading.

483A-483B-483C. Advanced Computer Animation. (4 to 8 each) Lecture, six hours; laboratory, four hours. Requisites: courses 191A, 191B, 191C. Recommended: course 191B. Course 483A is requisite to 483B, which is requisite to 483C. Creation and production of complete and original advanced computer animated film. Letter grading.

484A-484B. Visual Thinking and Organization for Animation. (4–4) Lecture, six hours; laboratory, four hours. Course 484A is requisite to 484B. Systematic approach to analyzing and communicating two-dimensional and three-dimensional form and applying traditional compositional approaches to animation. May be repeated for maximum of 16 units. Letter grading.

485. Legal Issues in Animation. (4) Lecture, three hours; laboratory, three hours. Examination of legal issues in animation, including copyright, contracts, constitutional issues in animation, competing rights, employer/employee relationships, and representation in animation. S/U or letter grading.

486. Directed Individual Study: Preparation to Advance to Candidacy for MFA in Production. (2 to 4) Tutorial, four to eight hours. Limited to MFA production program students. Completion of projects in final stages of postproduction. May not be repeated. S/U or letter grading.

487. Directed Individual Study: Postproduction Laboratory. (4) Laboratory, eight hours. Limited to MFA production program students. Completion of projects in final stages of postproduction. May not be repeated. S/U or letter grading.

488A. Interactive Animation. (4 to 8) Lecture, six hours; laboratory, to be arranged. Requisites: courses 161A, 161C, 161F, and instruction of various creative arts used in animation and interactive media to form complete study of selective interactive animation project. May be repeated for maximum of 16 units. Letter grading.

488B. Advanced Interactive Animation. (4 to 8) Lecture, six hours; laboratory, to be arranged. Requisite: course 488A. Organization and integration of various creative arts and interactive animation to form complete project of selected interactive topic. May be repeated for maximum of 16 units. Letter grading.

489A. Computer Animation in Film and Video. (4 to 8) Lecture, six hours; laboratory, four to eight hours; other, to be arranged. Preparation: completed animated film. Requisites: courses 181A, 181C. Instruction in and supervised production of computer animation. May be repeated for maximum of 16 units. Letter grading.

489B. Production in Computer Animation. (4 to 8) Lecture, six hours; laboratory, four to eight hours. Requisite: course 488A. Instruction in creation, production and production of complete and original computer animation film or tape. May be repeated for maximum of 16 units. Letter grading.

495. Practice of Teaching Film and Television. (2) Seminar, three hours. Required of all teaching assistants and associates in critical studies program. Orientation and preparation of graduate students who have responsibility to assist in teaching undergraduate courses in department; discussion of problems common to teaching experience. S/U grading.

496. Practice of Teaching Film and Television. (2) Discussion, two hours. Required once of all teaching assistants and associates in department. Orientation and preparation of graduate students who have responsibility to assist in teaching undergraduate courses in department; discussion of problems common to teaching experience. May not be applied toward MA, MFA, or PhD. May be repeated. S/U grading.

498. Professional Internship in Film and Television. (4, 8, or 12) Tutorial, to be arranged. Full- or part-time at studio or on professional project. Designed for MFA program advanced students. Internship at various film, television, or theater facilities accentuating creative contribution, organization, and work of professionals in various specialties. Given only when projects can be scheduled. S/U or letter grading.

501. Cooperative Program. (2 to 8) Tutorial, to be arranged. Preparation: consent of graduate advisor and graduate dean, and host campus instructor, department chair, and graduate dean. Used to record enrollment of UCLA students in courses taken under cooperative arrangements with USC. S/U grading.

596A. Directed Individual Studies: Research. (2 to 12) Tutorial, to be arranged. Limited to graduate students. May be repeated with consent of instructor. S/U or letter grading.

596B. Directed Individual Studies: Writing. (2 to 12) Tutorial, to be arranged. Limited to graduate students. May be repeated with consent of instructor. S/U or letter grading.

596C. Directed Individual Studies: Directing. (2 to 12) Tutorial, to be arranged. Limited to graduate students. May be repeated with consent of instructor. S/U or letter grading.

596F. Directed Individual Studies: Production. (2 to 12) Tutorial, to be arranged. Limited to graduate students. May be repeated with consent of instructor. S/U or letter grading.

597. Preparation for PhD Qualifying Examinations in Film and Television. (2 to 12) Tutorial, to be arranged. May be taken for maximum of 12 units. S/U grading.


## Scope and Objectives

The Food Studies minor uses food—its production, preparation, sharing, consumption, and disposal—as a lens to understand individual, sociocultural, and global issues. The study of the role of food in multiple complex aspects of life builds bridges across all areas of the academy, including arts, anthropology, environment and sustainability, folklore and mythology, geography, history, humanities, law, psychology, public health, public policy, and other fields.

Through interdisciplinary courses and a capstone experience, students in the minor acquire a unique insight of food studies and emerge with a new intellectual framework for understanding this expanding area of study.

## Undergraduate Study

### Food Studies Minor

To be eligible for the Food Studies minor, students must be in good academic standing (have an overall grade-point average of 2.0 or better) and be enrolled in one of the required elective courses for the minor. To apply, students must file a petition with the Food Studies Committee, A316 Murphy Hall.

**Required Elective Courses (5 units):** Food Studies 195CE or 199. The capstone requirement gives students the opportunity to either put their studies into practice through internship or complete independent research in a food-related area of interest. The capstone course is required for completion of the minor. It must be the last course completed for the minor, after all other courses have been completed or concurrently with one remaining course requirement.

No more than two lower-division courses may be applied toward the minor. Students may petition to have courses other than those listed above under the required elective courses be applied toward the minor. Contact the academic counselor for the Food Studies minor for information on how to petition.

A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor. Each minor course must be taken for a letter grade, and students must have an overall grade-point average of 2.0 or better in the minor. Successful completion of the minor is indicated on the transcript and diploma.

### Food Studies

#### Lower-Division Courses

19. Fiat Lux Freshman Seminars. (1) Seminar: one hour. Discussion of critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

27. Critical Thinking about Food and Science Publications. (5) Lecture, two hours; discussion, one hour. Development of process of further thinking about stories behind conclusions from nutrition studies and food scientific literature. Exercises, discussions, reports, and readings designed to provide practices to become critical thinker in food science and literature. P/NP or letter grading.

M79. Food Politics and Cultural Solutions to Political Problems. (5) Same as World Arts and Cultures D79.) Lecture, four hours; discussion, one hour. Examination of issues of environmental and public health effects of intensive and extensive agriculture, influence of corporations on government, animal ethics, food deserts and urban gardening, and food insecurity. Focus on representation of such issues in documentaries, public lectures, memoirs, novels, and visual art, as well as on initiatives to address such problems through policy and activism. P/NP or letter grading.

89. Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to lower-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

89HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to lower-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 3 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

#### Upper-Division Courses

M132. Food Cultures and Food Politics. (5) Same as English M1718F and Society and Genetics M132.) Lecture, four hours; discussion, one hour (when scheduled). Requisite: English. Introduction to interdisciplinary field of food studies, with focus on how literature, art, science writing, and visual culture address political dimensions of food and agriculture in specific contexts. P/NP or letter grading.

133W. Historical Recipes and Recipe for History. (5) Lecture, two hours; discussion, one hour. Requisite: English Composition 3. Exploration of historical meaning of food in medieval and early modern Europe through lens of recipes. How recipes, as historical documents, are related to culture, social interactions, and historical ways of knowing. Introduction to ways that historians attempt to understand and recreate rhythms of daily life through interactive pedagogy and experimental recreation of historical recipes. Students gain working knowledge of food studies as interdisciplinary field from historical perspective. Research project documenting original research. Satisfies Writing II requirement. P/NP or letter grading.

159. Food and Health in Global Perspective. (4) Lecture, three hours. Study problematizes and adds depth to common-sense understandings of healthy and unhealthy consumption by examining of relationships between food and health, from critical and holistic perspective, that accounts for interplay of biology and culture within broader historical, societal, and global contexts. Topics include what is meant by health, especially in terms of diet; relationship between food practices and evolutionary biology, as well as cultural environments and sociocultural systems, histories, and their health implications; how major global foods have come to their dominance and consequences for health; and influences of food production, distribution, and preparation on health. P/NP or letter grading.

M170SL. Food Studies and Food Justice in Los Angeles. (4) Same as Community Engagement and Social Change M170SL.) Seminar, three hours; fieldwork, two hours. Interdisciplinary service learning course that provides general understanding of access and equity issues related to food chain in Los Angeles. Exploration of social justice issues faced by residents of lower-income communities. Reading of research from multiple disciplines, including but not limited to public health, environmental justice, and public policy. Service-learning component includes meaningful work with off-campus community partners selected in advance by instructor and Center for Community Learning. Letter grading.

M170SL. Making Films about Food. (5) Same as Community Engagement and Social Change M170SL and Public Affairs M170SL.) Lecture, three hours. Introduction to documentary video production and distribution. Students work on assignments in pairs and small groups to create 8- to 10-minute video about one of several Los Angeles partner organizations that advocate for healthy, local, sustainable food. Consideration, through video production, of challenges posed by existing farming, food distribution, and marketing methods, and strategies these groups are pursuing to create more sustainable food pathways. Students look at social media communication strategies to help think through intervention in face of historically entrenched industrial food production and regulations that remain favorable to mass-produced, processed food items. P/NP or letter grading.

187. Special Topics in Food Studies. (4) Lecture, three hours. Variable topics in one area within food studies. May be repeated for credit with topic and/or instructor change. P/NP or letter grading.

189. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to upper-division lecture course. Exploration of topics of greater depth through supplemental readings, papers, or other activities and led by lecture course instructor.

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**Faculty Committee**

Allison B. Carruth, PhD, Chair

**Allison B. Carruth, PhD (English, Environment and Sustainability, Society and Genetics)**

Akhil Gupta, PhD (Anthropology)
Joseph F. Nagy, PhD (English)
Janet M. O’Shea, PhD (World Arts and Cultures/Dance)
Amy C. Rowat, PhD (Integrative Biology and Physiology)
Wendelin M. Slusser, MD, MS (Community Health Sciences)

**Required Capstone Course (4 units):** Food Studies 195CE or 199. The capstone requirement gives students the opportunity to either put their studies into practice through internship or complete independent research in a food-related area of interest. The capstone course is required for completion of the minor. It must be the last course completed for the minor, after all other courses have been completed or concurrently with one remaining course requirement.

No more than two lower-division courses may be applied toward the minor. Students may petition to have courses other than those listed above under the required elective courses be applied toward the minor. Contact the academic counselor for the Food Studies minor for information on how to petition.

A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor.

Each minor course must be taken for a letter grade, and students must have an overall grade-point average of 2.0 or better in the minor. Successful completion of the minor is indicated on the transcript and diploma.

**Scope and Objectives**

The Food Studies minor uses food—its production, preparation, sharing, consumption, and disposal—as a lens to understand individual, sociocultural, and global issues. The study of the role of food in multiple complex aspects of life builds bridges across all areas of the academy, including arts, anthropology, environment and sustainability, folklore and mythology, geography, history, humanities, law, psychology, public health, public policy, and other fields.

Through interdisciplinary courses and a capstone experience, students in the minor acquire a unique insight of food studies and emerge with a new intellectual framework for understanding this expanding area of study.
May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

189HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to upper-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

195C. Community and Corporate Internships in Food Studies for Capstone. (4) Tutorial, to be arranged; fieldwork, eight to 10 hours. Limited to juniors/seniors. Internship in corporate, governmental, or nonprofit setting coordinated through Center for Community Learning (CCL). Students complete weekly written assignments, attend biweekly meetings with graduate student coordinator, and write final research paper. Faculty sponsor and graduate student coordinator construct series of reading assignments that examine issues related to internship site. Fulfills capstone experience requirement for Food Studies minor. Individual contract with site supervisor, CCL coordinator, and faculty sponsor required. Letter grading.

195CE. Community and Corporate Internships in Food Studies. (4) Tutorial, to be arranged; fieldwork, eight to 10 hours. Limited to juniors/seniors. Internship in corporate, governmental, or nonprofit setting coordinated through Center for Community Learning (CCL). Students complete weekly written assignments, attend biweekly meetings with graduate student coordinator, and write final research paper. Faculty sponsor and graduate student coordinator construct series of reading assignments that examine issues related to internship site. Fulfills capstone experience requirement for Food Studies minor. Individual contract with site supervisor, CCL coordinator, and faculty sponsor required. P/NP or letter grading.

196. Research Apprenticeship in Food Studies. (4) Tutorial, one hour. Entry-level research apprenticeship under guidance of faculty mentors affiliated with Food Studies minor. Collaboration with faculty mentors on their research in area related to food studies. May be repeated for credit. Individual contract required. Letter grading.

197. Individual Studies in Foodways, Diet, and Nutrition. (2 to 8) Tutorial, to be arranged. Limited to juniors/seniors. Individual intensive study, with scheduled meetings between faculty member and student. Assigned reading and tangible evidence of mastery of subject matter required. May be repeated for credit. Individual contract required. P/NP or letter grading.

199. Directed Research or Senior Project in Food Studies. (4) Tutorial, to be arranged. Limited to juniors/seniors. Supervised individual research projects in food studies under guidance of faculty mentor. Culminating paper required. May be repeated for credit. Individual contract required. P/NP or letter grading.

Graduate Course

375. Teaching Apprentice Practicum. (1 to 4) Seminar, to be arranged. Preparation: apprentice personnel employment as teaching assistant, associate, or fellow. Teaching apprenticeship under active guidance and supervision of regular faculty member responsible for curriculum and instruction at UCLA. May be repeated for credit. S/U grading.

FOREIGN LITERATURE IN TRANSLATION

Scope and Objectives

The following courses, offered in the departments of language and literature, do not require reading knowledge of any foreign language.

Courses

Afrikaans (Germanic Languages)
40. From Oppressed to Oppressor and Beyond: Literature in Afrikaans from Preapartheid to Postapartheid Era in English Translation

Ancient Near East (Near Eastern Languages and Cultures)
150A. Survey of Ancient Near Eastern Literatures in English; Mesopotamia
150B. Survey of Ancient Near Eastern Literatures in English; Egypt

Arabic (Near Eastern Languages and Cultures)
150. Classical Arabic Literature in English
M151. Modern Arabic Literature in English

Armenian (Near Eastern Languages and Cultures)
150A. Survey of Armenian Literature in English
C152. Modern Armenian Drama as Vehicle for Social Critique
C153. Art, Politics, and Nationalism in Modern Armenian Literature

Asian (Asian Languages and Cultures)
151. Buddhist Literature in Translation

Asian American Studies (Asian American Studies)
M173. Topics in Vietnamese Cinema and/or Literature

Central and East European Studies (Slavic, East European, and Eurasian Languages and Cultures)
91. Culture and Society in Central and Eastern Europe
M120. Women and Literature in Southeastern Europe
125. Interwar Central European Prose
126. Coldwar Central European Culture
127. Central European Culture after Fall of Communism
130. Balkan Cultures in Film and Literature

Chinese (Asian Languages and Cultures)
70–70W. Classics of Chinese Literature
131. World Sinophone Literature: Theories and Texts
C150A. Lyrical Traditions
C150B. Chinese Literature in Translation: Traditional Narrative and Fiction
151. Chinese Literature in Translation: Modern Literature
152. Topics in Contemporary Chinese Literature and Culture
M153. Chinese Immigrant Literature and Film

Classics (Classics)
40W. Reading Greek Literature: Writing-Intensive
41W. Reading Roman Literature: Writing-Intensive
60. Fantastic Journey: Antiquity and Beyond

137. Ancient Lives: Art of Biography
140. Topics in History of Greek Literature
141. Topics in History of Latin Literature
142. Ancient Epic
143A. Ancient Tragedy
143B. Ancient Comedy
144. Topical Studies in Ancient Culture
M145A. Ancient Greek and Roman Philosophy
M145B. Later Ancient Greek Philosophy
M146A. Plato—Earlier Dialogues
M146B. Plato—Later Dialogues
M147. Aristotle
150A. Female in Greek Literature and Culture
150B. Female in Roman Literature and Culture
162. Reception of Ancient Myth
163. Ovid and Consequences

Comparative Literature (Comparative Literature)
All undergraduate courses

Czech (Slavic, East European, and Eurasian Languages and Cultures)
155. Survey of Czech Literature from Middle Ages to Present

Dutch (Germanic Languages)
10. Contemporary Dutch Society and Culture: Beyond Rembrandt, Cheese, and Wooden Shoes
113. Modern Dutch and Flemish Literature in Translation

English (English)
111A. Hebrew Bible in Translation
111B. Christian Biblical Texts in Translation
111C. Topics in Biblical Literature
112A. Oral Tradition
112B. Celtic Mythology
112C. Survey of Medieval Celtic Literature
112D. Celtic Folklore
141B. Introduction to Old English Language and Literature
141C. Topics in Old English

French (French and Francophone Studies)
112. Medieval Foundations of European Civilization
160. Francophone Cultures in English
161. French and Francophone Theater in Translation
163. French and Francophone Short Story in Translation
164. French and Francophone Novel in Translation
166. French and Francophone Autobiography in Translation
167. French and Francophone Intellectual History in Translation
191A. Variable Topics Research Seminars in Translation

German (Germanic Languages)
50B. Great Works of German Literature in Translation: Romanticism to Present
56. Figures Who Changed World: Cosmopolitanisms within a Global Context
59. Holocaust in Film and Literature
61A. Modern Metropolis: Berlin
102. War, Politics, Art
103. German Film in Cultural Context: Early German Film
104. German Film in Cultural Context, 1945 to Present
109. Jewish Question and German Thought
110. Special Topics in Modern Literature and Culture
112. Feminist Issues in German Literature and Culture
113. German Folklore
114. Fairy Tales and Fantastic
117. German Exile Culture in Los Angeles

Hungarian (Slavic, East European, and Eurasian Languages and Cultures)
121. Survey of Hungarian Literature in Translation

Iranian (Near Eastern Languages and Cultures)
150A-150B. Survey of Persian Literature in English

Italian (Italian)
42A. Italy through Ages in English: Saints and Sinners in Early Modern Italy
42B. Italy through Ages in English: Modern and Contemporary Italy
42C. Italy through Ages in English: Food and Literature in Italy
46. Italian Cinema and Culture in English
50A. Masterpieces of Italian Literature in English: Middle Ages to Baroque
50B. Masterpieces of Italian Literature in English: Enlightenment to Postmodernism
102A-102B-102C. Italian Cultural Experience in English
110. Dante in English
140. Italian Novella from Boccaccio to Basile in Translation
150. Modern Fiction in Translation
152. Italy between Europe and Africa
M158. Women, Gender, and Sexuality in Italian Culture
230A-230B. Folk Tradition in Italian Literature
260A. Alternative Perspectives in Italian Culture: Studies of Folk Tradition in Italian Literature
260B. Women in Italian Culture
260C. Studies in Italian Cinema

Japanese (Asian Languages and Cultures)
70. Images of Japan: Literature and Film
75. Anime
C150. Topics in Japanese Literature and Philosophy
151. Japanese Literature in Translation: Modern
154. Postwar Japanese Culture through Literature
M156. Literature and Technology
157. Classical Japanese Drama: Great Tradition
170. Japanese Tales of Supernatural
172. Fiction and Plays of Floating World
174. Classical Japanese Poetry

Jewish Studies (Near Eastern Languages and Cultures)
M150A. Hebrew Literature in English: Literary Traditions of Ancient Israel—Bible and Apocrypha
150B. Hebrew Literature in English: Rabbinic Judaism
M151A. Modern Jewish Literature in English: Diaspora Literature
151B. Modern Jewish Literature in English: Israeli Literature
175. Modern Israeli Literature Made into Films

Korean (Asian Languages and Cultures)
C150. Korean Literature in Translation: Classical
C151. Korean Literature in Translation: Modern
154. Contemporary Korean Literature through Literature and Film

Polish (Slavic, East European, and Eurasian Languages and Cultures)
152A. Survey of Polish Literature: From the Middle Ages to Neoclassicism
152B. Survey of Polish Literature: Reimagining a Nation
152C. Survey of Polish Literature: Dreaming, Mocking, and Writing “as if”

Portuguese (Spanish and Portuguese)
40A. Portuguese, Brazilian, and African Literature in Translation: Portuguese and Portuguese-African Literature
40B. Portuguese, Brazilian, and African Literature in Translation: Brazilian Literature
46. Brazil and Portuguese-Speaking World
141A. Literature and Film in Portuguese
142C. Travel Narratives, Testimony, Autobiography

Romanian (Slavic, East European, and Eurasian Languages and Cultures)
152. Survey of Romanian Literature

Russian (Slavic, East European, and Eurasian Languages and Cultures)
25–25W. Great Russian Novel
30. Russian Literature and World Cinema
M118. History of Russia, Origins to Rise of Muscovy
119. Golden Age and Great Realists
120. Literature and Revolution
121. Russian Pop Culture
C124C. Studies in Russian Literature: Chekhov
C124D. Studies in Russian Literature: Dostoevsky
C124G. Studies in Russian Literature: Gogol
C124N. Studies in Russian Literature: Nabokov
C124P . Studies in Russian Literature: Puskin
C124T. Studies in Russian Literature: Tolstoy
125. Russian Novel in Its European Setting
126. Russian Theater: Plays and Performance
M127. Women in Russian Literature
128. Russian Science Fiction
C170. Russian Folklore

Scandinavian (Scandinavian Section)
40–40W. Heroic Journey in Northern Myth, Legend, and Epic
50–50W. Introduction to Scandinavian Literatures and Cultures
C131. Introduction to Viking Age
C133A. Saga
134. Scandinavian Mythology
C137. Old Norse Literature and Society
138. Vikings
C141A. Theory of Scandinavian Novel
141B. Nordic Poetry
141C. Short Story in Scandinavia
142A. Introduction to Nordic Theater and Drama
143A. Scandinavian Detective Fiction
143C. Scandinavian Crime Literature
C145A. Henrik Ibsen
C145B. Knut Hamsun
C146A. August Strindberg
147A. Hans Christian Andersen
C147B. Søren Kierkegaard
C147C. Karen Blixen
154. Romanticism
156. Scandinavian Literature of 20th Century
157. Contemporary Nordic Literature
161. Introduction to Nordic Cinema
C163A. Introduction to Danish Cinema
C163B. Introduction to Swedish Cinema
C163C. Introduction to Norwegian Cinema
C166A. Ingmar Bergman
C166C. Carl Dreyer
C171. Introduction to Scandinavian Folklore
172A. Nordic Folk and Fairy Tales
C174A. Minority Cultures in Scandinavia
173A. Popular Culture in Scandinavia
174B. Queer Scandinavia
C175. Introduction to Sami Language and Culture
C180. Literature and Scandinavian Society
C185. Seminar: Scandinavian Literature

Serbian/Croatian (Slavic, East European, and Eurasian Languages and Cultures)
154. South Slavic Literature

Slavic (Slavic, East European, and Eurasian Languages and Cultures)
90. Introduction to Slavic Civilization

South Asian (Asian Languages and Cultures)
150. Classical Indian Literature in Translation

Southeast Asian (Asian Languages and Cultures)
70. Modern Southeast Asian Literature
90. Modern Literatures in Southeast Asia
130. Topics in Southeast Asian Literature

Spanish (Spanish and Portuguese)
60A. Hispanic Literatures in Translation: Spanish Literature
60B. Hispanic Literatures in Translation: Spanish-American Literature
60C. Hispanic Literatures in Translation: Don Quijote

Ukrainian (Slavic, East European, and Eurasian Languages and Cultures)
152. Ukrainian Literature

Vietnamese (Asian Languages and Cultures)
CM155. Topics in Vietnamese Cinema and/or Literature

Yiddish (Germanic Languages)
121A. 20th-Century Yiddish Poetry in English Translation
121B. 20th-Century Yiddish Prose and Drama in English Translation
121C. Special Topics in Yiddish Literature in English Translation
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Lecturer
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Scope and Objectives
The Department of French and Francophone Studies is a major West Coast center for the study of French. In recent decades French critical thought has maintained a dominant position in the Western world. The department seeks to give its students not only a background in the various fields of French and Francophone studies, but also opportunity to relate literary, linguistic, and cultural study to examination of the critical intellectual questions of our time.

The undergraduate lower-division program is designed to provide students with practical competence in French after one year and thorough basic knowledge of the language after two years.

The undergraduate upper-division program is chiefly devoted to perfecting linguistic skills and to the study of French and Francophone culture and literature. Courses in linguistics and business French are also offered. Students graduating with a Bachelor of Arts in French should be fully fluent in the language after two years.

Undergraduate Study
If students have taken French elsewhere, they must take a placement test administered by the department. Depending on the results of the placement test or with recommendation of an instructor, they may be permitted to enroll in a course of study at a more advanced level.

Requisites to all upper-division courses taken in partial fulfillment of the French majors are French 6, 12, or equivalent. Courses 105 through 109 may not be sequential and may be taken in any order, provided the requisites for each course are fulfilled.

No credit is allowed for completing a less advanced course after successful completion of a more advanced course in French grammar and/or composition.

The French major is a designated capstone major. Students are required to complete a capstone seminar that is thematically devised to reflect current trends in the discipline. Through the capstone experience, students work closely with a faculty member on a focused topic of research. They engage in presentations and weekly discussions and write a research paper demonstrating language proficiency, critical and creative thinking, analytical skills, and a cultural perspective.

French BA
Capstone Major
Learning Outcomes
The French major has the following learning outcomes:

- Demonstrated written and oral mastery of the French language
- Demonstrated specific skills and expertise, including research, analysis, and writing
- Identification and analysis of appropriate primary sources
- Conception and execution of a project that identifies and engages with a specialized topic
- Acquisition of working knowledge of scholarly discourse relative to a specialized topic
- Engagement with peers through presentation, discussion, and critique of student work

Preparation for the Major
Required: French 1, 2, 3, 4, 5, 6, 12, or equivalent. Students normally take course 6 before undertaking course 12. Students who receive a grade of A in course 5 may enroll in course 12 concurrently with course 6, with consent of the instructor.

Transfer Students
Transfer applicants to the French major with 90 or more units must complete the following introductory courses prior to admission to UCLA: two years of French and one French literature course.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

The Major
Two plans are offered by the department:

Plan I: French/Francophone Studies in Literature and Culture
Required: French 100, 101, two courses from 114A, 114B, and 114C, one senior capstone seminar (191B), and six 4-unit courses in French and Francophone literature and/or culture selected from upper-division offerings in the department in language, civilization, literature, or the arts. One upper-division elective course from outside the department may be substituted in the major program with consent of the undergraduate adviser. Each course must be taken for a letter grade.

Plan II: Interdisciplinary French/Francophone Studies
Required: French 100, 101, one course from 114A, 114B, or 114C, one senior capstone seminar (191B), four upper-division elective courses in French and Francophone studies, and three upper-division elective courses in fields relevant to French and Francophone studies to be selected from outside the department in consultation with the undergraduate adviser. Each course must be taken for a letter grade.

Plan II, with emphasis on French and Francophone culture, is a core program in French allowing for individual selection of relevant courses in related fields such as gender studies, humanities, linguistics, and social sciences.

It is strongly advised that students who intend to pursue advanced degrees begin preparation for the language requirements at the undergraduate level. If students’ knowledge of French exceeds the preparation usually received in courses preparing for the major and if they demonstrate the requisite attainment in French 100 or 101, they may substitute for those courses in grammar and composition an equivalent number of upper-division courses in the French and Francophone Studies Department in consultation with an adviser. All prospective French majors who are native or quasi-native speakers of French must see the undergraduate adviser before beginning upper-division work in the major.

All majors must complete a minimum of nine courses of appropriate upper-division work in the UCLA French and Francophone Studies Department. Freshmen and sophomores may take up to two courses taught in English, selected from French 164 through 167, in fulfillment of major requirements (if taken in the junior or senior year, these courses count as electives). A maximum of 8 units of course 199 may be applied toward the elective requirements for the major if approved in advance by the undergraduate adviser. Students must maintain a C+ or higher in all French language and literature courses. Students who receive a grade of C- or lower in any French language and literature course must complete the course again until they achieve a grade of C+ or higher.
average in upper-division major courses in order to remain in the French major.

Coursework taken on a Passed/Not Passed basis is not acceptable in any area of the major program.

It is recommended that students intending to major in French consult with the undergraduate adviser before enrolling in upper-division courses.

French and Linguistics BA

Learning Outcomes
The French and Linguistics major has the following learning outcomes:

- Demonstrated technical mastery of French language pronunciation, history, and structure
- Working knowledge of scholarly discourse relative to a specialized French linguistics topic such as phonology, syntax, or sociolinguistics
- Demonstrated specific skills and expertise acquired in coursework, including speaking, analysis, and writing
- Demonstrated analysis of spoken discourse, including regional variations
- Engagement with peers through discussion and critique on a specialized topic in French linguistics

Preparation for the Major
Required: French 1, 2, 3, 4, 5, 6, 12, or equivalent, Linguistics 20, completion of the third term of a second foreign language. Students normally take course 6 before undertaking course 12. Students who receive a grade of A in course 5 may enroll in course 12 concurrently with course 6, with consent of the instructor.

Transfer Students
Transfer applicants to the French and Linguistics major with 90 or more units must complete the following introductory courses prior to admission to UCLA: two years of French, one French literature course, and one introduction to linguistics course. Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

The Major
Required: French 100, 101, 104, one course from 114A, 114B, or 114C, two courses from 105, 107, 108, 109, one upper-division French elective course, and Linguistics 103, 110, 120A, 120B. Each course must be taken for a letter grade.

It is strongly advised that students who intend to pursue advanced degrees begin preparation for the language requirements at the undergraduate level.

If students’ knowledge of French exceeds the preparation usually received in courses preparing for the major and if they demonstrate the requisite attainment in French 100 or 101, they may substitute for those courses in grammar and composition an equivalent number of upper-division courses in the French and Francophone Studies Department in consultation with an adviser. All prospective French and Linguistics majors who are native or quasi-native speakers of French must see the undergraduate adviser before beginning upper-division work in the major.

All majors must complete a minimum of nine courses of appropriate upper-division work in the UCLA French and Francophone Studies Department. Freshmen and sophomores may take up to two courses taught in English, selected from French 164 through 167, in fulfillment of major requirements (if taken in the junior or senior year, these courses count as electives). A maximum of 8 units of course 199 may be applied toward the elective requirements for the major if approved in advance by the undergraduate adviser. Students must maintain a C average in upper-division major courses in order to remain in the French and Linguistics major.

Coursework taken on a Passed/Not Passed basis is not acceptable in any area of the major program.

It is recommended that students intending to major in French and Linguistics consult with the undergraduate adviser before enrolling in upper-division courses.

Honors Program
The department encourages those students in the French majors with initiative and independence of mind, who desire an enriched individualized course of study, to apply for the honors program.

The honors program is designed for French majors who have fulfilled their lower-division requirements and have a 3.5 departmental grade-point average (GPA). Students whose GPA falls between 3.3 and 3.5 should submit a composition from an advanced language or literature course to the honors committee. If the work submitted meets with approval, students are admitted to the program.

To graduate with departmental honors, students must complete a minimum of two honors projects in the context of nonhonors upper-division courses (French 115 and above) taken for honors credit. They must do an honors project (a research paper of 12 to 15 pages) in addition to the regular course requirements. An honors contract must be signed before the end of the third week of the term. After completing the project, students fill out a completion form.

On the basis of their coursework and field of interest, students are expected to formulate a research topic they wish to pursue in greater depth. They take course 198 where they receive regular personal supervision from a faculty member in the research, methodology, and writing of their approximately 20- to 25-page honors thesis (honors projects and the honors thesis are not to be confused).

Students may begin the honors program toward the end of their junior year or during their senior year. Students are allowed to enroll in graduate courses with the consent of the instructor, but cannot use those courses to replace an honors project. Departmental honors are recorded on the final transcript if students fulfill all requirements for the program. They may submit their final honors thesis for the departmental prize.

French Minor
To enter the French minor, students must have an overall grade-point average of 2.0 or better.

Required Lower-Division Courses (8 units):
- French 6 or equivalent and one course from 12, 14, 41, or 60.

Required Upper-Division Courses (20 units):
- French 100 or 101, and four additional departmental courses in language, culture, or literature to be selected in consultation with an undergraduate counselor.

A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor.

Each minor course must be taken for a letter grade, and students must have an overall grade-point average of 2.0 or better in the minor. Successful completion of the minor is indicated on the transcript and diploma.

Graduate Study
Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Division website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Graduate Degrees
The Department of French and Francophone Studies offers Master of Arts (MA), Candidate in Philosophy (CPHIL), and Doctor of Philosophy (PhD) degrees in French and Francophone Studies.

French

Lower-Division Courses
1. Elementary French, (4) Lecture, five hours. P/NP or letter grading.
2. Elementary French, (4) Lecture, five hours. Enforced requisite: course 1 with grade of C– or better. P/NP or letter grading.
7. Intensive First-Year French, (12) Lecture, 15 hours. All-in-French intensive language program equivalent to first year of college French and designed to develop basic language skills. Additional work in language and media laboratory required. Offered in summer only. P/NP or letter grading.
8. Intensive Second-Year French, (8) Lecture, 10 hours; media laboratory, three hours. Enforced requisite: course 3. Intensive course equivalent to first two terms of Intermediate French and designed to improve proficiency in reading, writing, and speaking. Offered in summer only. P/NP or letter grading.
14. Introduction to French Culture and Civilization in English. (5) Lecture, three hours; discussion, one hour. Not open for credit to students with credit for course 14W. Study of contemporary French institutions and issues in cultural, political, and socioeconomic realms. P/N or letter grading.

14W. Introduction to French Culture and Civilization in English. (5) Lecture, three hours; discussion, one hour. Enforced requisite: English Composition 3 or 3H or English as a Second Language 36. Not open for credit to students with credit for course 14W. Study of contemporary French institutions and issues in cultural, political, and socioeconomic realms. Satisfies Writing II requirement. P/N or letter grading.


16. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current and historical significance. Taught in French by members in their areas of expertise and illuminating many paths of discovery at UCLA. P/N or letter grading.

41. French Cinema and Culture. (5) Lecture/Screenings, five hours; discussion, one hour. Introduction to French cinema, through study of films of cultural and literary significance. P/N or letter grading.

60. French and Francophone Novel. (5) Lecture, three hours; discussion, one hour. Study of literary masterpieces produced by writers from France and Francophone world (Canada, Africa, Caribbean, etc.) from 17th to early 21st century. P/N or letter grading.

89. Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to lower-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/N or letter grading.

89HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to lower-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/N or letter grading.

Upper-Division Courses


101. Advanced Expository Writing: Techniques of Argumentation. (4) Lecture, three hours. Requisite: course 100. Study of rhetorical devices and revision of grammatical structures. Writing assignments follow close analysis of relevant texts, film, and of learning sound—spelling corresponds to help sight read accurately. Thorough study of symbols of International Phonetic Alphabet (IPA) to give students tools to work on pronunciation systematically. Standard French serves as model, with examination of pronunciation changes and various dialects that are spoken in France. Listen, watch, improve listening comprehension and pronunciation. P/N or letter grading.

105. Structure of French. (4) Lecture, three hours. Prior background in linguistics not required. Introduction to linguistic analysis of French in areas of phonology, morphology, syntax, and language variation. P/N or letter grading.


112. Medieval Foundations of European Civilization. (4) Lecture, three hours; discussion/film screenings, two hours. Medieval texts, culture, social structure, and political history as they lay bases of European modernity. P/N or letter grading.


114A. Medieval and Renaissance Literature. (5) Lecture, three hours. Requisite: course 12. Masterpieces of medieval and Renaissance literature, including examples of epic (La Chanson de Roland), romance (Chrétien de Troyes’ Yvain), and Renaissance prose and poetry (including Marot, Du Bellay, Ronsard, Rabais, Marguerite de Navarre, and Montaigne). P/N or letter grading.

114B. 17th and 18th Centuries. (5) Lecture, three hours. Requisite: course 12. Study of selections from major works of classicism and Enlightenment, including Racine, Pascal, La Fayette, La Fontaine, Laclos, Descartes, Voltaire, and Rousseau. P/N or letter grading.


115. Studies in Medieval French Culture and Literature. (4) Lecture, three hours. Requisite: course 5. Taught in French. Study of medieval French culture and literature, including lyric poetry and narrative romance, history of medieval warfare, comedy, and class structure in literature. May be repeated for credit with topic change. P/N or letter grading.

116. Studies in Renaissance French Culture and Literature. (4) Lecture, three hours. Taught in French. Study of Renaissance culture and literature, including la Pléiade and 16th-century poetry, linguistic and poetic revolution, novel and early prose, and late French humanism. May be repeated for credit with topic change. P/N or letter grading.


118. Studies in 18th-Century French Culture and Literature. (4) Lecture, three hours. Taught in French. Study of 18th-century French culture and literature, including satire, novel, theater, philosophers, and theoretical writings. May be repeated for credit with topic change. P/N or letter grading.


120. Studies in 20th-Century French Culture and Literature. (4) Lecture, three hours. Taught in French. Study of 20th-century French culture and literature, including early 20th-century writers, surrealism, literature from 1915 to 1945, post-World War II literature, existentialism, new novel, theater, and poetry. May be repeated for credit with topic change. P/N or letter grading.

121. Studies in Francophone Cultures and Literatures. (4) Lecture, three hours. Enforced requisite: course 5. Taught in French. Study of Francophone cultures and literatures, including works by poets, playwrights, and novelists from Caribbean, North Africa, Quebec, and sub-Saharan narratives, and colonialism and postcolonial studies. May be repeated for credit with topic change. P/N or letter grading.

130. Contemporary French and Francophone Cultures. (4) Lecture, three hours. Requisite: course 12 or 100. Taught in French. Study of contemporary Francophone and Francophone world (Africa, Asia, Caribbean, Quebec), government, institutions, cultural, economic, social, and political issues. May be repeated for credit with topic change. Letter grading.


137. French and Francophone Intellectual History. (4) Lecture, three hours. Requisite: course 12 or 100. Taught in French. Exploration of themes that address particular problem of French literature, civilization, or ideas. May be repeated for credit with topic change. P/N or letter grading.

138. Contemporary French Theory. (4) Lecture, three hours. Enforced requisite: course 12 or 100. Taught in French. Study of contemporary French theorists (Barthes, Baudrillard, Cixous, Derrida, Foucault, Irigaray) and major concepts in contemporary French thought, with attention to its influence on and application to literary and nonliterary texts. May be repeated for credit with topic change. P/N or letter grading.


141. French Cinema. (4) Lecture, three hours. Study of French cinema and cinematographers in generic, thematic, and sociocultural aspects. May be repeated for credit with topic change. P/N or letter grading.

142. Francophone Cinema. (4) Lecture, three hours. Study of Francophone cinema (Africa, Caribbean, postcolonial communities in France) and cinematographers in generic, thematic, and sociocultural aspects. May be repeated for credit with topic change. P/N or letter grading.
160. Francophone Cultures in English. (4) Lecture, three hours. Study of historical, anthropological, legal, literary, or filmic texts to provide students with broad view of some main issues in field of colonial and post-colonial Francophone studies. P/NP or letter grading.

161. French and Francophone Theater in Translation. (4) Lecture, three hours. Through plays of 20th century, analysis of struggles of individuals and social groups in contexts that are historical, political, philosophical (existentialism, absurd), and cultural (colonialism and conformism). May be repeated for credit with topic change. P/NP or letter grading.


189. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

189HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as supplement to honors lecture or seminar course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

191A. Variable Topics Research Seminars in Translation. (4) Seminar, three hours. Research seminars on topics to be announced each term. Topics include major writers, genres, cultural movements, or theoretical practice. Reading, discussion, and development of culminating project. May be repeated for credit with consent of major adviser. P/NP or letter grading.

191B. Variable Topics Research Seminars: French. (4) Seminar, three hours. Taught in French. Research seminars on topics to be announced each term. Topics include major writers, genres, cultural movements, or theoretical practice. Reading, discussion, and development of culminating project. May be repeated for credit with consent of major adviser. P/NP or letter grading.

195. Community or Corporate Internship in French. (4) Tutorial, to be arranged. Limited to juniors/seniors. Internship in supervised setting in community agency or business. Students meet on regular basis with instructor and provide periodic reports of their experience. May be repeated for credit. Individual contract with supervising faculty member required. P/NP or letter grading.

198. Honors Research in French. (4) Tutorial, three hours. Limited to junior/senior French majors with 3.5 department and 3.25 overall grade-point averages. Development and completion of honors thesis or comprehensive research project under direct supervision of faculty member. May be repeated for credit. Individual contract required. Letter grading.

199. Directed Research or Senior Project in French. (2 to 4) Tutorial, three hours. Limited to juniors/seniors. Supervised individual research or investigatory performance and of theory of these genres. S/U or letter grading.

201. Techniques of Literary Analysis. (4) Lecture, three hours. Practice in close analysis of literary texts, including explicating de texte. S/U or letter grading.

202. Cultural Studies. (4) Lecture, three hours. Introduction to theoretical approaches to popular and mass culture, and to postcolonial and Francophone cultures. Topics include emergent disciplines and theories such as sociology and structuralism, city, revolution, avant-garde strategies, media, diaspora during postwar modernization, Algerian War, May 68, and beyond. Theorists include Barthes, de Certeau, Bourdieu, Baudrillard, Lyotard, Ross, Roy Chow, Virilio. S/U or letter grading.

203. Contemporary Francophone Literature. (4) Lecture, three hours. Study of Francophone African, Caribbean, Vietnamese, or Quebec literatures and cultures, with specific attention to issues of cultural contact, language, colonialism, anticolonialism, nationalism, resistance and dissidence, and postcolonial theory. S/U or letter grading.

204. Studies in autobiography. (4) Lecture, three hours. Introduction to theories of autobiography and subjectivity, and to genericity in literary traditions in French across centuries. Topics include early modern approaches to self-writing, Rousseau and emergence of modern self, women's autobiography in France and Francophone world. Theorists may include Georges Gudosf, Philippe Lejeune, Paul de Man, Jacques Derrida, Hélène Cixous, Michel Foucault, Pierre Bourdieu, Toril Moi. S/U or letter grading.


207. Studies in History of ideas. (4) Seminar, three hours. Particular problems in intellectual history and ideas. May be repeated for credit. S/U or letter grading.


215. Studies in Middle Ages. (4) Seminar, three hours. Examination of nature of cross-cultural, cross-linguistic, and cross-confessional exchange in medieval and early modern periods and France's role in it. S/U or letter grading.


220. 20th Century. (4) Lecture, three hours. Overview, both historical and analytical, of 20th-century French literature set in context of several key critical topics that interrogate canonical interpretation. Letter grading.

296. Research Methods and Writing. (2) Seminar, two hours. Advanced study of current topics in literary and cultural analysis and in critical theory. Discussion of current research and literature in research specialty of faculty member teaching course. S/U grading.

375. Teaching Apprentice Practicum. (1 to 4) Seminar, to be arranged. Preparation: apprentice personnel employment as teaching assistant, associate, or fellow. Teaching apprenticeship under active guidance and supervision of regular faculty member responsible for curriculum and instruction at UCLA. May be repeated for credit. S/U grading.


596. Directed Individual Studies or Research. (2 to 4) Tutorial, to be arranged. S/U or letter grading.

597. Preparation for Second-Year Review or PhD Qualifying Examinations. (2 to 8) Tutorial, to be arranged. May be repeated for maximum of 16 units. S/U grading.

598. Research for and Preparation of MA Thesis. (2 to 4) Tutorial, to be arranged. Maximum of 4 units may be applied toward MA degree requirements. S/U grading.


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FRESHMAN GENERAL EDUCATION CLUSTERS

See Cluster Program
Gender Studies
College of Letters and Science
1120 Rolfe Hall
Box 951504
Los Angeles, CA 90095-1504

Gender Studies
310-206-8101
Department e-mail

Elizabeth A. Marchant, PhD, Chair

Professors
Alicia Gaspar de Alba, PhD
Mishuana R. Goeman, PhD
Gil Z. Hochberg, PhD
Grace Kyungwon Hong, PhD
Douglas M. Kellner, PhD
Rachel C. Lee, PhD
Punima Manekar, PhD
Kathleen A. McHugh, PhD
Nancy M. Mithlo, PhD
Rafael Pérez-Torres, PhD
Shereen H. Razack, PhD (Penny Kanner Endowed Professor of Women's Studies)
Lucia Re, PhD, Dottore in Lettere
Abigail C. Saguy, PhD
Jennifer A. Sharpe, PhD
David Delgado Shorter, PhD
Shannon E. Speed, PhD
Juliet A. Williams, PhD

Professors Emeriti
Sandra Hale, PhD
Sandra Harding, PhD
Françoise Lionnet, PhD
Christine A. Littleton, JD
Susan K. McClary, PhD

Associate Professors
Maylei S. Blackwell, PhD
Lucy M. Burns, PhD
Jessica R. Cattelino, PhD
Lieba B. Faier, PhD
Aisha K. Finch, PhD
Sarah Haley, PhD
Elizabeth A. Marchant, PhD
Uri G. McMillan, PhD
Satya U. Noble, PhD
Kathryn Norberg, PhD
Sharon J. Trawee, PhD

Assistant Professors
Julian Anesi, PhD
Joshua J. Guzman, PhD
Judy J. Han, PhD
Zeynep K. Korkman, PhD

Scope and Objectives
The Department of Gender Studies offers interdisciplinary academic programs that are both nationally and transnationally oriented. The undergraduate program offers a Bachelor of Arts degree and a minor; the graduate program offers Master of Arts (PhD students only, no terminal master’s degree) and PhD degrees.

Students develop critical reasoning and analytical skills, a deep appreciation for complexities of power and asymmetries in gender relations across time, class, and cultures, and conceptual tools for social change.

The Gender Studies curriculum challenges the pervasive theory/practice divide within the academy. In both undergraduate and graduate courses, students are taught a broad range of methodological and analytical skills. Core undergraduate courses contextualize foundational theories and key analytic concepts within the study of different historical periods and social movements. In designating these courses power, knowledge, and bodies, the department identifies three primary areas in which feminist and queer inquiry has been concentrated over time, enabling students to trace groundings concepts, key controversies, and the emergence of new theoretical paradigms.

The department has long enjoyed recognition for its strengths in areas including women’s history, feminist science studies, and gender and the law. Over the past decade, it has become a leading program for interdisciplinary intersectional feminist scholarship on gender, sexuality, race, class, and nationality, and has built a strong reputation in transnational feminist studies, studies of settler colonialism, neoliberalism, racial violence, cultural politics, migration, social movements, affect, visual culture, and disability, as well as feminist policy studies, critical prison studies, women of color feminism, queer of color critique, and queer theory.

Undergraduate Study
The Gender Studies major is a designated capstone major. Students are required to complete a senior seminar in which they conduct original research while studying readings that consider how disciplinary and interdisciplinary research has been conducted and critiqued. Through their senior seminar work, students produce a significant work that may include an original research paper, a media project, or an in-depth literature review. They are expected to demonstrate working knowledge of the field of gender studies; understand key theoretical approaches in the study of women, gender, and sexuality; have ability to construct well-written analytic essays and present their work orally; and conduct a research project that involves the consultation of scholarly literature and presentation of evidence to support an argument.

Gender Studies BA
Capstone Major
The major in Gender Studies may be taken alone or in conjunction with another Letters and Science major. In the case of a double major, no more than five courses may be applied toward both majors.

Learning Outcomes
The Gender Studies major has the following learning outcomes:

- Demonstrated working knowledge of the field of gender studies
- Understanding of key theoretical approaches in the study of women, gender, and sexuality
- Demonstrated ability to construct well-written analytic essays and give an oral presentation
- Conduct a research project that involves the consultation of scholarly literatures and presentation of evidence to support an argument

Admission
To be admitted to the major, students must have completed Gender Studies 10, be in good standing, and formally register with the department. They are encouraged to declare their major as early as possible and to discuss their proposed course of study with the undergraduate adviser.

Students are encouraged to draw on diverse UCLA resources in creating their program of study. They may pursue traditional and/or innovative subjects in fields ranging from the humanities and fine arts to the social and life sciences. In addition to courses on the gender studies approved list, students may petition to have diverse courses accepted, including courses outside the College of Letters and Science, independent studies, or field study courses.

Each course applied toward the major must be taken for a letter grade, and students must have a grade-point average of 2.0 or better in gender studies courses to receive credit for completing the program. Courses in which they receive grades of C– or lower may not be applied toward the required courses in the major.

Preparation for the Major

Required: Gender Studies 10. Students must also complete departmental lower-division requisites, as available, for upper-division gender studies courses.

Transfer Students
Transfer applicants to the Gender Studies major with 90 or more units must complete the following introductory courses prior to admission to UCLA: one multidisciplinary gender studies course and departmental lower-division requisite courses.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

The Major
The major is designed to (1) impart core concepts in theory and critical analysis, research design, and methods and (2) provide students with exposure to a range of feminist and queer scholarship across disciplines. To achieve these goals, the major is divided into three categories.

Required: At least 11 upper-division courses (minimum of 4 units each) as follows: (1) three core courses—Gender Studies 102, 103, 104, (2) seven elective courses; one upper-division tutorial (minimum of 4 units) selected from course 195, 197, or 199 may be applied toward the elective requirement (this limit does not apply to course 198A or 198B), and (3) course 187 (capstone seminar).

Honors Program
The honors program is open to advanced junior and senior Gender Studies majors with a 3.6 grade-point average in gender studies courses and a minimum 3.4 overall GPA who have no outstanding incomplete grades, and to majors who demonstrate ability to do honors work by submitting a paper to the department chair for approval.

To qualify for honors at graduation, students must successfully complete three successive terms of
honors research (courses 199A, 198, 198C) with their faculty sponsor and receive a grade of B+ or better on the research paper/project. Course 199A may be applied toward the elective requirement; courses 198B and 198C are in addition to the minimum required courses. More information is available from the undergraduate counselor in the department office.

Gender Studies Minor

The Gender Studies minor augments and enriches study in a traditional field. Students participating in this program are required to complete both a departmental major and the Gender Studies minor.

To enter the minor, students must have an overall grade-point average of 2.0 or better and formally register with the department undergraduate advisors in 1120 Rolfe Hall. They are encouraged to declare the minor as early as possible.

Required Lower-Division Course (5 units): Gender Studies 11.

Students must also complete departmental lower-division requisites, as applicable, for upper-division gender studies courses.

Required Upper-Division Courses (24 units): (1) One core course from Gender Studies 102, 103, or 104, (2) 120SL or 187 or an equivalent senior research seminar approved in advance, and (3) four upper-division courses (minimum of 4 units each) from the approved gender studies course list. No more than 4 units of courses 195 through 199 may be applied.

A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor.

Each minor course must be taken for a letter grade, and students must have an overall grade-point average of 2.0 or better in the minor. Courses in which students receive grades of C– or lower may not be applied toward the core requirements in the minor. Successful completion of the minor is indicated on the transcript and diploma.

Graduate Study

Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Division website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Graduate Degrees

The Gender Studies Department offers Master of Arts (MA) and Doctor of Philosophy (PhD) degrees in Gender Studies.

Gender Studies

Lower-Division Courses

10. Introduction to Gender Studies. (5) Lecture, three hours; discussion, one hour. Introduction to key concepts in study of sex and gender. Exploration of topics such as gender socialization, body image, sexualities, masculinities, and women’s subordination. Special emphasis on interaction of gender with other identity markers such as race, nation, ethnicity, sexuality, class, and other differences. P/NP or letter grading.

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their research. Enrollment limited. Many paths of discovery at UCLA. P/NP grading.

89. Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to lower-division lecture course. Exploration of gender and gendered knowledge in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

89HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to lower-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under the guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Courses

101W. Writing Gender. (5) Lecture, three hours. Required. Enforced requisite: English Composition 3. Development of critical reading and writing skills necessary for academic success. Students engage assigned readings in contextualization of work with weak readers, and women’s and other social movements defined and challenged gender, social, political, and economic subordination? How have meanings of terms sex and gender varied across time and place? How has gendered body been represented in different visual cultures? How have embodied identities been produced in different historical and geographic contexts? What is relationship between embodiment and desire? P/NP or letter grading.

M104C. Diversity in Aging: Roles of Gender and Ethnicity. (4) (Same as Chicana and Chicano Studies M1106B, Aging, Health, and Society M104C, and Social Welfare M104C.) Lecture, four hours. Exploration of complexity of variables related to diversity of aging population and variability in aging process. Examination of gender and ethnicity within context of both physical and social aging, in multidisciplinary perspective utilizing faculty from variety of fields to address issues of diversity. P/NP or letter grading.

M105A. Premodern Queer Literatures and Cultures. (5) (Same as English M101A and Lesbian, Gay, Bisexual, Transgender, and Queer Studies M101A.) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisite: English Composition 3. Survey of discrete period of queer literature from beginning to circa 1850. Works by such writers as Sappho, Plato, Marlowe, Shakespeare, and Thomas Gray may be included. May be repeated for credit with topic or instructor change. P/NP or letter grading.

M105B. Queer Literatures and Cultures, 1850 to 1970. (5) (Same as English M101B and Lesbian, Gay, Bisexual, Transgender, and Queer Studies M101B.) Lecture, four hours; discussion, three hours (when scheduled). Enforced requisite: English Composition 3. Survey of discrete period of queer literature and culture from circa 1850 to 1970. Works by such authors as Walt Whitman, Radclyffe Hall, Gertrude Stein, Virginia Woolf, Langston Hughes, Tennessee Williams, Henry Blake Fuller, and James Baldwin may be included. May be repeated for credit with topic or instructor change. P/NP or letter grading.

M105C. Queer Literatures and Cultures after 1970. (5) (Same as English M101C and Lesbian, Gay, Bisexual, Transgender, and Queer Studies M101C.) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisite: English Composition 3. Examination of cultural production, specifically literature, produced by queers after Stonewall rebellion in New York City, circa 1970, widely regarded as beginning of modern lesbian and gay rights movement in U.S. Writings and films by such authors as Andrew Hol- leran, Leslie Feinberg, Achy Obejas, Essex Hemphill, Audre Lorde, Cheryl Dunye, and Alison Bechdel may be included. May be repeated for credit with topic or instructor change. P/NP or letter grading.

M105D. Studies in Queer Literatures and Cultures. (5) (Same as English M101D and Lesbian, Gay, Bisexual, Transgender, and Queer Studies M101D.) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisite: English Composition 3. Variable specialized studies course in queer literatures and cultures. Topics focus on particular problem or issue in terms of its relationship to queer cultures and writings. May be repeated for credit with topic or instructor change. P/NP or letter grading.

M105E. Queer Literatures and Cultures. (4) (Same as Chicana and Chicano Studies M101E and Honors College M101E.) Seminar, four hours. Designed for juniors/seniors. Study of four female cultural archetypes—abscinding wife/mother, infanticide mother, infanticidal woman, and vampicotic— as they appear in their classical and modern manifestations in European and American cultures. P/NP or letter grading.

M107A. Studies in Women’s Writing. (5) (Same as English M107A.) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisite: English
Composition 3. Focus on women writers that may include historical, regional, national, or thematic emphasis, with possible topics such as authorship, self-writing, sexuality, gender, and genre. May be repeated for credit with topic or instructor change. P/NP or letter grading.

M107B. Studies in Gender and Sexuality. (5) Same as English M107B and Lesbian, Gay, Bisexual, Transgender, and Queer Studies M107B.) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisite: course 3. Selection from a variety of literary and cultural production through lens of gender and sexuality. Depending on instructor, emphasis on historical, national, political, comparative, or thematic and include other intersectional vectors of identity and representation such as race and ethnicity. May be repeated for credit with topic or instructor change. P/NP or letter grading.

108S. Violence against Women. (4) Lecture, three hours. Requisite: course 10. Factual information and theoretical analyses regarding various forms of violence against women in their homes, workplaces, and communities through critical examination of social structures and social science research. Letter grading.

M109. Women in Jazz. (4) Same as African American Studies M109, Ethnomusicology M109, and Global Studies M109.) Lecture, four hours; discussion, one hour. Sociocultural history of women in jazz and allied musical traditions from 1880s to present. Survey of women vocalists, instrumentalists, composers, arrangers, and producers and their impact on development of jazz. P/NP or letter grading.

M110C. Topics in Feminist Philosophy: Metaphysics and Epistemology. (4) Same as Philosophy M118.) Lecture: three hours; discussion, one hour (when scheduled). Requisite for Gender Studies majors: course 10; for other students: one philosophy course. Examination in depth of different theoretical positions on gender and women as they have been applied and critiqued in the field of metaphysics. Emphasis on theoretical contributions made by new scholarship on women in philosophy. Critical study of concepts and principles that arise in discussion of women's rights and liberation. Philosophical approach to feminist theories. May be repeated for credit with consent of instructor. Letter grading.

M111. Women and Film. (6) Same as Film and Television M111.) Lecture, eight hours; discussion, one hour. Historical issues and critical approaches to women and cinema that may include authorship, stardom, female genres, and images of women in Hollywood cinema, alternative cinema, and independent cinema from silent era to present. Letter grading.

112. Special Topics in Women and Arts. (4) Lecture, three hours. Requisite: course 10. Selected topics relating feminist theories to creation of art by women, with consideration of cultural contexts in which they work. Approach to be comparative, cross-cultural, and interdisciplinary. Consideration of artistic practice by women in relation to issues of power, representation, and access. May be repeated twice, except for credit toward Gender Studies major. P/NP or letter grading.

113. Sex Work. (4) Lecture, three hours. Enforced requisite: one course of variety of contemporary and historical sex work both in U.S. and abroad from feminist perspective. Examination of how race, class, and gender alter experience and perception of erotic labor, and consideration of critically feminist responses by range of authors to sex work. Topics include brothels, phone sex, strip clubs, sex tourism, military prostitution, and international traffic in persons. Reading of texts by women sex workers, as well as articles from current philosophical and policy debates about prostitution. P/NP or letter grading.

M114. Introduction to Lesbian, Gay, Bisexual, Transgender, and Queer Studies. (5) Same as Lesbian, Gay, Bisexual, Transgender, and Queer Studies M114.) Lecture, three hours; discussion, one hour. Introduction to history, politics, and scientific study of lesbians, gay men, bisexuals, transgendered, and queer people; examination of sexuality and gender as categories for investigation; interdisciplinary theories and research on minority sexualities and genders. P/NP or letter grading.

M115. Topics in Study of Sexual and Gender Orientation, (4) Same as Lesbian, Gay, Bisexual, Transgender, and Queer Studies M115.) Lecture, discussion, three hours. Requisite: course 10 or M114. Studies in arts, humanities, social sciences, and/or life sciences on aspects of sexual orientation, gender identity, and lesbian, gay, and/or bisexual issues; variable topics may include questions of identity, history and political change, life and health experiences, and queer or transgender theories; multithematic and cross-cultural emphases. May be repeated for credit. Letter grading.


117. Introduction to Queer Latina/Latino Studies. (4) Lecture, three hours. Examination of production of Latina/Latino identity and limitations as it emerges within contemporary literature, music, film, and performance art. Engagement with texts that posit queer analytical approach to study how Latinidad is informed by Latinx identity and the extent that it is out of dominant notions of Latino in popular culture. Critical engagement of limits of knowledge production around Latina/Latino identity to develop new analytical insights that challenge the binary as residual and posit alternative queer or solution to its political consequences in contemporary U.S. culture. Study draws upon queer feminist artists such as Ana Mendieta, Nao Bustamante, Asco, Carmelita Tropicana, Gloria Anzudz, Felix-Gonzales Torres, Gil Cuadros, and Gregg Araki. P/NP or letter grading.

M118. Queering American History. (4) Same as Lesbian, Gay, Bisexual, Transgender, and Queer Studies M118.) Lecture, four hours. Enforced requisite: one prior lesbian, gay, bisexual, transgender, and queer studies course. History of sexual and gender minorities in U.S. Topics include changing norms, romantic friendships, medical discourse, liberation politics, post-Stonewall culture, AIDS, transgender movement, queer theory, and politics. P/NP or letter grading.

120SL. Feminist Praxis: Community-Based Learning. (4) Seminar, three hours; fieldwork, four hours. Preparation: at least two gender studies core courses. Requisites: course 10 and one course from 102, 103, or 104.) Seminar combining the seminar and fieldwork with practical experience working on gender issues and connecting these experiences to methodological and theoretical themes explored in gender studies core courses. Community partners will select an advanced by instructor in consultation with Center for Community Learning. Letter grading.

M121. Topics in Gender and Disabilities. (4) Same as Disability Studies M121.) Lecture, three and one half hours. Limited to juniors/seniors. Ways in which issues of disability are affected by gender, with particular attention to various roles, positions, and concerns of women with disabilities. Approach is intersectional, exploring how social categories of class, race, ethnicity, religion, age, sexuality, nationality, and citizenship affect and are affected by gender and disability. Topics may include law (civil rights, nondiscrimination), representation (arts, literature), education, public policy, health. May be repeated for credit with topic and instructor change. P/NP or letter grading.

122. Masculinities. (4) Lecture, three hours. Enforced requisite: course 10. Masculinity as theorized by feminists and shaped by race, class, age, and nation. Topics include feminist theories of masculinity, male body, childhood and adolescent socialization, sport, masculinity in the black masculine, global and masculinity, and men’s movements in 1970s and beyond. Special emphasis on social science approaches and methodologies. P/NP or letter grading.

123. Gender, Race, and Class in Latin American Literature and Film, 1850 to 1950. (4) Seminar, three hours. Requisite: course 10. Readings and discussion in English. Comparative survey of cultural expression in Latin America, with emphasis on works produced or set in late-19th and early-20th century historical and social circumstances of women in different Latin American cultural contexts, with particular concentration on how gender, sexuality, race, and class are absorbed and reflected in film text. Within this genealogy, examination of how cultural production sustains or interrogates categories used to construct social, political, and cultural hierarchies. Topics include representations of authorship such as women’s participation in formation of national cultures, engagement with artistic movements, and strategies of self-figuration. P/NP or letter grading.

M124. Sex, Race, and Difference in Transnational Film. (6) Same as Film and Television M124.) Lecture, three hours; discussion, one hour. Drawing on feminist media studies, training of students in media literacy so that they acquire necessary skills to critically interrogate film as medium of communication and to appreciate how film provides lens to examine some of most critical issues of our time. Development of understanding of how femininity extends to examine political consequences in contemporary U.S. culture. Study draws upon queer feminist artists such as Ana Mendieta, Nao Bustamante, Asco, Carmelita Tropicana, Gloria Anzudz, Felix-Gonzales Torres, Gil Cuadros, and Gregg Araki. P/NP or letter grading.

125. Perspectives on Women’s Health. (4) Lecture/discussion, three hours. Requisite: course 10. Examination in depth of various ways women provide healthcare in both paid and unpaid capacities and of political, economic, and social factors affecting women as recipients of healthcare. P/NP or letter grading.

M126. Feminist and Queer Theory. (5) Same as English M126 and Lesbian, Gay, Bisexual, Transgender, and Queer Studies M126.) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisite: English Composition 3. Recommended: one course from 102, 103, 104, English 120, or 121. Investigation of key concepts and debates around gender, sexuality, and kinship, with focus on their interrelated significance for making of culture. Readings to be interdisciplinary, with possible emphasis on core ideas of gender and specific historical cultures. May be repeated for credit with topic or instructor change. P/NP or letter grading.

M127. Women in Russian Literature. (4) Same as Russian M127.) Lecture, three hours. Designed for juniors/seniors. Lectures and readings in English. Introduction to alternative tradition of women’s writings in Russia and Soviet Union. Emphasis on images of women expressed in this tradition as compared with those found in works of contemporary male writers. P/ NP or letter grading.


129. Women and Gender in Caribbean. (4) Seminar, three hours. Requisite: course 10. Exploration of way in which gender discourses have been central to making of Caribbean history and to some most enduring experiences in European empire, capitalist development, and coercive labor. Emphasis on women who lived through slavery and servitude and who continue to live under systems of globalization and neoliberal exploitation. How Caribbean women have historically empowered themselves and
130. Women of Color in the U.S. (4) Lecture/discussion, three hours. Examination of experiences of African American, Asian American, Chicana, and Native American women in order to assess intersections of race, class, and gender. Contemporary and/or historical and/or theoretical perspectives on racism and its relation to feminism as defined by women of color. P/NP or letter grading.

131. Feminist Politics in Korea and Diaspora. (4) Lecture, three hours. Examination of gender, religion, and social movements in Korea and Korean diaspora through interdisciplinary feminist and critical area studies approach. Use of postcolonial, anti-racist, and intersectional feminist lens to discuss Korea and Korean diaspora as site of inquiry and field of knowledge. Close examination of several contemporary political issues, focusing on salient political theories and oppositional mobilized religious groups, and wide range of ideas, institutions, and practices that are animated by complex politics of gender, sexuality, and religion. Topics include Korean and transnational feminism concerning imperialism, militarism, and antimilitarism; queer multiplicities; pro-democracy movements and labor organizing; Catholic and Buddhist solidarity and sanctuary geographies; heteropatriarchy and urban megachurches; pro-choice activism; flows of asylum; defining justice; Nordic feminism in Islamic and women's rights organizations.

132A. Chicana Feminism. (4) Same as Chicana and Chicano Studies CM10. Lecture, four hours. Enforced requisite: course 10. Examination of Chicana feminism. Analysis of understandings of Chicana as women who identify as Chicana feminist. Analysis of writings of Chicanas who do not identify as feminist but whose practices attend to gender inequities faced by Chicanas both within Chicanas/Chicano community and dominant society. Attention to Anglo-European and African American, Asian American, Puerto Rican, and Caribbean to examine diverse social movements and ideologies; heteropatriarchy and urban megachurches; pro-choice activism; flows of asylum; defining justice; Nordic feminism in Islamic and women's rights organizations.


133A-M133B. History of Women in Europe. (4–4) (Same as History M133A-M133B.) Lecture, three hours; discussion, one hour (when scheduled). Enforced requisite: course 10. Overview of major events in the history of women from Middle Ages to present. P/NP or letter grading.

133A. History of Women in Europe. (4) Lecture, three hours; discussion, one hour (when scheduled). Enforced requisite: course 10. Overview of major events in the history of women from Middle Ages to present. P/NP or letter grading.


135C. Bilingual Writing Workshop. (4) Same as Chicana and Chicano Studies M135. Lecture, four hours. Limited to juniors/seniors. Writing sample required; access to course webpage mandatory; need not be bilingual. Exploration and/or development of bilingual creative expression through genre of short fiction. Bilingualism as both politics and aesthetics to be central theme. Discussion and analysis of Chicana/Chicano and Latina/Latino short story collections. Peer critique of weekly writing assignments. Emphasis on narrative techniques such as characterization, plot, conflict, setting, point of view, and dialogue, and magical realism as prevailing Chicana/Latinesque style. Some attention to process of manuscript preparation, public reading, and publication. Letter grading.

136. Music and Gender. (5) Same as Musicology M136. Lecture, two to three hours. Enforced requisite: course 10. Analysis of gender ideologies in several musical cultures; representations of gender, body, and sexuality through vocal and instrumental practices; contributions of women to Western and non-Western popular music; methods in feminist and gay/lesbian theory and criticism. Letter grading.

137E. Work Behavior of Women and Men. (4) Same as Psychology M137E. Lecture, two and one half hours. Enforced requisite: course 10 or Psychology 10. Designed for seniors. Examination of work behavior of women and men. Topics include antecedents of career choice, job findings, leadership, performance evaluation, and job satisfaction, and interdependence of work and family roles. P/NP or letter grading.

138. Gender and Popular Culture. (5) Lecture, three hours; screenings, two hours. Limited to juniors/seniors. Conceptual tools and critical skills necessary to rigorously interrogate gender politics of popular culture in the U.S. context. Consideration of theories of popular culture and exploration of distinctive power and ideological force exerted by popular culture in American public life. Examination of specific represen- tations of male and female bodies to understand visual ideologies of race and gender, as well as relationship between visual stereotypes and social power. Consideration of debates concerning transformative potential of pop culture and exploration of possibilities for feminist and queer cultural studies. Letter grading.


140. Gender, Culture, and Capitalism. (4) Lecture, three hours. Dynamic investigation of culture as terrain of production and reproduction—of and resistance to gendered, racialized, and classed inequalities through active analysis of advertisements, television, popular music, Disney fairy tales, and performative forms like fortunetelling. Focus on relationships between gender, culture, and capital through lenses of transnational feminism, cultural studies, and political economy. Explore gendered process of production and consumption of culture under capitalism. P/NP or letter grading.

141. Race, Gender, and Punishment. (4) Seminar, three and one half hours. Enforced requisite: course 10. Examination of what crisis scholars have called prison industrial complex. U.S. has largest prison population in world. How and why is this? Who is imprisoned? What historical conditions account for this massive explosion in prisoner population? Does prison function as regime? How have politicians used imprisonment as response to economic transforma-
American Indian cultures in early 17th century to rise of women's rights movement in mid-19th century. P/N or letter grading.

M147C. Transnational Women's Organizing in Americas. (Same as Chicana and Chicano Studies CM147C) Lecture, four hours. Formerly numbered M145T. Exploration of transnational feminist theories of inequality and race as central to processes of globalization and essential to economic and political struggles encompassed in transnational power relations. Exploration of how questions of relevant theoretical issues using economic policies and impact local actors and their communities. In time when people, capital, cultures, and technologies move across borders with increasing frequency, discussion of process of accelerated globalization has been linked to feminization of labor and migration, environmental degradation, questions of diaspora, sexuality, and cultural displacement, as well as growing global militarization. Problems and issues created by globalization and cultural, social, and political responses envisioned by transnational organizing. P/N or letter grading.

M147D. History of Women in U.S., 1860 to 1980. (Same as History M147D.) Lecture, three hours; discussion, one hour (when scheduled). Designated for juniors/seniors. Introduction to major themes in history of American women. Examination of lives of slave and civil War to rise and consequences of second-wave feminism. P/N or letter grading.

M149. Media: Gender, Race, Class, and Sexuality. (Same as Communication M149 and Labor Studies M149.) Lecture, three hours; activity, one hour. Limited to junior/senior Communication and Gender Studies majors and Labor Studies minors. Examination of manner in which media culture induces people to perceive various dominant and denigrated and/or colonized groups of people. Ways in which women, gay, lesbian, bisexual, transgendered, racial, and ethnic marginalized peoples, class relations, and other subalterns or outcasts are represented and misrepresented in media. Investigation and employment of practical applications of communications and feminist theories for understanding ideological nature of representation through use of media, guest presentations, lectures, class discussions, and readings. Introduction to theory and practice of cultural studies. Letter grading.

M152. Gender, Disability, and Education. (Same as Disability Studies and Gender Studies M152.) Lecture, three hours. Drawing on critical theory, study engages intersections of disability as it is theorized, constructed, and lived as post/neocolonial condition. Study examines scholarship between global North and South, as well as interdisciplinary fields of feminist disability studies—which assumes disability is always inextricably linked to other social markers, such as class, race, and poverty; examination of efforts and proposals by women of color, mothers, motherhood, and mothering, surrogacy, and new reproductive technologies. P/N or letter grading.

M154. Selected Topics in Gender Systems. (Formerly numbered M154G.) Lecture, three hours. Recommended preparation: for gender studies courses. Designed for senior/senior social science majors. Comparative study of women's lives and gender systems and cultures from anthropological perspective. Critical examination of intersections of gender, race, class, and sexualities. P/N or letter grading.

M154R. Women and Social Movements. (Formerly numbered M155G.) (Same as Anthropology M145R) Lecture/discussion, three hours. Recommended preparation: prior gender studies or anthropology courses. Comparative studies of social movements (e.g., nationalist, socialist, liberal/reform), beginning with Russia and China and including Cuba, Algeria, Guinea-Bissau, Mozambique, Nicaragua, and Iran, analysis of women's participation in social transformations and the centrality of gender interests. P/N or letter grading.

M154T. Women's Voices: Their Critique of Anthropology of Japan. (Formerly numbered M153T.) Lecture, three hours. Formerly numbered M152T. Preparation: introductory sociocultural anthropology course. The anthropology of Japan has long viewed issues of genders and class from women's perspective. Restoration of diversity and inequality in it by listening to voices of Japanese women in various historical contexts. P/N or letter grading.

M15A. History of Women in the U.S.: Rebellious Women of 20th Century. Lecture, three hours. Limited to juniors/seniors. Introduction to major and minor figures and movements for social change in the U.S., including themes from politics, sports, civil rebellions, and body. Examination of dramatic challenges to gender roles over course of the 20th century through actions of rebellious women who led way for myriad of changes in women's lives. Offered in summer only. Formerly numbered M150A. P/N or letter grading.

M157. Chicana Historiography. (Same as Chicana and Chicano Studies M158 and History M151D) Lecture, four hours. Examination of Chicana historiography, looking closely at how practice of writing of history has portrayed Chicanas into particular narratives. Using Chicana feminist approaches to study of history, revisiting of specific historical periods and moments such as Spanish Conquest, Mexican Period, American request, Mexican Revolution, and Chi- cano Movement to excavate untold stories about women's participation in and contribution to making of Chicana and Chicano history. P/N or letter grading.

M158. Women, Gender, and Sexuality in Italian Culture. (Same as Italian M158.) Lecture, three hours; discussion, one hour. Analysis of gender roles, images of femininity and masculinity, patriarchy, myths of Ma- donna and Latin lover, condition of women in Italian society through history, politics, literature, film, and other media. Italian majors required to read texts in Italian. P/N or letter grading.

M160. Sporting Bodies. (Same as Women's Studies M160.) Lecture, three hours. Recommended preparation: for gender studies courses. “nappy-headed hos” comment to controversies about transgender athletes or athletes with prosthetics; from covers of magazines to violence in Dodger’s Stadium parking lot; formation of national sports labor force; anthem, college men’s teams rats women’s teams in terms of sexual positions, unionization of athletes—discourses of sport draw heavily upon extant ideolo- gies of gender, sex, sexuality, and class. Introduction to critical analyses of social categories and how they are represented and reproduced in various sports and media. Critical examination of historical social values and how they are reproduced through sport. P/N or letter grading.

M161. Sports, Normativity, and Body. (Same as Disability Studies M161) Lecture, four hours. Since creation of International Olympic Committee in 1894, athletes are divided into off-field and on-field categories. Athletes are divided into ethnic and national categories. Athletes are divided into athletic categories, and therefore, into social categories. Inclusion of women in Olympics has been linked to feminization of labor and migration, environmental degradation, questions of diaspora, sexuality, and cultural displacement, as well as growing global militarization. Problems and issues created by globalization and cultural, social, and political responses envisioned by transnational organizing. P/N or letter grading.

M162. Sociology of Gender. (Same as Sociology M162) Lecture, three hours. Recommended preparation: course 10 or Sociology 1. Examination of process by which gender is socially constructed. Topics include distinction between biological sex and social gender, consequences of gender inequality, and recent changes in gender relations in modern industrial societies. P/N or letter grading.

M163. Gender and Work. (Same as Sociology M163) Lecture, three hours. Requisite: course 10 or Sociology 1. Exploration of relationship of gender to work, concentrating on the U.S. experience but also including some comparative material. Particular emphasis on analysis of causes and consequences of job segregation by gender and of wage inequality. P/N or letter grading.

M164. Politics of Reproduction. (Same as Sociology M164.) Lecture, three hours; discussion, one hour. Exposure to interdisciplinary politics and gender and reproduction. Topics include politics of migration, employment, and wage gaps between men and women in different world economy regions; feminist critiques of economic and political systems in developed countries; and politics of development in developing countries. P/N or letter grading.

M165. Psychology of Gender. (Same as Psychology M165.) Lecture, four hours. Presentation and analysis of psychological literature relevant to understanding contemporary sex differences. Topics include sex-role development and role conflict, physiological and personality differences between men and women, and sex differences in intellectual abilities and achievement, and impact of gender on social interaction. P/N or letter grading.

M166. International Economics in Globalizing World. (Same as Comparative Literature CM170) Lecture, three hours; discussion, one hour. Sociological perspectives on formation, control, and resistance of globalizing world economy. Overview of gender inequalities such as gender division of labor in paid and unpaid work, patterns of employment and unemployment, and wage gaps between men and women in different world economy regions; feminist critiques of economic and of theoretical debates within gender and development field on topics such as the feminization of labor and migration, global poverty; examination of efforts and proposals by governments, international policy-making institutions, and civil society organizations to make economic policies and structures gender-equitable. P/N or letter grading.

CM170. Alternating Traditions: In Search of Female Voices in Contemporary Literature. (Same as Comparative Literature CM170) Seminar, three hours. Designed for upper-division literature majors. Investigation of narrative texts by contemporary French, German, English, American, Spanish American, Af- rican, and Asian women writers from cross-cultural perspective. Focus on theoretical issues and methods. Concurrency with CM270. P/N or letter grading.

M170C. History of Women in China, AD 1000 to 1949. Lecture, four hours. Formerly numbered M170C. Formerly numbered CM170. Preparation: introductory history courses or consent of instructor. Examination of history of women in China, AD 1000 to 1949. P/N or letter grading.

171A. Women, Gender, and Law: Jurisprudence of Sexual Equality. (Same as Sociology and Gender Studies M171A) Lecture, four hours. Enforced requisite: course 102 or 103. Exploration of equality described and/or advocated by legal theorists primarily in U.S.—equality of opportunity, equality of outcome, equality of respect, etc.—using specific problems of women (e.g., sexual harassment, pregnancy leave policy, access to safe and effective reproductive con-
M172. Afro-American Woman in U.S. (4) (Same as African American Studies M172 and Psychology M172.) Lecture, two and one half hours. Designed for juniors/seniors. Introduction to movements for women's rights (educational, political, economic, social, and reproductive) throughout world and over one and one half centuries. P/NP or letter grading.

M173B. Women in 20th-Century Japan. (4) (Same as History M173B.) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Japanese women in Japanese and world history through state documents, autobiographical voices, contemporary television, and other varying historical sources, including topics such as women and new political order (1900 to 1930), women, war, and empire (1930 to 1945), and women in consumer society (1980s to 1990s). P/NP or letter grading.

M174. Sociology of Family. (4) (Same as Sociology M174.) Lecture, three hours; discussion, one hour. Theory and research dealing with modern family structure, and functions, including historical changes, variant family patterns, family as institution, and influence of contemporary society on family. P/NP or letter grading.

M175. Women and Cities. (4) (Same as Urban Planning M175.) Lecture, three hours. Limited to juniors/seniors. Examination of relationship between women and cities. (1) How cities have affected women's opportunities for economic and social equality, (2) women's contributions to development of U.S. cities, and (3) contemporary strategies and efforts to create urban environments that reflect women's needs and interests. P/NP or letter grading.

CM178. Critical Media Literacy and Politics of Gender: Theory and Production. (4) (Same as Education CM178.) Seminar, three hours. Corequisite: course CM178L. Use of range of pedagogical approaches to theory and practice of critical media literacy that necessarily involves understanding of new technologies and media forms. Study of both theory and production techniques to inform student analysis of media and critical media literacy projects. Concurrently scheduled with course CM278L. Letter grading.

CM178L. Critical Media Literacy and Politics of Gender: Laboratory. (2) (Same as Education CM178L.) Lecture, two hours; individual study, with scheduled meetings with course instructor. Hands-on production experience as integral component of course CM178. Concurrently scheduled with course CM278L. Letter grading.

M180B. Historical Perspectives on Gender and Science. (4) (Same as History M180B.) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Historical cases illustrating how gender informs practice and concepts of science. Topics include gendered conceptions of nature, persons of man of science, role of women in scientific revolution, scientific investigations of women and femininity. P/NP or letter grading.

185. Special Topics in Gender Studies. (4) Lecture, three hours. Preparation: one prior gender studies course. Designed for juniors/seniors. Specialized or advanced study in one area within gender studies. May be repeated for credit with topic and/or instructor change. P/NP or letter grading.

M185A. Special Topics in American Indian and Gender Studies. (4) (Same as American Indian Studies M187A.) Lecture, three hours. Variable topics in American Indian and gender studies. May be repeated for credit with topic and/or instructor change. P/NP or letter grading.

M186A. Women and Gender, Prehistory to 1792. (4) (Same as History M186A.) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Exploration of history of women, gender, and sexuality from prehistory to 1792. First half deals with period before written history and asks when did gender appear? How and why did patriarchy develop? Topics include evolution of women's bodies, appearance of gender, women's contribution to Neolithic revolution, significance of Goddess artifacts, creation myths, and women and sexuality in different religions. Course fulfills requirements for Me- soamerican women, women's power in monarchies, gender dimensions of Atlantic slavery, and first manifestations of feminist consciousness in second half. Objects or texts created by women examined or read throughout. P/NP or letter grading.

M186B. Global Feminism, 1850 to Present. (4) (Same as History M186B.) Lecture, three hours; discussion, one hour (when scheduled). Designed for advanced junior/senior Gender Studies majors or minors. In-depth study of major theme in feminist research. Themes vary by instructor and term. Students pursue independent research related to course theme, with guidance from instructor, then share and critique other student works in progress. May be repeated for credit with topic change. Letter grading.

187. Senior Research Seminar: Gender Studies. (4) Seminar, three hours. Requisites: courses 100, 102, 103, 104. Designed for advanced junior/senior Gender Studies majors or minors. In-depth study of major theme in feminist research. Themes vary by instructor and term. Students pursue independent research related to course theme, with guidance from instructor, then share and critique other student works in progress. May be repeated for credit with topic change. Letter grading.

188A-188B-188C. Honors Research in Gender Studies. Tutorial, eight hours. Requisites: courses 102 or 103 or 104, or two upper-division gender studies courses not in 189 to 199 series. Limited to junior/seniors. Internship in community setting coordinated through Center for Community Learning. Comparative study of race, gender, and indigeneity in relation to contemporary workplace dynamics. Students complete weekly written assignments, attend biweekly meetings with graduate student mentor, and write final research paper. Faculty sponsor and graduate student coordinator conduct series of reading and discussion that examine issues related to internship site. Individual contract with supervising faculty member required. P/NP or letter grading.

189A-189B-190C. Honors Research in Gender Studies. (4-4-4) Tutorial, internships, senior honors project required. May not be repeated. Letter grading.

190A & 190B & 190C. Honors Research in Gender Studies. (4-4-4) Tutorial, internships, senior honors project required. May not be repeated. Letter grading.

191. Directed Research in Gender Studies. (2 or 4) Tutorial, to be arranged. Preparation: at least two upper-division gender studies courses, minimum 3.0 grade-point average. Requisite: course 102 or 103 or 104. Limited to junior/senior Gender Studies majors and minors. Supervised individual research or investi- gation under guidance of faculty mentor or specific to gender studies culminating paper or project required. May be repeated for credit. Individual contract required. Letter grading.

Graduate Courses

201. Introduction to Interdisciplinary Methods in Gender Studies. (4) Seminar, three hours. Presenta- tions and discussions of interdisciplinary methods and discussions of their own research. Demystification of methods, particularly of interdisciplinary sort, to introduce students to wide range of faculty research and to incorporate questions of
ethics. Focus on interdisciplinary gender research that intervenes in knowledge production. Particular issues include approaches to interdisciplinary methods of research, introduction to feminist intersectional and queer theories, effective use of reflexivity and positionality in research and writing, and incorporating ethics into research design, conduct, and teaching. May be repeated once for credit with instructor change. Letter grading.

202. Key Theories and Concepts in Gender Studies. (4) Lecture/discussion, three hours. Relationship of debates in field to key intellectual and social movements (such as Marxism, poststructuralism, critical race theory, and postcolonial and transnational studies) that have generated feminist critiques and contributed to development in feminist thought. Issues include analysis of central theoretical works in field and survey of key methodological, examination of key concepts and debates in gender studies, and identification of debates that have generated key analytic insights in feminist research and gender studies scholarship. May be repeated once for credit with instructor change. Letter grading.

203. Epistemologies of Gender. (4) Lecture/discussion, three hours. Focus on debates concerning methods of inquiry in gender and sexuality studies and exploration of feminist studies, minority studies, and gender studies, and queer studies. Debates and interventions concern interdisciplinary, intersectional feminist methods and changing boundaries of field over time. Emphasis on case studies in public and private sphere to illustrate existing methodologies. Issues include examination of how feminisms have shaped and been shaped by processes of knowledge-production within and across national identities and difference. May be repeated once for credit with instructor change. Letter grading.

204. Research Design and Professional Development. (4) Seminar, three hours. Required of third-year gender studies graduate students. To be taken at the end of second year and in addition to all course work is complete; primarily geared toward proposal writing for dissertations and outside grants. Process of constructing dissertation proposals by providing structured process with incremental steps toward writing of dissertation proposal draft. Professional development for students as they prepare to enter academia or other professions. Help in preparing for teaching, field of study, examination of job/interview process, development of materials to assist in teaching, and analysis of various job markets. May be repeated once for credit with instructor change. Letter grading.

205. Subfields in Gender Studies. (4) Seminar, three hours. Departmental topics course that offers in-depth aspects of field. Limits of investigation set by individual instructor. S/U or letter grading.

210. Topics in Women and Public Policy. (4) Lecture, four hours. Designed for graduate gender studies students. Introductions to background, decision-making processes, and current debates over public policy issues affecting women in one or more major spheres of public life (e.g., work, family, political system, healthcare, legal regulation). Topics may focus on public health, political science, medicine, workplace, and welfare. May be repeated for credit with topic or instructor change. Letter grading.

215. Topics in Study of Sexuality and Gender. (4) Seminar, three to four hours. Designed for graduate students. Multidisciplinary studies on aspects of sexual identity, gender identity, queer and trans gender theory, interdisciplinary research on minority sexualities, and social construction/deconstruction of gender. May be repeated for credit with topic or instructor change. Letter grading.

220. Cultural Studies in Gender, Race, and Sexualities. (4) Seminar, three hours. Designed for graduate students. In-depth study of representations of gender and sexuality in a range of cultural and performance settings, with special attention to racisms include flow of artistic cultural production across national borders, theorizing femiserque as diasporic or material formations. Letter grading.

CM232A. Chicana Feminism. (4) Same as Chicana and Chicano Studies CM231A.) Lecture, four hours. Enforced requirement: courses for Chicana and Chicano Studies MA and/or PhD programs. Emphasis of course is on identification of women who identify as Chicana feminist. Analysis of writings of Chicanas who do not identify as feminist but whose practices attend to gender inequities faced by Chicanas in multicultural community and dominant society. Attention to Anglo-European and Third World women. Concurrently scheduled with course CM132A. S/U or letter grading.

CM238. Feminist Theory, Gender, and Sociology (M238.) Seminar, three hours. Designed for graduate students. Analysis of current American feminist theory relevant to sociologists. Exploration of critiques of second wave feminism by working class feminists and/or feminists of color, feminist scholars from other countries, and recent “antifeminist” feminists. Discussion of directions for future feminist sociology. Letter grading.

CM243. Healing, Ritual, and Transformation. (4) Same as World Arts and Cultures CM243D.) Lecture, four hours. Designed for graduate students. Examination of role of healers, historically and within contemporary culture, including Marx, Nietzsche, Freud, Marcuse, Foucault, Fanon, and de Beauvoir and their contributions to critique of contemporary education, society, and politics. S/U or letter grading.

CM255. Cross-Cultural Perspectives on Gender. (4) (Same as Sociology M255.) Seminar, three hours. How does gender manifest itself in lives of different groups of women in U.S. and abroad? Are universal analytical categories or unified feminist movements possible or is gender too different cross-culturally? S/U or letter grading.

CM259A–CM259B. History of Women. (4–4) (Same as History M259A–M259B.) Seminar, three hours. Course CM259A is requisite to CM259B. History of women’s social and political movements, with special attention to role of women in different national contexts. In Progress (M259A) and letter (M259B.) S/U or letter grading.

CM261. Gender and Music in Cross-Cultural Perspective. (4) (Same as Ethnomusicology M261.) Seminar, three hours. Designed for graduate students. Seminar in selected topic in sociology of gender. May be repeated for credit. Letter grading.

CM253A. Seminar: Current Problems in Comparative Education. (4) (Same as Education M253A.) Seminar, four hours. Examination of some of most influential critical theorists, including Marx, Nietzsche, Freud, Marcuse, Foucault, Fanon, and de Beauvoir and their contributions to critique of contemporary education, society, and politics. S/U or letter grading.

CM285. Special Topics in Women’s Studies. (4) Lecture, discussion, two hours. Designed for graduate students. Seminar on selected topic in sociology of gender. May be repeated for credit. S/U or letter grading.

CM598. Research for MA Thesis. (2 to 12) Tutorial, to be arranged. Preparation: satisfactory completion of Ph.D program first year. Requires: at least two courses from 201, 202, 203, 210. Limited to program PhD students. Interactive seminar with focus on disciplinary and interdisciplinary issues, feminist scholars, and research presentation and development. May be repeated for credit. S/U grading.

CM599. Doctoral Roundtable. (4) Seminar, four hours. Interdisciplinary, four hour seminar for graduate students. Selected topics or special problems. In-depth study of aspects of feminist theory or research methods or gender analysis within disciplinary studies in film, politics, sociology, economics, arts, or professional programs. May be repeated for credit with topic or instructor change. Letter grading.

CM278. Critical Media Literacy and Politics of Gender: Laboratory. (2) (Same as Education CM278L) Laboratory, two hours. Corequisite: course CM278. Hands-on production experience as integral component of course CM278. Concurrently scheduled with course CM178L. Letter grading.

CM275. Critical Media Literacy and Politics of Gender: Laboratory. (2) (Same as Education CM275L) Laboratory, two hours. Corequisite: course CM275. Lecture/discussion, four hours. Emphasis on relationship between systems of gender, race, and class and/or feminists of color, feminist scholars from other countries, and recent “antifeminist” feminists. Discussion of directions for future feminist sociology. Letter grading.

CM276. Critical Media Literacy and Politics of Gender: Laboratory. (2) (Same as Education CM276L) Laboratory, two hours. Corequisite: course CM276. Lecture/discussion, four hours. Emphasis on relationship between systems of gender, race, and class and/or feminists of color, feminist scholars from other countries, and recent “antifeminist” feminists. Discussion of directions for future feminist sociology. Letter grading.

CM278. Critical Media Literacy and Politics of Gender: Laboratory. (2) (Same as Education CM278L) Lecture, two hours. Corequisite: course CM278. Lecture/discussion, four hours. Emphasis on relationship between systems of gender, race, and class and/or feminists of color, feminist scholars from other countries, and recent “antifeminist” feminists. Discussion of directions for future feminist sociology. Letter grading.

CM279. Critical Media Literacy and Politics of Gender: Laboratory. (2) (Same as Education CM279L) Lecture, two hours. Corequisite: course CM279. Lecture/discussion, four hours. Emphasis on relationship between systems of gender, race, and class and/or feminists of color, feminist scholars from other countries, and recent “antifeminist” feminists. Discussion of directions for future feminist sociology. Letter grading.
Scopes and Objectives

Geography is the study of the natural world and how humans have changed it. It examines the physical Earth and life on it, looking at the world’s diverse cultures, economies, and the environmental problems they produce.

Geography addresses many issues about the contemporary world. Some are local, such as documenting the development of ethnic neighborhoods within Los Angeles. Others are regional, such as determining the best locations for nature reserves in California. Many are global, such as the study of greenhouse gases and how they affect climates, culture and resource issues in developing countries, and the impact of information technologies on people in different places.

The work of geographers often takes them out of the classroom into the field to collect information on topics that range from the settlement of new immigrants to the distribution of endangered species, the erosion of shorelines, and the location of high-tech businesses. On other occasions, geographers work in laboratories, using techniques such as computer analysis of satellite photographs to look for changes in river courses and computer modeling of shifts in global vegetation patterns and the distribution of human populations. Research is also conducted in libraries and archives, probing documentary sources on human interaction with the natural world and how that world is imagined.

Department of Geography graduates have a wide variety of career opportunities because of their combination of geographical/environmental perspectives and technical skills. UCLA geography students have gone on to become university scholars, school teachers, members of governmental and nongovernmental planning, development, and conservation agencies, business executives, lawyers, and specialists in geographical information analysis for government and private business. Because of its sophisticated focus on the relationship of the global to the local, geography is particularly useful for those who wish to pursue careers with an international focus.

The department has one of the top programs in the U.S. and offers two undergraduate majors that lead to the Bachelor of Arts degree: Geography and Geography/Environmental Studies. The Geography major combines a broad background in the field with specific tracks. The Geography/Environmental Studies major focuses on the impact of humans on the natural environment. Also offered are undergraduate minors in Geography, Geography/Environmental Studies, and Geospatial Information Systems and Technologies.

The department also offers the PhD degree in Geography (an MA degree may be earned in the process of completing PhD requirements). Student research projects are conducted in collaboration with a faculty adviser and advisory committee. Graduate students work in most major areas of geography and on projects around the world. Graduate alumni of the department have teaching positions at many leading universities in the U.S. and abroad.

Undergraduate Study

Geography BA

The Geography major allows students to combine a broad background in the field with more specific interests and career goals. Students can select classes in several areas of geography such as urban, economic, cultural, environmental, physical, or biogeography. They should consult with the undergraduate adviser to plan a program suitable to their personal objectives.

Learning Outcomes

The Geography major has the following learning outcomes:

• Comprehensive knowledge of the main strands of physical and human geography, including familiarity with major theoretical perspectives
• Command of various geographical methods and techniques such as remote sensing, cartography, and field methods
• Skills in collecting and analyzing geographical data
• Proficiency in written arguments drawing on appropriate sources and methods in the geographical literature

Preparation for the Major

Required: Three courses (15 units) as follows: Geography I or 2, 3 or 4 or 6, and Statistics 12. Each course must be taken for a letter grade.

Transfer Students

Transfer applicants to the Geography major with 90 or more units must complete as many of the following introductory courses as possible prior to admission to UCLA: one physical geography or biogeography course, one cultural geography or economic geography course, and one statistics course.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

The Major

Required: Eleven upper-division geography courses (44 units minimum), each taken for a letter grade. All geography upper-division courses numbered 100 and higher may be applied toward the major, with a few exceptions. Contact the advising office for more information.

Geography/Environmental Studies BA

The major in Geography/Environmental Studies develops and deepens students’ understanding of environmental issues; it explores problem-solving approaches from an interactive people/nature viewpoint and involves analysis of social, physical, and biotic environmental systems. The major’s uniqueness lies in its emphasis on its geographical perspective of human impacts on natural systems, as well as of implications of global change on local and regional human systems.

Learning Outcomes

The Geography/Environmental Studies major has the following learning outcomes:

• Comprehensive knowledge of the main strands of physical and human geography, including familiarity with major theoretical perspectives
• Command of various geographical methods and techniques such as remote sensing, cartography, and field methods
• Familiarity with a range of environmental problems at different geographical scales, their analysis, modeling, and various policy responses to them
• Skills in collecting and analyzing geographical data
Preparation for the Major

Required courses must be taken at UCLA in order to fulfill the major. Required courses must be taken in residence at UCLA. Transfer credit for any of the above is subject to departmental approval. Each minor course must be taken for a letter grade. Successful completion of the minor is indicated on the transcript and diploma.

The Major

Geography Minor

The Geography minor is designed for students who wish to deepen and/or broaden their major program of study with a distinctive yet flexible program of courses encompassing the relationship between environment and society. The minor allows students to develop a coherent strategy for understanding and explaining the manner in which people and the Earth interact. Students have the opportunity to explore the origins, development, morphology, and processes of landscapes inherited from nature, as well as those institutions and cultural, economic, political, and social patterns associated with the human development, occupancy, organization, perception, and use of these landscapes.

To enter the minor, students must have completed at least one geography course at UCLA with a grade of C or better, have an overall grade-point average of 2.0 or better, and file a petition in the Geography Department Advising Office, 1255 Bunche Hall.

Required Lower-Division Courses (10 units): Textbooks and a systems approach to gaining a causal understanding of major environmental problems facing our society and the world at large.

Required Upper-Division Courses (20 units): Two courses from Geography 1, 2, 3, 4, 6. It is recommended that students take these courses before attempting upper-division courses.

Required Upper-Division Courses (20 units): Any five upper-division geography courses, with a few exceptions. Contact the advising office for more information.

A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor, and at least three of the five upper-division courses must be taken in residence at UCLA. Transfer credit for any of the above is subject to departmental approval.

Each minor course must be taken for a letter grade. Successful completion of the minor is indicated on the transcript and diploma.

Geospatial Information Systems and Technologies Minor

The Geospatial Information Systems and Technologies minor is designed to provide students with a strong background in the use, application, and development of geospatial/environmental research techniques and methods.

To enter the minor, students must have completed Geography 7 with a grade of B or better, have an overall grade-point average of 2.0 or better, and file a petition in the Geography Department Advising Office, 1255 Bunche Hall. For majors in Geography or Geography/Environmental Studies, only two upper-division courses may overlap between the major and this minor.

Required Lower-Division Courses (10 units): Geog- raphy 7, Statistics 12.

Required Upper-Division Courses (20 units mini- mum): Geography 8, 181A, 181B, 182A, and any two courses selected from 181C, 182B, 182C, 184, 185, 186B, and 199 (4 units with approval of the faculty adviser). Each upper-division course must be completed with a grade of C or better.

A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor, and at least three of the five upper-division courses must be taken in residence at UCLA. With the exception of Statistics 12, transfer credit is not accepted toward this minor except on rare occasions.

Each minor course must be taken for a letter grade, and students must have an overall grade-point average of 2.0 or better in the minor. Successful completion of the minor is indicated on the transcript and diploma.

Graduate Study

Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Division website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Graduate Degrees

The Department of Geography offers Master of Arts (MA), Candidate in Philosophy (CPhil), and Doctor of Philosophy (PhD) degrees in Geography, and the
Master of Applied Geospatial Information Systems and Technologies (MAGIST) degree.

Geography

Lower-Division Courses

1. Earth’s Physical Environment. (5) Lecture, three hours; laboratory, two hours. Study of Earth’s physical environment, with particular reference to nature and distribution of landforms and climate and their significance to people. P/N or letter grading.


3. Cultural Geography. (5) Lecture, three hours; discussion, two hours. Introduction to cultural geography of modern world, with examination of key concepts of space, place, and landscape as these have shaped and been shaped by connections between societies and their natural environments. Examples from variety of landscapes and places since 1800 and especially from Los Angeles region. P/N or letter grading.

4. Globalization: Regional Development and World Economy. (5) Lecture, three hours; discussion, two hours. Economic geography explores spatial distribution of all forms of human productive activity at number of geographical scales—local, regional, national, and global. Key themes include changing powerful global economic forces on organization of production, P/N or letter grading.

5. People and Earth’s Ecosystems. (5) Lecture, three hours; laboratory, two hours. Exploration of ways in which human activity impacts natural environment and how modification of environment can eventually have significant consequences for human activity. Examination, using case studies, of real environmental problems that confront us today. P/N or letter grading.

6. World Regions: Concepts and Contemporary Issues. (5) Lecture, three hours; discussion, two hours. Interdisciplinary and historical approach to modern peoples, their differences in wealth or poverty, and their local origins of food production. Brief introduction to physical geography and biogeography of each region. Discussion of each region’s peoples, languages, foods, prehistories, and histories. Letter grading.

7. Introduction to Geographic Information Systems. (5) Lecture, three hours; laboratory, two hours. Designed for freshmen/sophomores. Introduction to fundamentals of GIS and concepts necessary to carry out sound geographic analysis with geographic information systems (GIS). Reinforcement of key issues in GIS, such as geographic coordinate systems, map projections, spatial analysis, and visualization of spatial data. Laboratory exercises use database query, manipulation, and spatial analysis to address real-world problems. P/N or letter grading.

8. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/N or letter grading.

88A-B8Z. Lower-Division Seminars: Geography. (4 each) Discussion, three hours; reading period, one hour. Seminars designed to explore various themes and issues pertinent to environment and people. Seminar topics change each quarter, depending on department during previous term. P/N or letter grading.


89. Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to lower-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities assigned by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/N or letter grading.

109. Biogeography of Plant and Animal Invasions. (4) Formerly numbered 116). Lecture, three hours; reading period, one hour. Requisite: course 1 or 2 or 5. Examination of theories and examples of invasion of new environments by plants and animals introduced through natural processes or by human activity. P/N or letter grading.

110. Ecoseystem Ecology. (4) Formerly numbered M117.) (Same as Ecology and Evolutionary Biology M131.) Lecture, three hours; field trips. Requisite: course 1 or Life Sciences 7B. Designed for juniors/seniors. Development of ecosystem ecology, with focus on understanding links between ecosystem structure and function. Emphasis on energy and water balances, nutrient cycling, plant-soil-microbe interactions, landscape heterogeneity, and human disturbance to ecosystems. P/N or letter grading.

116. Climatology. (4) Formerly numbered 104.) Lecture, three hours; reading period, one hour. Designed for juniors/seniors. Examination of many relations between climate and world of man. Application of basic energy budget concepts to microclimates of relevance to ecosystems of agriculture, animals, man, and urban places. P/N or letter grading.

117. Tropical Climatology. (4) Formerly numbered 102.) Lecture, three hours, In-depth exploration of development of tropical climate, with special reference to hurricanes, ENSO, and monsoons. Examination of human interaction with tropical climate processes and human-induced climate change in tropics. Use of climatological information to foster sound environmental management of climate-related resources in tropics. P/N or letter grading.

118. Applied Climatology: Principles of Climate Impact on Natural Environment. (4) Formerly numbered M106.) Lecture, three hours. Requisites: one course from course 1, 2, Environment 10, or life Sciences 7B. Designed for juniors/seniors. Exploration of knowledge and tools to solve complex problems in contemporary applied climatology, including current practices, influence of climate on environment, and human influence on changing climates. P/N or letter grading.


125. Environmentalism: Past, Present, and Future. (4) (Formerly numbered M115.) (Same as Environment M125 and Urban Planning M165.) Lecture, three hours; discussion, one hour. Exploration of history and origin of major environmental ideas, movements or countermovements they spawned, and new and changing nature of modern environmentalism. Introduction to early ideas of environment, how rise of modern sciences reshaped environmental thought, and how this was later transformed by 19th-century ideas and rise of American conservation movements. Reevaluation of politics of American thought and contemporary environmental questions as they relate to broader set of questions about nature of development, sustainability, and equity in environmental debate. Exploration of issues in broad context, including global climate change, rise of pandemics, deforestation, and environmental justice impacts of war. Letter grading.

126. Environmental Change. (4) Formerly numbered M111.) (Same as Environment M111.) Lecture, three hours; reading period, one hour. Designed for juniors/seniors. Examination of natural forces producing environmental changes over past two million years. How present landscape reflects past conditions. Effects of environmental change on people. Increasing importance of human activity in environmental modification. Focus on impact of natural and anthropogenic changes on forests. P/N or letter grading.

Upper-Division Courses

Environmental Studies and Natural Systems

101. Principles of Geomorphology. (4) Formerly numbered 100.) Lecture, three hours; reading period, one hour. Requisite: course 1. Study of shape that earth’s landforms, with emphasis on weathering, mass movement and fluvial erosion, transport, deposition; energy and material transfers; space and time considerations. P/N or letter grading.

102. Soils and Environment. (4) Formerly numbered M127.) (Same as Geography and Evolutionary Biology M127 and Environment M102L.) Lecture, three hours; discussion, one hour; field trips. General treatment of soils and environmental implications: soil development, morphology, and worldwide distribution of soil orders; physical, chemical, hydrologic, and biological properties; water use, erosion, and pollution; management of soils in relation to plant growth and distribution. P/N or letter grading.

102L. Soils and Environment: Field. (1) Formerly numbered M127L.) (Same as Geography and Evolutionary Biology M127L and Environment M102LL.) Laboratory, one hour; field excursions. Corequisite: course 102. Investigations and demonstrations supporting material in course 102, including excavating, describing, and naming soils in field, soil-forming processes, geomorphology, and soils. P/N or letter grading.

103. Soil and Water Conservation. (4) (Formerly numbered M107.) (Same as Environment M103.) Lecture, three hours; discussion, one hour. Enforced requisite: course 102. Soil Conservation Society. The conservation of soils and soil resources and the management of soils as related to plant growth and distribution. P/N or letter grading.

104. Analytical Animal Geography. (4) Formerly numbered M110.) Lecture, three hours; reading period, one hour; Environmental quality. Scope includes agriculture, forestry, mining, and other rural uses of land. P/N or letter grading.

105. World Vegetation. (4) Formerly numbered 108.) Lecture, three hours; reading period, one hour. Limited to juniors/seniors. Characteristics, distribution, environmental and cultural relationships of world’s principal vegetation patterns. P/N or letter grading.

106. Forest Ecosystems. (4) Formerly numbered 111.) Lecture, three hours; field trips. Requisite: course 2 or Life Sciences 7B. Designed for juniors/seniors. Examination of ecological principles as they apply to forests. Emphasis on constraints of physical environment, biotic interactions, succession, disturbances, and long-term environmental change. P/N or letter grading.


119. Geobiology of Microorganisms. (4) Formerly numbered 113.) Lecture, three hours. Requisites: course 13 or Life Sciences 7B, Environmental Biology M125 and Urban Planning M165.) Lecture, three hours; discussion, one hour. Exploration of history and origin of major environmental ideas, movements or countermovements they spawned, and new and changing nature of modern environmentalism. Introduction to early ideas of environment, how rise of modern sciences reshaped environmental thought, and how this was later transformed by 19th-century ideas and rise of American conservation movements. Reevaluation of politics of American thought and contemporary environmental questions as they relate to broader set of questions about nature of development, sustainability, and equity in environmental debate. Exploration of issues in broad context, including global climate change, rise of pandemics, deforestation, and environmental justice impacts of war. Letter grading.


125. Environmentalism: Past, Present, and Future. (4) (Formerly numbered M115.) (Same as Environment M125 and Urban Planning M165.) Lecture, three hours; discussion, one hour. Exploration of history and origin of major environmental ideas, movements or countermovements they spawned, and new and changing nature of modern environmentalism. Introduction to early ideas of environment, how rise of modern sciences reshaped environmental thought, and how this was later transformed by 19th-century ideas and rise of American conservation movements. Reevaluation of politics of American thought and contemporary environmental questions as they relate to broader set of questions about nature of development, sustainability, and equity in environmental debate. Exploration of issues in broad context, including global climate change, rise of pandemics, deforestation, and environmental justice impacts of war. Letter grading.

126. Environmental Change. (4) Formerly numbered M111.) (Same as Environment M111.) Lecture, three hours; reading period, one hour. Designed for juniors/seniors. Examination of natural forces producing environmental changes over past two million years. How present landscape reflects past conditions. Effects of environmental change on people. Increasing importance of human activity in environmental modification. Focus on impact of natural and anthropogenic changes on forests. P/N or letter grading.

130. Food and Environment. (4) (Formerly numbered M132.) Lecture, three hours. Designed for juniors/seniors. Thematic orientation to food systems and their role in urban and cultural transformations. P/NP or letter grading.

M131. Human Impact on Biophysical Environment. (4) (Formerly numbered M109.) (Same as Environment M131.) Lecture, three hours; reading period, one hour. Designed for juniors/seniors. Examination of human activities and their ecological principles, and forms of land use. Letter grading.

133. Humid Tropics. (4) (Formerly numbered 113.) Lecture, three hours. Requisite: course 2 or 5 or Life Sciences 21 or 67. Designed for juniors/seniors. Exploration of humid tropics, with emphasis on rainforests, their ecological principles, and forms of land use. Letter grading.

135. African and African Diaspora in Americas. (4) (Formerly numbered 114.) Lecture, three hours. Designed for juniors/seniors. Historical-geographical examination of Africa’s role in Americas, with emphasis on environment, agriculture, food systems, and medical crops. P/NP or letter grading.

136. Health and Global Environment. (4) (Formerly numbered 125.) Lecture, three hours; reading period, one hour. Impact of environment and lifestyle on individual and communal health. Emphasis on geographical perspectives, with examples from both developed and developing countries. P/NP or letter grading.


139B-139C. Problems in Geography. (4-4) (Formerly numbered 158C-158RC.) Seminar, three hours; reading period, one hour. Preparation: completion of three courses in one concentration. Limited to seniors. Seminar course in which students carry out intensive research projects developed from courses within one concentration. P/NP or letter grading.

140. Social Geography. (4) (Formerly numbered 147.) Lecture, three hours; discussion, one hour. Study of spatiality of social differences such as race, class, gender, age, sexuality, location. Critical explorations of identity, space and power. Analysis of social and spatial structures. Importance of space and place in social life. P/NP or letter grading.

141. Cultural Geography of Modern World. (4) (Formerly numbered 148.) Lecture, three hours; discussion, two hours (when scheduled). Designed for juniors/seniors and graduate students. Historical and structural approach to cultural geography of modern world system, with particular emphasis on structure and functioning of its core, semi-periphery, and periphery. P/NP or letter grading.

142. Past People and Their Lessons for Our Own Future. (5) (Formerly numbered M153.) (Same as Anthropology M148 and Honors Collegium M152.) Lecture, two hours; discussion, two hours. Examination of modern and past peoples that met varying fates, as background to examination of how other modern people are coping or failing to cope with similar issues. Letter grading.

M144. Feminist Geography. (4) (Formerly numbered M146.) (Same as Gender Studies M146.) Lecture, three hours; discussion, one hour. Critical engagement of gender in the processes of human historical and spatial development, with an emphasis on the spatiality of gender and power. P/NP or letter grading.

145. Slavery and Human Trafficking. (4) Lecture, three hours; discussion, two hours (when scheduled); reading period, one hour. Offered either as 4-unit course or with consent of course. Designed for juniors/seniors. Discussions of human traffick ing in world today using examples from U.S. and Europe, with focus on Philippines as case study for exploring both contemporary examples and historical forms of enslavement. P/NP or letter grading.

146. Political Geography. (4) (Formerly numbered 140.) Lecture, three hours; reading period, one hour. Designed for juniors/seniors. Spatiality of political activity, spatial constitution of political power, control over space as central component to political struggles. Studies at local, national, state, and global scales. P/NP or letter grading.

147. Border Studies: Globalization, Nation, Identity. (4) (Formerly numbered 150.) Lecture, three hours; discussion, one hour (when scheduled). Analysis of history, production, and functions of contemporary borders. Designed to broaden understanding of and challenge dominant narratives about many physical, political, and conceptual borders that shape our daily lives, from national boundaries to security fences to discoveries about race and gender. P/NP or letter grading.


150. Uneven Development Geographies: Prosperity and Impoverishment in Third World. (4) (Formerly numbered 141.) Lecture, three hours; discussion, two hours (when scheduled). Geographical perspective on part of globe commonly called Third World (global South). How development has shaped livelihood possibilities and processes of change over past two centuries, and transformative possibilities of Third World agency. World societies seek to transform Third World into their own image through theories and practices of colonialism, development, and globalization. Study of those theories and Third World alternatives to examine how they have shaped livelihood possibilities. Social differences between stagnant livelihoods and those who have achieved freedom and control over space as key to political struggles. Studies at local, national, state, and global scales. P/NP or letter grading.

151. Unseen Development Geographies: The Spatial Turn. (4) (Formerly numbered 142.) Lecture, three hours; discussion, two hours (when scheduled). Designed for juniors/seniors and graduate students. Study of geographical perspectives on the unseen in development. Analysis of transformation of Third World societies from a geographical perspective. Requisite: two prior courses. P/NP or letter grading.

152. Urban Geography. (4) (Formerly numbered 150.) Lecture, three hours; discussion, one hour. Designed for juniors/seniors. Analysis of development, functions, spatial patterns, and geographic problems of cities. P/NP or letter grading.

154. Cities and Social Difference. (4) (Formerly numbered 151.) Lecture, three hours; discussion, one hour. City landscapes embody best and worst of U.S. society: diversity and poverty, opportunity and violence. Study of urban spaces, social differences, inequality, and conflicts over use of space. Social urban geography. P/NP or letter grading.

156. Ethnicity in American Cities. (4) (Formerly numbered 144.) Lecture, three hours; reading period, two hours. Limited to juniors/seniors. Designed to encourage and facilitate critical thinking about geographical aspects of ethnicity in contemporary America. Use of comparative perspective to explain changing distribution, conditions, and political behavior, and adjustment problems ethnic groups face in contemporary American cities. P/NP or letter grading.

159A. Problems in Geography: Urban and Regional Development Studies. (4) (Formerly numbered 159A.) Seminar, three hours; reading period, one hour. Preparation: completion of three courses in one concentration. Limited to seniors. Seminar course in which students carry out intensive research projects developed from courses within one concentration. P/NP or letter grading.

Regions

171A. North America. (4) (Formerly numbered 180.) Lecture, three hours; reading period, one hour. Designed for juniors/seniors. Delimitation and analysis of principal geographic regions of U.S. and Canada. P/NP or letter grading.

171B. California. (4) (Formerly numbered 184.) Lecture, three hours; reading period, one hour. Limited to juniors/seniors. Systematic and regional treatment of geography of California, including physical, cultural, and economic aspects and detailed at sites of various regions. P/NP or letter grading.

171C. Metropolitan Los Angeles. (4) (Formerly numbered 156.) Lecture, three hours; reading period, one hour. Limited to juniors/seniors. Designed for juniors/seniors. Study of origins, growth processes, internal structure and pattern, interactions, environmental and spatial problems of Los Angeles metropolitan area. P/NP or letter grading.

172A. Spanish South America. (4) (Formerly numbered 153.) Lecture, three hours; discussion, one hour. Designed for juniors/seniors. Study of geographical factors, physical and cultural, that are basic to understanding historical development of Spanish...
172C. Brazil. (4) (Formerly numbered 182B.) Lecture, three hours; reading period, one hour. Designed for juniors/seniors. Study of geographic factors, physical and cultural that are basic to understanding the development of Brazil since the 1500s to present. Introduction to great disputes in history and ecology centered on this region and character of two shores of the Mediterranean basin. P/NP or letter grading.

173A. Civilization of Europe. (4) (Formerly numbered 152.) Lecture, three hours; reading period, one hour. Limited to juniors/seniors. Urbanization of Europe, growth of city systems and internal spatial structure, functions, and geographic contemporary aspects of European cities. Particular attention to historical development and landscapes of capital cities such as Rome, Paris, and Berlin. P/NP or letter grading.

174A. The Mediterranean World. (4) (Formerly numbered 183.) Lecture, three hours; reading period, one hour. Designed for juniors/seniors. Study of geographic factors, physical and cultural, that are basic to understanding historical development of Mediterranean region. Topics involve people in both Japan and other parts of the world. P/NP or letter grading.

175A. Japan in World: Culture, Place, and Global Connections. (4) (Formerly numbered 138.) Lecture, three hours; reading period, one hour. Focus on questions of culture and place in Japan. Exploration of ways that the history of Japan itself has been shaped by historical and contemporary interactions involving people in both Japan and other parts of the world. P/NP or letter grading.

175B. Contemporary China. (4) (Formerly numbered 186.) Lecture, three hours; reading period, one hour. Limited to juniors/seniors. Regional synthesis with varying emphasis on people of South or Southeast Asia in their physical, biotic, and cultural environment and its dynamic transformation, P/NP or letter grading.

176A. Southeast Asia. (4) (Formerly numbered 185.) Lecture, three hours; reading period, one hour. Limited to juniors/seniors. Regional synthesis with varying emphasis on people of Southeast Asia in their physical, biotic, and cultural environment and its dynamic transformation, P/NP or letter grading.

176B. Contemporary China. (4) (Formerly numbered 186.) Lecture, three hours; reading period, one hour. Limited to juniors/seniors. Regional synthesis with varying emphasis on people of South or Southeast Asia in their physical, biotic, and cultural environment and its dynamic transformation, P/NP or letter grading.

177. Conservation Geography Field and Professional Practicum. (4) Eight hours: research group meeting, three hours; one-, three-, and four-day field trips. Limited to senior Geography and Environmental Studies majors. Enrollment by application. Field focus on California vegetation and its response to current and future climate change. Students learn to collect field data, and to conduct field vegetation research. Students learn to work as professional research consultants in teams, develop consulting research proposals, consultant assessment report, and present those reports orally and in written format to clients. Field trips to Mojave Desert, Great Basin Desert, pine-oak woodland, pine-fir forest, alpine treeline, White Mountains, Sierra Nevada, and coastal pine and redwood forests. P/NP or letter grading.


181B. Advanced Geographic Information Systems. (4) (Formerly numbered 170.) Lecture, three hours; discussion, one hour. Enforced requisite: course 181A. Introduction to full geographic information systems (GIS) functionality, using ARCGIS/INFO on UNIX workstations. Spatial manipulation, query, and computation of datasets carried out in project-oriented approach. P/NP or letter grading.

181C. Geographic Information Systems Programming. (4) (Formerly numbered 173.) Lecture, two hours; laboratory, two hours. Enforced requisite: course 181A. Introduction to fundamental concepts and architecture of programming objects in widely used geographic information systems (GIS), and programming in GIS environment. Topics include GIS customization and development using variety of programming languages. Lectures followed by laboratory exercises. P/NP or letter grading.

182A. Introduction to Remote Sensing. (4) (Formerly numbered 169.) Lecture, two hours; laboratory, one hour. Enforced requisite: course 7. Introduction to fast-growing field of environmental monitoring from space. Application of Polar Orbiter Processing System (GPS), and Earth Observing System satellites to land-use change, oceanography, meteorology, and environmental monitoring. Introduction to digital remote sensing, digital terrain modeling, and geographic information systems (GIS) software. P/NP or letter grading.

182B. Remote Sensing: Digital Image Processing and Analysis. (4) (Formerly numbered 172.) Lecture, three hours; reading period, one hour. Enforced requisite: course 182A. Digital processing methods for manipulating and analyzing image data. Topics include statistical description, geometric and radiometric correction, cloud detection, and change detection schemes. Reinforcement of procedures presented in lecture with laboratory exercises and student projects. P/NP or letter grading.

182C. Advanced Remote Sensing. (5) (Formerly numbered 174.) Lecture, three hours; laboratory, two hours. Enforced requisite: course 182A. Remote sensing in visible and infrared wavelength regions to understand basic concepts of measurement and interaction with matter, how digital remote sensing images are acquired, and constraints on available data and data analysis. P/NP or letter grading.

184. Environmental Modeling. (4) (Formerly numbered 166.) Lecture, two hours; reading period, two hours. Presentation of basic concepts related to computer modeling of biogeochemical cycles, geomorphic processes, and other phenomena relevant to changing Earth and its inhabitants. Laboratory exercises include building basic computer models and working with existing models. P/NP or letter grading.

185. Field Methods in Physical Geography. (8) (Formerly numbered 177.) Lecture, three hours; laboratory, three hours; hours; laboratory. Enforced requisite: course 182A. Examination of field procedures and concepts used in observation, measurement, analysis, and interpretation of physical phenomena in natural and built environment. Topics vary from year to year and may include soils, geomorphology, and field methods in geographic information science. May be repeated for credit with topic change. P/NP or letter grading.


187. Research and Writing in Human Geography. (4) (Formerly numbered 161.) Seminar, three hours. Limited to seniors. Topics vary from year to year. Required of all majors. Enforced requisite: course 181A. Students should come with idea of topic of interest. Students learn process of doing geography research, including how to ask good research questions, how to search for relevant sources, how to construct argument, how to build literature review, and how to properly cite and incorporate academic sources. Culinating final paper on topic of choice. Weekly class discussions and opportunities to exchange work with peers, giving useful feedback and opportunity to learn how to offer feedback and how to incorporate feedback into editing their work. Letter grading.

Special Studies

188SA. Individual Studies for USIE Facilitators. (1) Tutorial, to be arranged. Enforced requisite: courses 188SA and 188SB. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to discuss selected USIE seminar topic, conduct preparatory research, and begin preparation of syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.

188SB. Individual Studies for USIE Facilitators. (1) Tutorial, to be arranged. Enforced requisite: course 188SA. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to finalize course syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.

188SC. Individual Studies for USIE Facilitators. (2) Tutorial, to be arranged. Enforced requisite: course 188SB. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor while facilitating USIE 88S course. Individual contract with faculty mentor required. May not be repeated. Letter grading.

189. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be repeated for credit. Individual honors contract required. Honors content noted on transcript. P/NP or letter grading.

189HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to upper-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for credit. Individual honors contract required. Honors content noted on transcript. Letter grading.

191. Variable Topics Research Seminars: Geogra- phy. (4) Seminar, three hours. Three hours of research per selected topics in geography. Some sections may require prior coursework. Consult Schedule of Classes for topics and instructors. May be repeated for credit and may be applied as elective units toward departmental majors and minors. P/NP or letter grading.

194. Research Group Seminars: Geography. (2) Seminar, two hours. Research group meeting, two hours. Designed for undergraduate students who are part of research group. Discussion of research methods and current literature in field or of research of faculty members or students. May meet concurrently with graduate research seminar. May be repeated for credit with topic change. P/NP grading.

C194A. Research Group Seminars: Issues in Bio- physical Geography. (1) Seminar, one hour. Designed for undergraduate students who are part of research group. Discussion of current research in biophysical geography. Topics vary from year to year. May be repeated for credit. Concurrently scheduled with course C299B. P/NP grading.

195. Community or Corporate Internships in Geog- raphy. (4) Tutorial four hours. Limited to juniors/seniors. Internship of eight to 10 hours per week in supervised setting in community agency or business. Students meet on regular basis with instructor and provide bi-weekly reports. May be repeated for credit. Individual contract with supervising faculty member required. P/NP grading.
Graduate Courses

Core

200A. History and Structure of Modern Geography. (4) (Formerly numbered 297A.) Lecture, three hours; reading period, one hour. Evolution of field of geography in 19th and 20th centuries, with emphasis on professionalization of geography and its emergence as modern academic discipline. S/U or letter grading.

200B. Seminar: Geographical Inquiry. (1) (Formerly numbered 297B.) Seminar, one hour. Discussion of geographical research within context of philosophical debates concerning nature of scientific inquiry. S/U or letter grading.

Methods

201. Research Design in Geography. (4) (Formerly numbered 299D.) Lecture, four hours. Introduction to logic of geographic inquiry. Topics include questions surrounding philosophy of science, research design issues, and range of methodologies available to and implemented by geographers to enable students to evaluate geographic literature critically. S/U or letter grading.

202. Qualitative Methods and Methodology. (4) (Formerly numbered 299C.) Seminar, three hours; laboratory, two hours. Examination of definition and use of qualitative methodology and methods in social-cultural geographic research. Exploration of relationship between methodology and epistemology; review of range of research methods and techniques, including interviewing and focus groups, observation, action research, ethnography, and interpretation of material culture, and consideration of ethical and practical issues of conducting qualitative research. S/U or letter grading.

204. Statistical Methods for Geographic Research. (4) (Formerly numbered 299A.) Lecture, three hours; laboratory, two hours. Requisite: course M171. Use of linear models, discriminant functions, and factor analysis to analyze problems in geography. S/U or letter grading.

M205. Spatial Statistics. (4) (Formerly numbered M272.) (Same as Statistics M222 and Urban Planning M215.) Lecture, three hours. Designed for graduate students. Survey of modern methods used in analysis of spatial data. Implementation of various techniques using real data sets from diverse fields, including remote sensing, image processing, geosemology, demography, and environmental sciences. S/U or letter grading.

M206. Introduction to Biophysical Modeling of Land Surface Processes and Land/Atmosphere Interactions. (4) (Same as Atmospheric and Oceanic Sciences M206.) Lecture, two hours; laboratory, one hour; reading period, one hour. Designed for graduate students. Presentation of introductory knowledge for graduate students to understand nature, principles, and scope of biophysical modeling of land surface processes including ideal canopy model, radiation, heat and CO2 fluxes transfer, and satellite data application. Laboratory sessions included. S/U or letter grading.

Geospatial Information Systems

208. Geographic Data Visualization and Analysis. (4) (Formerly numbered 298B.) Lecture, three hours; laboratory, two hours. Requisites: course 168, Statistics 12. Development of broad base of knowledge and set of skills that foster conduct of high-quality geographic data analysis. S/U or letter grading.

111. Remote Sensing for Environmental Change. (4) (Formerly numbered 299E.) Laboratory, three hours; independent study, two hours. Requisite: course 167. Study of aerial photographs and other remote sensing images as tools for geographical research. Particular attention to analysis of landscapes and interpretation of interrelationships of individual features in their physical and cultural complex. S/U or letter grading.

Remote Sensing

212. Physical, Mathematical, and Computational Basis of Remote Sensing. (4) (Formerly numbered 299F.) Lecture, three hours; laboratory, two hours. Requisites: courses 169, 172. Intensive review and analysis of fundamental physics, mathematics, and computer science that underlie modern remote sensing and application of this knowledge to modern geodetic, physical, and environmental remote sensing. May be repeated for credit with topic change. S/U or letter grading.

214. Advanced Projects in Geographic Information Systems (GIS)/Remote Sensing. (4) (Formerly numbered 268.) Lecture, one hour; laboratory, three hours. Recommended: Requisite: course 262. Use of GIS or image processing package expected. Implementation of various techniques in geographical research. May be repeated for credit with instructor change. S/U or letter grading.

215. Advanced Field and Laboratory Methods in Biophysical Geography. (4) (Formerly numbered 260.) Laboratory, five hours; fieldwork, five hours. Examination of advanced field and laboratory procedures used in contemporary biophysical geographical research. May be repeated for credit with instructor change. S/U or letter grading.

216. Advanced Field Analysis: Biogeography. (8) (Formerly numbered 282.) Fieldwork, 10 hours. Examination of land surface studies conducted on UNIX platforms within structured course environment. All aspects of modest but original project, including data acquisition, ingestion, and analysis; interpretation of results and presentation in publication-style format. Letter grading.

217. Advanced Medical Geography. (4) Lecture, two hours; discussion, one hour; reading period, one hour. Requisite: course 118. In-depth study of selected topics in medical geography and intense review of recent research. S/U or letter grading.

Human Geography

M224. International Migration. (4) (Formerly numbered M243.) (Same as Sociology M236B.) Lecture, three hours. Further exploration of key current theoretical debates in study of international migration, with emphasis on exploring both theoretical debates of past and contemporary migration and case studies on which those debates hinge, to encourage students to undertake research in field. S/U or letter grading.

M229A. Development Theory. (4) (Same as Urban Planning M234A.) Lecture, three hours. Review of basic literature, theoretical framework for development theory through analysis of impact of mercantilism, colonialism, capitalism, and socialism on various urban and rural social and economic structures in Third World. Presentation, through evaluation of theoretical writings and case studies, of complexity and diversity of developing countries. Emphasis on linkages between policy and rural and urban impacts. Gives students working background for courses M228E, M229C, and many other planning courses addressing Third World Issues. Letter grading.

M229B. Ecological Issues in Planning. (4) (Same as Urban Planning M234B.) Lecture, three hours. Recommended preparation: Urban Planning M265. Science and politics of modern environmentalism and planning in light of transformations inherent in global change, including how to address these questions in ways that go beyond green consumerism and bifurcation of wild, ecological, and human environments. American environmentalism has become dominant model for many conservation practices, informed by Multum in Parvo model of idea of untrammeled nature with people-less sets. Asides for spiritual and scientific contemplation of nature; this approach used in environmental policy and as key idea in conservation and fragment biology. At opposite end is environmental planning devoted to infrastructure in hyper-human habitats (cities). Exploration of these competing models and many reasons to be skeptical of both in 21st century. Letter grading.

M229C. Resource-Based Development. (4) (Same as Urban Planning M234C.) Lecture, three hours. Recommended preparation: course M229A. Some major issues associated with development of specific natural resources. Topics include nature of particular resource (or region associated with it), its previous management, involvement of state, corporations, and local governments in environment and social impact of its development. Letter grading.

M230A. Theories of Regional Economic Development. (4) (Formerly numbered M236A.) (Same as Public Policy M240 and Urban Planning M236A.) Lecture, three hours; discussion. In-depth study of theories and application of economic geography in 19th and 20th centuries, with emphasis on relationships between regions, process of regional growth and decline, reasons for different levels of economic development, relations between more and less developed regions. Letter grading.

M230B. Globalization and Regional Development. (4) (Formerly numbered M236B.) (Same as Urban Planning M236B.) Lecture, three hours. Requisites: course M230A. Application of theories of regional economic development, location, and trade learned in course M230A to contemporary process known as globalization. Examination of nature and effects of globalized geographic space, employment, and social structure, along with implications for policy. Letter grading.

235. Seminar: Social Geography. (4) Seminar, three hours; reading period, one hour. Focus on particular topics in contemporary social geography. Content may vary from year to year. May be repeated for credit. S/U or letter grading.

237. Seminar: Historical Geography. (4) Seminar, three hours; reading period, two hours. Theory and practice of historical geography in North America and Europe. May be repeated for credit. S/U or letter grading.

238. Seminar: Urban Geography. (4) (Formerly numbered 251.) Seminar, three hours; reading period, two hours. Requisite: course 250. Related research projects growing out of course 250. May be repeated for credit. S/U or letter grading.

240. Seminar: Geographic Thought. (4) (Formerly numbered M265E.) Seminar, three hours; reading period, two hours. Designed for graduate students. Discussion and study of topics significant to growth of modern philosophy of geography. S/U or letter grading.
Human Geography Advanced

245. Advanced Political Geography: Geopolitics. (4) (Formerly numbered 246.) Lecture, two hours; discussion, one hour. Intensive study of theories and principles of geopolitics. Selected regions used as examples of differing techniques of study in geopolitics. S/U or letter grading.

247. Advanced Topics in Cultural Geography. (4) (Formerly numbered 232.) Seminar, two hours; discussion, one hour; reading period, one hour. Requisite: course 133. Lectures and discussions around specific aspects of regional change, cultural landscape interactions, and regional and global perspectives. Tools and concepts of environmental physics of relevance to human and physical geography also embraced. S/U grading.

248. Advanced Topics in Economic Geography. (4) (Formerly numbered 231.) Seminar, three hours; reading period, three hours. Designed for graduate students. Study of economic theories and principles S/U or letter grading.


250. Advanced Topics in Urban Geography. (4) Seminar, two hours; discussion, one hour; reading period, one hour. General study of hierarchy of urban places, including diffusion within urban hierarchy and theories to account for location and size distribution of cities. S/U or letter grading.

Physical Geography

255. Physical Basis of Geography. (4) (Formerly numbered 297B.) Lecture, three hours; reading period, one hour. Critical evaluation of formative influences, paradigm shifts, and present challenges of physical geography, illustrated from historical developments and changing research frontiers in geomorphology, climatology, oceanography, hydrology, and soils. S/U or letter grading.

256. Regional Climate and Terrestrial Surface Processes. (4) (Formerly numbered 207.) Seminar, three hours. Designed for graduate students. Physical concepts and basic principles of land-surface/atmosphere interactions. Exploration of topics in terms of regional and global perspective and implications. Human activities cause changes in land cover, which in turn affect regional climate. Some regions, in particular, appear to be hot spots. Regions to be studied in detail. S/U or letter grading.

257. Land Degradation. (4) (Formerly numbered 227.) Seminar, three hours. Discussion on impact of human activities and institutions on terrestrial ecosystems and goods and services they provide. Topics vary from year to year. May be repeated for credit with topic change. S/U or letter grading.

258. Human Security and Environmental Change. (4) (Formerly numbered 228.) Seminar, three hours. Discussion of impact of environmental change on food, water, and physical security of human populations and societies’ adaptations to environmental change. Topics vary from year to year. S/U or letter grading.

260. Evolution, Ecology, Environmentalism, and Roots of Modern American Geography. (4) (Formerly numbered 297C.) Seminar, three hours; reading period, one hour. Discussion of how contemporary development of modern concepts of evolution, ecology, and environmentalism influenced, and were influenced by, development of modern geography as academic discipline. S/U or letter grading.

M265. Environmentalisms: Climate Dimensions and Politics, Past, Present, Future. (Same as Urban Planning M265.) Lecture, four hours; discussion, one hour. Review of environmental theories and their practices in dynamic U.S. and international contexts. Issues of climate change, scenario planning, and matrix applications in both urban and rural settings. Exploration of problematics of increasing internationalization (or international implications) of environmental practices as part of both green and black economies. What does integrated environmental planning look like in this century? Letter grading.

270A-M270B-M270C. Seminars: Climate Dynamics, (2 to 4 each) (Same as Atmospheric and Oceanic Sciences M270A-M270B-M270C.) Seminar, two hours. Archaeological, geochemical, micropaleontological, and stratigraphic evidence for climate change throughout geological past. Rheology and dynamics of climatic systems: atmosphere and oceans, ice sheets and marine ice, lithosphere and mantle. Climate of other planets. Modeling, simulation, and prediction of climate on seasonal, and interannual time scale. May be repeated for credit. S/U or letter grading.

271. Seminar: Climatology. (4) (Formerly numbered 205.) Seminar, three hours; reading period, one hour. Requisite: course 280. Selected topics. May be repeated for credit. S/U or letter grading.

272. Seminar: Biogeography. (4) (Formerly numbered 213.) Seminar, three hours; reading period, two hours. Requisite: course 281. Related research projects growing out of course 281. May be repeated for credit. S/U or letter grading.

274. Seminar: Humid Tropics. (4) (Formerly numbered 223.) Seminar, three hours; reading period, two hours. Designed for graduate students. Selected topics, biophysical and cultural concepts, of humid tropics, with emphasis on problems related to human settlement and livelihood. May be repeated for credit. S/U or letter grading.

277. Coastal Geography. (4) Seminar, three hours. Discussion of various coastal topics from biophysical, ecological, and human perspectives. Content may vary from year to year. May be repeated for credit. S/U or letter grading.

Physical Geography Advanced

280. Advanced Climatology. (4) (Formerly numbered 204.) Lecture, three hours; laboratory, one hour. Preparation: first year of calculus and acquaintance with Fortran IV. Requisite: course 104. Introduction to tools and concepts of environmental physics of relevance to natural and man-made landscapes. Such basic, mathematical, and computer programming tools are of special concern to physical geographers, ecologists, and architects. S/U or letter grading.

281. Advanced Topics in Biogeography. (4) (Formerly numbered 208.) Lecture, two hours; discussion, one hour; reading period, one hour. Requisites: courses 108, and 110 or 116. Intensive review and analysis of physical and cultural factors influencing plant distributions, and diversity.

283. Advanced Topics in Geomorphology. (4) (Formerly numbered 200.) Lecture, two hours; discussion, one hour; reading period, eight hours. Preparation: two courses from 101, 105, M107. Requisite: course 100. Analysis of geomorphic theories since scientific revolution, with emphasis on catastrophism, uniformitarianism, glacial theories, isostasy and eustasy, evolution and cyclicity, thermodynamics and mechanics, quantification, and current paradigms. View of each theme in its contemporary milieu. S/U or letter grading.

286. Advanced Topics in Environmental Change. (4) (Formerly numbered 215.) Lecture, three hours; reading period, two hours; fieldwork, three hours. Preparation: one course from 271, 280, 283, or one appropriate graduate course in atmospheric and ocean sciences or Earth, planetary, and space sciences. Analysis of changing physical environment of Quaternary period. May be repeated for credit. S/U or letter grading.

Regional Geography

290. South America. (4) (Formerly numbered 282.) Seminar, three hours; reading period, two hours. Introduction to main issues in geography of South America, with focus on historical and geographical perspectives on national period; themes and periods can be adapted to individual interests. S/U or letter grading.

291. Geography of Contemporary China. (4) (Formerly numbered 286.) Seminar, three hours, reading period, two hours. Designed for graduate students. May be repeated for credit. S/U or letter grading.

M292. Seminar: Political Geography of Italy. (4) (Formerly numbered M241.) (Same as Italian M241.) Seminar, three hours reading period. Themes in political geography with particular emphasis on Italy. May be repeated for credit. S/U or letter grading.

Required Colloquia

299A. Research Group Seminars: Issues in Human Geography. (1) (Formerly numbered 298E.) Seminar, one hour. Biweekly seminar to discuss current research in human geography. Topics vary from year to year. May be repeated for credit. S/U grading.

C299B. Research Group Seminars: Issues in Biological Geography. (1) (Formerly numbered 299A.) Seminar, one hour. Biweekly seminar to discuss current research in biological geography. Topics vary from year to year. May be repeated for credit. Concurrency scheduled with course M299B.

299C. Cultural Geography Methods Workshop. (1) (Formerly numbered 299B.) Seminar, two hours. Biweekly forum for presentation and discussion of new concepts, theories, and methods at juncture of geography, humanities, and environmental study. Principal focus on landscape, but scope of cultural study within geography also embraced. S/U grading.

299D. Political Geography Working Group. (1) (Formerly numbered 299C.) Seminar, two hours. Limited to graduate students. Biweekly forum for analysis of current geopolitics, with emphasis on geographic impacts of recent global events. S/U grading.

299E. Agriculture and Food Studies Colloquium. (1) (Formerly numbered 299D.) Seminar, one hour. Current scholarly debates surrounding topics on agriculture and food. Interdisciplinary discussion, with focus on research that explores confluence of production and consumption studies vis-à-vis agriculture and food. Group discussion of recently published work, works-in-progress by participants, and distinguished guest speakers. S/U grading.

Special Studies

375. Teaching Apprentice Practicum. (1 to 4) Seminar, to be arranged. Preparation: apprentice personnel employment as teaching assistant, associate, or fellow. Teaching apprenticeship under active guidance and supervision of regular faculty member responsible for curriculum and instruction at UCLA. May be repeated for credit. S/U grading.

495. Teaching College Geography. (2) Seminar, one hour; laboratory, three hours. Classroom practice in teaching, with individual and group instruction on related educational methods, materials, and evaluation. May be repeated for credit. S/U grading.

595. Directed Individual Study or Research. (2 to 8) Tutorial, to be arranged. May be repeated for credit. S/U grading.

597. Preparation for PhD Qualifying Examinations. (2 to 8) Tutorial, to be arranged. Independent study. May be repeated for credit. S/U grading.


GERMANIC LANGUAGES
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Scope and Objectives
The Department of Germanic Languages offers an array of courses in languages, literatures, and cultures. The broad range of studies offers training in specialized fields such as film, linguistics, and critical theory. Courses prepare students for a variety of careers, including education, law, business, international relations, and publishing.

Undergraduate majors earn a Bachelor of Arts degree by completing one of three plans. An undergraduate minor is also available. Language, literature, and culture studies are available in Afrikaans and Dutch, in addition to German.

The graduate program offers Master of Arts and PhD degrees. Refer to the Scandinavian Section for information about the degrees in Scandinavian studies.

The program also provides opportunity for study, work study, and internships.

Undergraduate Study
The German major is a designated capstone major. During their senior year, students complete a capstone seminar under the guidance of a faculty member. In the seminar they reflect both individually and collaboratively on prior coursework for the major and draw out common themes. Students identify key ideas that interest them while demonstrating analytical thinking, synthesized knowledge, collaborative spirit, and a keen awareness of the German language and German-speaking cultures.

No credit is allowed for completing a less advanced course after successful completion of a more advanced course.

Germanic Languages / 453

German BA

Learning Outcomes: The German major has the following learning outcomes:

- Demonstrated skills at analyzing and synthesizing knowledge gained
- Identification, drawn from coursework, of a key idea or theme of interest
- Ability to effectively present learning about selected theme through final paper or project
- Demonstrated capacity to work collectively to effectively analyze and synthesize knowledge

Preparation for the Major

Required: German 1, 2, 3, 4, 5, 6, or equivalent. Students who have completed one year of college-level German language courses should enroll in course 4. Students who are in doubt as to their level of language proficiency or who are native speakers should consult with the language program advisor.

Transfer Students

Transfer applicants to the German major with 90 or more units must complete the following introductory courses prior to admission to UCLA: two years of German.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

The Major

Three plans are offered by the department.

Plan I: German Studies

Required: Six upper-division German courses, three upper-division elective courses in fields relevant to Germanic languages to be selected in consultation with the director of undergraduate studies, and German 191C. Each course must be taken for a letter grade.

Plan II: Germanic Languages

Required: German 140, 141, 142, 152, 153, 191C, one upper-division elective course in the department, and three upper-division elective courses in fields relevant to Germanic languages to be selected in consultation with the director of undergraduate studies.

Honors Program

To qualify for graduation with departmental honors, students must earn a cumulative grade-point average of 3.6 or better in upper-division German courses and a 3.3 overall GPA, and complete German 199 with a grade of A. Contact the departmental honors advisor for procedures, special arrangements, possible exceptions, and other information.

German Minor

To enter the German minor, students must have an overall grade-point average of 2.0 or better.

Required Lower-Division Courses (8 units): German 5 and 6 or equivalent.

Required Upper-Division Courses (at least 20 units): Any five upper-division courses in the department.

A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor. Each minor course must be taken for a letter grade, and students must have an overall grade-point average of 2.0 or better in the minor. Successful completion of the minor is indicated on the transcript and diploma.

Graduate Study

Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Division website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Graduate Degrees

The Department of Germanic Languages offers Master of Arts (MA), Candidate in Philosophy (CPhil), and Doctor of Philosophy (PhD) degrees in Germanic Languages and a Master of Arts (MA) degree in Scandinavian (see Scandinavian Section).

Afrikaans

Lower-Division Courses

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

40. From Oppression to Oppressor and Beyond: Literature in Afrikaans from Preapartheid to Postapartheid Era in English Translation. (5) Lecture, four hours; discussion, one hour. Enforced requisite: English Composition 3 or 3H. Development of all literature in Afrikaans, with special attention to authors and poets who protested apartheid—Brink, Breitzenbach, Van Heerden, Jonker, Joubert, Krige, Krog, Labruch, Rabe, Small, and Willemse. Additional readings by Coetzee, De Lange, Krog, and others on censorship, imprisonment, South African history, and postcolonial literary theory. P/NP or letter grading.
Upper-Division Courses

105A. Elementary Afrikaans. (4) Lecture, four hours; language laboratory. Introduction to sister language of modern Dutch among the national languages of South Africa. Grammar, practice in listening, speaking, reading, and writing. P/NP or letter grading.

105B. Intermediate Afrikaans. (4) Lecture, four hours; language laboratory. Requisite: course 105A. Grammatical exercises; reading and linguistic analysis of texts from both literary and nonliterary sources. P/NP or letter grading.

135. Introduction to Afrikaans Literature. (4) Discussion, three hours. Requisite: course 105B. Analysis of selected works from founding of Genootskap van Rege Afrikaanse in 1875 to present time, including novels by recent writers such as Leroux and Brink, as well as works of such as Ebyers, Oppenberg, W.E.G. Louw, Van Wyk Louw, and Breytenbach, P/NP or letter grading.

189. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

189HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to lower-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

199. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Graduate Courses

596. Directed Individual Study or Research in Afrikaans. (4) Tutorial, three hours. Limited to juniors/seniors. Supervised individual research or investigation under guidance of faculty mentor. May be repeated toward graduate credit. Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Dutch

Lower-Division Courses

10. Contemporary Dutch Society and Culture: Beyond Rembrandt and Golden Shoes. (6) Lecture, three hours. Lectures and readings in English. Country known as Holland, or more correctly, The Netherlands (in Dutch: Nederland) has played crucial role in both American history and American current events. It was first country to set up official diplomatic relations with U.S. (in 1782) and is major investor in U.S. and staunch ally of its foreign policy. Piercing of tourista aura surrounding The Netherlands by actively comparing and contrasting contemporary Dutch culture and society with contemporary American culture and society. How life would be different growing up in The Netherlands. Letter grading.

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

189. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to lower-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

189HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to upper-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

199. Directed Research or Senior Project in Dutch. (4) Tutorial, three hours. Limited to juniors/seniors. Supervised individual research or investigation under guidance of faculty mentor. May be repeated for credit. Individual contract required. P/NP or letter grading.

Graduate Courses

596. Directed Individual Study or Research in Dutch. (4) Tutorial, to be arranged with faculty member who directs study or research (course section to be identified by two-letter code using initials of sponsoring instructor—see department for ID number). May be repeated once. S/U grading.

597. Preparation for PhD Qualifying Examinations. (4) Tutorial, to be arranged with instructor (see department for ID number). S/U grading.

598. Final Exams. (1 to 4) Requisite: course 596. Final comprehensive exams for PhD students. P/NP grading.

German

Lower-Division Courses

1. Elementary German. (4) Lecture, five hours; laboratory, one hour. P/NP or letter grading.

2. Elementary German. (4) Lecture, five hours; laboratory, one hour. Enforced requisite: course 1. P/NP or letter grading.

3. Elementary German. (4) Lecture, five hours; laboratory, one hour. Enforced requisite: course 2. P/NP or letter grading.


5. Intermediate German. (4) Lecture, four hours; laboratory, one hour. Enforced requisite: course 4. P/NP or letter grading.

6. Intermediate German. (4) Lecture, four hours; laboratory, one hour. Enforced requisite: course 5. P/NP or letter grading.

8. Elementary German: Intensive. (12) Lecture, 15 hours; laboratory, five hours. Intensive basic course in German equivalent to courses 1, 2, and 3. P/NP or letter grading.

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

50B. Great Works of German Literature in Translation: Romanticism to Present. (5) Lecture, three hours; discussion, one hour. Study and analysis of select masterworks in English translation, including authors such as E.T.A. Hoffmann, Heine, Fontane,
Rilke, Kafka, Brecht, Thomas Mann, Hess, Grass, Böll, and Christa Wolf. May not be applied toward completion of major in German. P/NP or letter grading.

56. Figures Who Changed World: Cosmopolitanisms Within a Global Context. (5) Lecture; three hours; discussion, one hour. Introduction to German theoretical thought that focus on cosmopolitanism. Exploration of different historical and philosophical engagements with cosmopolitan projects. P/NP or letter grading.

59. History of Film in German Literature. (5) Lecture/screenings; five hours; discussion, one hour. History of Holocaust and its present memory through examination of challenges and problems encountered in trying to imagine its horror through media of literature and film. P/NP or letter grading.

61A. Modern Metropolis: Berlin. (5) Lecture; three hours; discussion, one hour. Cultural, political, architectural, and urban history of one of most vibrant and significant cities in world. Exploration of city over 800 years, using innovative mapping tools to understand how Berlin evolved from fortified mercantile town into global city. P/NP or letter grading.

88. Lower-Division Seminar. (4) Seminar; three hours. Limited to topics of current interest and offered whenever staff member is available. P/NP or letter grading.

89. Honors Seminars. (1) Seminar; three hours. Limited to enrollment as an adjunct to lower-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

89HC. Honors Contracts. (1) Tutorial; three hours. Limited to students in College Honors Program. Designed as an adjunct to lower-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work); three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Courses

102. War, Politics, Art. (5) Lecture; three hours; discussion, one hour. Taught in English. Analysis of interrelationship between politics, social conditions, and arts with respect to war. World Wars I and II and German history to be used as model for principal questions of society and philosophical thinking. P/NP or letter grading.

103. German Film in Cultural Context: Early German Film. (4) Lecture; two hours; discussion, one hour. Taught in English. Survey of German film between 1919 and 1945. Analysis of technological and stylistic development of film from silent Expressionist films to Nazi propaganda and entertainment films. Film discussions enhanced by interactive media. Letter grading.

104. German Film in Cultural Context: 1945 to Present. (4) Lecture; two hours; discussion, one hour. Taught in English. Survey of German film since 1945 in its thematic and stylistic diversity. How did German filmmakers grapple with aftermath of World War II and Holocaust, economic recovery, Cold War and division of Germany, reunification, and growth of minority communities? Film discussions enhanced by interactive media. Letter grading.

109. Jewish Question and German Thought. (4) Lecture; three hours. Taught in English. Analysis of works that represent process of Jewish assimilation, disenfranchisement, and extermination, including authors such as Mendelssohn, Heine, Kafka, Paul Celan, Waldheim, and Schuschnigg. Actor: Lecture/Velvety Sachs. Admission, P/NP or letter grading.

110. Special Topics in Modern Literature and Culture. (4) Lecture; three hours. Taught in English. Content varies with instructor and may include works by authors such as Thomas Mann, Rilke, Kafka, Brecht, Christa Wolf, and others. May be repeated for credit. Letter grading.

112. Feminist Issues in German Literature and Culture. (4) Lecture; three hours. Taught in English. Analysis of major issues in German feminism (e.g., status, creative work, and reception of women writers in various periods such as Romanticism, Fascism, and/or divided/unified Germany). Letter grading.

113. German Folklere. (4) Lecture; three hours. Taught in English. Survey of various folklores in cultural context, including legends, proverbs, and cultural enactments such as carnival. Letter grading.

114. Fairy Tales and Fantastic. (5) Lecture; three hours; discussion, one hour. Taught in English. History and reception of fairy tales (e.g., Grimms’ tales). Interpretation of selected tales and their transformations and appropriation in literature, film, advertising, and pedagogy. P/NP or letter grading.

115. 19th-Century German Philosophy. (4) Lecture; three hours; discussion, one hour. Taught in English. German philosophy, which may generally be characterized as philosophy that takes activity rather than passive subsistence to be fundamental nature of all things, is one of Germany’s greatest gifts to humanity. Exploration of first half of 20th-century history of German philosophy—period from Kant to Nietzsche, including Hegel, Kierkegaard, and Marx. Letter grading.

116. 20th-Century German Philosophy. (4) Lecture; three hours; discussion, one hour. Taught in English. German philosophy, which may generally be characterized as philosophy that takes activity rather than passive subsistence to be fundamental nature of all things, is one of Germany’s greatest gifts to humanity. Exploration of second half of 20th-century history of German philosophy—period from Nietzsche through Habermas, including Horkheimer, Gadamer, Jaspers, and Frankfurt School. Letter grading.

117. German Exile Culture in Los Angeles. (4) Lecture; three hours. Taught in English. Cultural and historical exploration of exile as site of creative activity for German writers and other artists during and after World War II. General questions of cultural migration and cultural transfer to be thematized. P/NP or letter grading.

118SL. Between Memory and History: Interviewing Holocaust Survivors. (4) Seminar; two hours; fieldwork, two hours. Strongly recommended requisites: prior European and Holocaust history courses. Examination of historical value of eyewitness testimony of Holocaust through unique service opportunities that bring students together with survivors. Question of testimony approached from number of perspectives, including legal, historical, and ethical, to examine, evaluate, and report on memory. Examination of survivor testimony through classic memoirs in field, such as Primo Levi’s “The Drowned and the Saved” and Ruth Kluger’s “Still Alive.” Through collaboration with Jewish organisations such as 1939 Club and Los Angeles Museum of Holocaust, students meet and work with Holocaust survivors and undertake collaborative research projects and oral histories. Students also research and present case studies created by various political ideologies; socially created boundaries of class, race, and gender; gender between memory and experience, ways in which people cross them, and their reasons for these transgressions. Analysis of movies to better understand various cinematic techniques. P/NP or letter grading.

153. Conversation and Composition on Contemporary German Culture and Society I. (4) Lecture; three hours. Requisite: course 6. Taught in German. Structured around themes as they emerge in contemporary German texts ranging from news magazine articles to literature, with emphasis on speaking and writing proficiency. Presentation software featured. P/NP or letter grading.

154. Business German. (4) Lecture; three hours. Requisite: course 6. Taught in German. Specialized language course that juxtaposes cultural history with current business administration, practices, and correspondence, with attention to cultural nuances. Ongoing developments in European Union analyzed via newspaper articles and Internet. P/NP or letter grading.

155. Advanced German Language through Cultural History and Current Affairs. (4) Lecture; three hours. Requisites: courses 152, 153. Taught in German. Advanced German language course that juxtaposes cultural history with current business administration, practices, and correspondence, with attention to cultural nuances. Ongoing developments in European Union analyzed via newspaper articles and Internet. P/NP or letter grading.

157. Contemporary German Cinema: Advanced Conversation and Composition. (4) Lecture; three hours. Taught in German. Development of advanced speaking skills and thorough grounding in essay writing in German by considering issues of style, structure, grammar, and vocabulary. Introduction to contemporary German cinema, with exposure to contemporary German film. Letter grading.

158. Introduction to Study of Literature. (4) Lecture; three hours. Taught in German. Introduction to major important terms and primary analytical techniques to help students develop and improve skills in close and critical reading of literary texts, develop basic research techniques, acquire familiarity with basics of literary and cultural analysis, and find pleasure in pursuit of literary and cultural study. Letter grading.

159. German Cultural Studies. (4) Lecture; three hours. Requisite: course 152 or 153. Taught in German; some theoretical readings in English. Exploration of German culture in different historical con-
texts. Examination of various cultural spaces, practices, and standpoints as staged in literary and nonliterary texts, with emphasis on constructions of ethnicity, nation, race, class, and gender. Analysis of several political and cultural debates that dominated public discussions in Germany (and Europe) for several weeks, months, or even years (e.g., debates about admission of women to universities at end of 19th century, recentracing/ preserving sites of memory in postwar Germany, and headscarf and integration in contemporary Germany). Letter grading.


174. Advanced Study of Contemporary Literature and Culture. (4) Lecture, three hours. Enforced requisite: course 152 or 153. Taught in German. Literature after 1945 in German-speaking countries, including issues such as national borders, ethnic identity, gender relations, and commercialization of culture. Letter grading.

175. Intercultural Germany: Literature, Politics, Migration, and Culture. (4) Lecture, three hours. Taught in German. Most recent in German. Some theoretical readings in English. Exploration of issues surrounding immigration and intercultural identity in Germany since 1960, with focus on period after 1990. Examination of various spaces, practices, and standpoints as staged in literary and nonliterary texts, with emphasis on constructions of ethnicity, nation, race, class, and gender. Analysis of several political and cultural debates that dominated public discussions in Germany and Europe for several weeks. Discussion of several literary texts by Turkish German and other minority/intercultural writers. Examination of hip-hop minority music and culture as voices in political debates. Exploration of contemporary controversies around Islam in Germany. Reading of several novels that examine relationships between immigration, globalization, culture, and identity. P/NP or letter grading.

187. Undergraduate Seminar. (4) Seminar, three hours. Required of all German majors who are candidates for upper-division instructional credits. Content varies by instructor and may include advanced work in folklore, film, and German studies. Letter grading.

188SA. Individual Studies for USIE Facilitators. (1) Tutorial, to be arranged. Enforced corequisite: Honors College 101E. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to discuss selected USIE seminar topic, conduct preparatory research, and begin preparation of syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.

188SB. Individual Studies for USIE Facilitators. (1) Tutorial, to be arranged. Enforced corequisite: course 188SA. Enforced corequisite: Honors College 101E. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to finalize course syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.

188SC. Individual Studies for USIE Facilitators. (2) Tutorial, to be arranged. Enforced requisite: course 188SB. Limited to USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor while facilitating USIE 88S course. Individual contract with faculty mentor required. May not be repeated. Letter grading.

189. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

189HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to pre-existing lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for credit for up to maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

191A. Variable Topics Research Seminars: German. (4) Seminar, three hours. Requisite: course 6. Taught in German. Research seminars on topics to be announced each term. Topics include major writers, genres, cultural movements, or theoretical practices. May be repeated for credit with consent of major advisor. P/NP or letter grading.

191C. Capstone Seminar. (2) Seminar, three hours. Limited to senior German majors. Collaborative discussion of and reflection on courses already taken for major, focusing on larger themes and culminating in paper or other final project. Must be taken in conjunction with one course numbered 140 or higher. Letter grading.

197. Individual Studies in German. (2 to 4) Tutorial, three hours. Limited to juniors/seniors. Individual intensive study, with scheduled meetings to be arranged between faculty member and student. Assigned readings and written evidence of mastery of subject matter required. May be repeated for credit. Individual contract required. P/NP or letter grading.

199. Directed Research or Senior Project in German. (4) Tutorial, three hours. Limited to juniors/seniors. Individual supervised research or investigation under guidance of faculty mentor. Culminating paper or project required. May be repeated for credit. Individual contract required. P/NP or letter grading.

Graduate Courses

201C. Theories of Literary Interpretation. (4) Lecture, three hours. Focus on how to read literary texts and discussion of various models of literary interpretation and schools of thought such as hermeneutics, psychoanalytic criticism, social historical approaches, semiotics, structuralism, and poststructuralism. Topics vary with instructor. Letter grading.

202A. Middle High German. (4) Lecture, three hours. Introduction to Middle High German language, with particular emphasis on developing facility in reading, study of grammar, syntax, and vocabulary combined with introduction to poetic forms and cultural context. Letter grading.

202B. Readings in Middle High German Literature. (4) Lecture, three hours. Introduction to medieval German literature and literary history and to use of contemporary theory in study of medieval texts. Continued practice in reading Middle High German, although modern texts to be read in modern translation. Letter grading.

204. Early Modern German Literature. (4) Lecture, three hours. Selected readings from 1500 to 1700, with introduction to development of German as modern literary language and to literary genres and cultural models. Impact of Thirty Years’ War on German literary production and reception in German baroque. Letter grading.


207. Weimar Classicism. (4) Lecture, three hours. Reading and interpretation of major works of German classicism. May include problems in reception of classicism by later authors and cultural theorists. Letter grading.

208. Romanticism. (4) Lecture, three hours. Analysis of selected works and theories of German Romanticism such as Friedrich Schlegel, Novalis, and Hoffman, with attention to relationship between Romanticism and other periods. Letter grading.


210A. Naturalism, Symbolism, and Expressionism. (4) Lecture, three hours. Analysis of selected works (poetry, drama, prose) of early modernism from Hauptmann to Kafka. Discussion of sociological spectra and pluralism of styles and forms. Letter grading.

210B. 20th-Century Novel to 1945. (4) Lecture, three hours. Prose works in first half of 20th century as they express war experience, crisis of consciousness, and cultural conflicts between wars, as well as innovations in narrative technique. Letter grading.

211. Postwar Literature. (4) Lecture, three hours. Study of major works by German-speaking authors writing since World War II. Examination of issues such as identity crises, nationalism and divided Germany, gender expectations, and social-political attitudes. Letter grading.

212. Contemporary Literature and Culture. (4) Lecture, three hours. Analysis of current cultural issues and their relation to literary production and interpretation. Topics may include issues such as feminism, postcolonialism, postmodernism, and contemporary theories of textuality. Letter grading.

213. Topics in Literature and Film. (4) Lecture, three hours. With focus on two different modes of cultural representation, examination of topics in German literature and film from Weimar Republic to present. Study of media theory, feminist film theory, and interrelationships between film, literature, and social history. Letter grading.

217. History of German Language. (4) Discussion, three hours. Historical survey of development of standard German language from Indo-European unity through proto-Germanic, West Germanic, medieval period, Reformation, baroque period, and Enlightenment until its final codification at end of 19th century. S/U or letter grading.


231. Gothic. (3) Discussion, three hours. Systematic study of phonology and grammar of Gothic language, with readings in Wulffa’s translation of Bible and introduction to history of Gothic language and development of modern European. S/U or letter grading.

232. Old High German. (4) Discussion, three hours. Introduction to earliest phases of German literature, with extensive readings in major documents of that period (750 to 1050). Emphasis on grammatical interpretation of these documents and identification of dialects used in their composition. S/U or letter grading.


238. Linguistic Theory and Grammatical Description. (4) Lecture, three hours. Enforced requisite: course 140 or Linguistics 20. Taught in English with German proficiency required. Problems in structure of Dutch and German, considered from theoretical frameworks such as sign-oriented linguistics, functional linguistics, discourse-oriented and cognitive linguistics. Discussion of formal linguistic approaches. Concurrently scheduled with course C142. Graduate students meet as group one additional hour each week and write research papers of greater length and depth. Letter grading.

251. Seminar: Germanic Linguistics. (4) Seminar, three hours. Current topics in synchronic or diachronic linguistics, such as specific issues in generative grammar, sociolinguistics, and dialectology, or language contact. Letter grading.
Yiddish

Lower-Division Courses

10. From Old World to New: Becoming Modern as Reflected in Yiddish Cinema and Literature. (5) Lecture, three hours; discussion, one hour. Exploration of transformational themes in depth through viewing of selected films, readings, research and weekly papers, and in-class discussions. P/NP or letter grading.

265. German Philosophy. (4) Seminar, three hours. In-depth analysis of one particular issue in pre-1945 German literature and culture. Letter grading.

266. Topics in Communicative, Cognitive, and Functional Approaches to Linguistic Analysis. (4) Seminar, three hours. Requisite: course C142 or C238. Reading, discussion, analyses, and validation procedures within sign-based linguistics, cognitive grammar, and discourse-functional approaches to language. Credit/no credit grading.


290. Seminar: Modern Period. (4) Seminar, three hours. In-depth analysis of one particular issue in pre-1945 German literature and culture. Letter grading.

263. Seminar: Contemporary Literature. (4) Seminar, three hours. In-depth analysis of one particular issue in modern German literature and culture. Letter grading.

264. Seminar: Literary Theory. (4) Seminar, three hours. Special focus on particular theoretical school or interpretive paradigm. Content varies with instructor. Letter grading.

269. Seminar: Germanic Languages / 457. Lecture, three hours. Designed for junior/senior. May include development of current theories of second-language acquisition, effects of these theories on language teaching, psycholinguistics, sociolinguistics, assessment techniques, use of multimedia in foreign language pedagogy, and design of syllabi for basic foreign language courses. S/U grading.

96. Directed Individual Study or Research. (4) Tutorial, three hours. To be arranged with faculty member who directs study or research. Required research paper must be filed with department chair. S/U grading.

97. Preparation for MA Comprehensive Examination or PhD Qualifying Examinations. (4) Tutorial, three hours. To be arranged with faculty member who directs examination preparation. S/U grading.


99. Research for and Preparation of PhD Disser- tation. (4 to 12) Tutorial, three hours. To be arranged with faculty member who directs study. May be repeated. S/U grading.

Upper-Division Courses

101A. Elementary Yiddish. (4) Lecture, four hours. Introduction to grammar; instruction in listening, speaking, reading, and writing skills. P/NP or letter grading.


102B-102C. Intermediate Yiddish. (4–4) Lecture, three hours. Requisite: course 102A. Course 102B is requisite to 102C. Grammatical exercises, reading and linguistic analysis of texts, conversation. P/NP or letter grading.


121C. Special Topics in Yiddish Literature in English Translation. (4) Lecture, three hours. Varying topics of importance and relevance to Yiddish literary study. Reading and analysis of wide range of 19th- and 20th-century literature. P/NP or letter grading.

131. Introduction to Yiddish Culture and Language through Film. (4) Lecture, three hours. Introduction to Yiddish language and culture, with focus on classic Yiddish films and documentaries as integral tools for accessing culture associated with this heritage language. Viewing and discussion to gain deeper understanding and appreciation of complex and scope of Yiddish culture and in particular of annihilated Yiddish civilization of 20th century. These films represent most accessible way available to hear Yiddish spoken in fluid, accessible manner. P/NP or letter grading.


131C. Special Topics in Yiddish Literature. (4) Lecture, three hours. Requisite: course 131A or 131B. Varying topics of importance and relevance to Yiddish literary study. Reading and analysis of wide range of 19th- and 20th-century literature. P/NP or letter grading.

189. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to lower-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be repeated toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

189HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to lower-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. P/NP or letter grading.

99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Graduate Courses

596. Directed Individual Study or Research in Yiddish. (4) Tutorial, to be arranged. Limited to seniors. Individual intensive study or more specialized investigation of topics in Yiddish, with scheduled meetings to be arranged between faculty member and student. Assigned reading and tangible evidence of mastery of subject matter required. May be repeated for credit. Individual contract required. P/NP or letter grading.

101A. Elementary Yiddish. (4) Lecture, four hours. Introduction to grammar; instruction in listening, speaking, reading, and writing skills. P/NP or letter grading.


Undergraduate Study
Gerontology Minor

To enter the Gerontology minor, students must have an overall grade-point average of 2.0 or better and a grade of B or better in Gerontology M108. Required Upper-Division Courses (28 to 32 units): (1) Gerontology M108, (2) four courses from Gerontology M104C, M104D, M119O, M119X, M142S, M150, M165, Psychology 124C, 150, (3) two courses from Gerontology 195CE, 199.

Students who have completed Clusters 80A with a grade of B or better, and have an overall grade-point average of 2.0 or better, do not need to take Gerontology M108. Successful completion of this cluster sequence (Clusters 80A, 80B, 80CW) counts for CM108 and one elective course. A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor.

Each minor course must be taken for a letter grade, and students must have an overall grade-point average of 2.0 or better in the minor. Successful completion of the minor is indicated on the transcript and diploma.
maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

195CE. Community or Corporate Internships in Gerontology. (4) Tutorial, one hour; internship (approved community setting), eight hours. Requisites: course M108, or GE Clusters 80A and 80B. Limited to juniors/seniors. Internship in applications of gerontology in supervised setting in community agency or business coordinated by Center for Community Learning. Students meet on regular basis with internship coordinator and must submit weekly writing assignments and final paper at end of term. Eight units of 195CE (or 199CE) are required for successful completion of Gerontology minor. Individual contract with supervising placement sponsor required. Information and contracts may be obtained from Gerontology Advising Office. (310) 206-8966, paul@spa.ucla.edu. Letter grading.

199. Directed Research or Senior Project in Gerontology. (4) Tutorial, to be arranged. Requisites: course M108, or GE Clusters 80A and 80B. Limited to juniors/seniors. Supervised individual research under guidance of gerontology faculty mentor. Submission of weekly writing assignments and research paper at end of term. Eight units of 199 (or 195CE) required for successful completion of minor. Individual contract required. Information and contracts may be obtained from Gerontology Advising Office. Letter grading.

GLOBAL HEALTH

Interdisciplinary Minor

College of Letters and Science

10256 Bunche Hall
Box 951487
Los Angeles, CA 90095-1487

Global Health
310-206-6571
Minor e-mail

Michael A. Rodriguez, MD, MPH, Chair

Faculty Committee
Victor Agapianian, PhD (Sociology)
David H. Gere, PhD (Sociology)
Ippolito A. Kalofonos, MD, PhD (Psychiatry and Biobehavioral Sciences)
Michael F. Lofchie, PhD (Political Science)
Anne W. Rimoin, PhD (Epidemiology)

Global Health Minor

To be admitted to the minor, students must be in good academic standing (overall grade-point average of 2.0 or better) and have completed all lower-division minor courses with a GPA of 2.0 or better in those courses.

After satisfying these requirements, students may declare the minor in consultation with the academic counselor.

Required Lower-Division Courses (10 units): Two courses from Civil and Environmental Engineering 58SL, Clusters 80A, 80B, 80CW, Community Health Sciences 91, Global Studies 1, History 3D, Honors Collegium 1, 14, 26, International and Area Studies 1, Molecular, Cell, and Developmental Biology 60, 70, Nursing 50, Statistics 13, World Arts and Cultures 2, 33.

Required Upper-Division Courses (20 to 25 units): Global Health 100 and four courses from the following theme areas, with a maximum of two courses from any single area:

Art: World Arts and Cultures 144, C158, C159, 160.

Community Health: Community Health Sciences 100, 161, CM170, 187A, 187B, 195, Health Policy and Management 140, Medicine M160A, M160B, Psychiatry and Biobehavioral Sciences 175, Psychology 150.

Environmental Health: Environment 166, M167, Environmental Health Sciences 100, C185A, C185B.

Genetics: Honors Collegium 141, Society and Genetics 162, 163.


Health Humanities and Communication: English Composition 131C, History H179A, H179B.


A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor.

Each minor course must be taken for a letter grade, and students must have an overall grade-point average of 2.0 or better in the minor. Successful completion of the minor is indicated on the transcript and diploma.

Global Health Lower-Division Courses

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP or letter grading.

89H. Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to lower-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

89HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to lower-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for junior/senior students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Courses

100. Global Health and Development. (4) Lecture, three hours; discussion, one hour (when scheduled). Interdisciplinary examination of key issues in area of global health, with focus on developing world. Provides basis for understanding current debates that frame global health problems and actions in and across nations with strikingly different political-economic contexts. Discussion on how local and international communities attempt to address challenges of global health problems and how interventions play out through range of policy and programmatic approaches. P/NP or letter grading.

110A-110B. Field Studies in Global Health. (4–4) Seminar, three hours. Enforced corequisite for course 110A: course 110B. Exploration of issues regarding global health in important locations around world. Hands-on experiential courses offered for students participating in UCLA Travel Study Program. Field trips included to gain first-hand experience. May be repeated with topic and/or location change. Offered in summer only. P/NP or letter grading.

150. Migration and Health. (4) Lecture, three hours; discussion, one hour. Introduction to history, current status, and future of migration and health using social determinants of health model to foster multidisciplinary analysis of status of migrant health around world. Exploration of social determinants of health affecting migrating populations, including gender, race, ethnicity, socioeconomic status, poverty, religion, politics, governance, and environment. Letter grading.

160. Selected Topics in Global Health. (4) Lecture, three hours; discussion, one hour (when scheduled). Examination of one or more topics related to global health. May be repeated for credit with topic change. P/NP or letter grading.

189. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

189HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to upper-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.


GLOBAL JAZZ STUDIES
Interdepartmental Program
Herb Alpert School of Music
2520 Schoenberg Music Building
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Los Angeles, CA 90095-1657

Global Jazz Studies
310-825-8381
Steven J. Loza, PhD, Chair

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Robin D. G. Kelley, PhD (African American Studies, History)
Cheryl L. Keyes, PhD (African American Studies, Ethnomusicology)
Steven J. Loza, PhD (Ethnomusicology)
Arturo O'Farrill, MMM (Music)
Shana L. Redmond, PhD (Musicology)

Professors
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Robin D. G. Kelley, PhD (Gary B. Nash Endowed Professor of U.S. History)
Arturo O'Farrill, MM

Professors Emeriti
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James W. Newton, BM

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Duane C. Benjamin
Clayton Cameron, BM
Paul J. De Castro, DMA
Charles A. Harrison, MM
Tamir Hendelman, BM
Wolf Marshall, BA
Hilton M. Oba, MA
Charles Owens, BA

Adjunct Professors
Eddie S. Meadows, PhD
Michele A. Weir, MA

Adjunct Associate Professors
Roberto Miranda, MM
Barbara Morrison, AA
Ruth Price

Scope and Objectives
The Bachelor of Arts degree in Global Jazz Studies is a capstone major designed to provide students with an interdisciplinary education that draws from various areas of the UCLA Herb Alpert School of Music, as well as from the arts and social sciences. The curriculum is designed around three major areas: (1) performance courses designed to advanced students' skills individually and playing in small combos and larger ensembles; (2) musicianship and music theory courses in which students master improvisation, basics of music theory, arranging, and composition; and (3) broad understanding of the historical and societal context of the development and advancement of jazz in the United States and globally.

Undergraduate Study
The Global Jazz Studies major is a designated capstone major. The capstone project, usually done in the senior year, is tailored to each student and includes a seminar class (course 195-199) and a capstone presentation such as a recital, lecture-demonstration, or lecture-recital (186B). The capstone experience provides an appropriate vehicle for the faculty to assess the students’ accomplishments during their tenure in the program.

Global Jazz Studies BA
Capstone Major
Learning Outcomes
The Global Jazz Studies major has the following learning outcomes:

- Advanced-level performance of multiple jazz styles across historical periods and contemporary jazz performance practices
- Demonstrated proficiency in styles representative of Africa, the African diaspora, and at least one other world musical culture
- Demonstrated advanced skill and understanding in improvisation, musical structure and instrumentation, composition, arranging, timbre, and expression
- Demonstrated basic proficiency in areas of programming, recording, and/or post-production
- Demonstrated interdisciplinary knowledge of global jazz as text and method
- Interrogation of the concerns of jazz as a comprehensive practice, including its capacity to transform the musical, political, and socioeconomic world it engages

Admission
Applicants are reviewed individually, based on a questionnaire, grade-point average, test scores, a personal statement of purpose, and an on-campus audition. Applicants who are unable to travel to UCLA have the option of submitting a video audition in place of the on-campus audition.

Preparation for the Major
All entering freshmen are required to take the Music Theory Assessment Examination either during New Student Orientation or during zero week of fall quarter. The examination score is used to determine eligibility and placement in first-year music core courses (Music M6A, M6B, M6C and 20A, 20B, 20C). Examination results may require enrollment in Music 3 as a requisite to both courses M6A and 20A. Entering transfer students with fewer than 15 units of prior music theory must take the Music Theory Assessment Examination.

Required: Ethnomusicology 208 or 20C (5 units), 4 units from 91E and/or 91P, 4 units from 66A through 68D and/or 91A through 91Z (except 91E and 91P); Global Jazz Studies 195A, 195B (10 units), 12 units from 71A through 71I (students must enroll in a studio each quarter); and Music M6A, M6B, M6C (6 units). Each course must be completed with a grade of C or better.

Transfer Students
Transfer applicants to the Global Jazz Studies major with 90 or more units must complete as many of the following introductory courses as possible prior to admission to UCLA: one to two years of jazz studio instruction (equivalent to Global Jazz Studies 71A through 71I) and one year of musicianship (equivalent to Ethnomusicology M6A, M6B, M6C).

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

The Major
Required: 72 units from the areas below. Each course must be taken for a letter grade and be completed with a grade of C or better. Students must have an overall grade-point average of 2.0 or better. No more than eight units from upper-division tutorials (195-199) may be applied toward the degree.

Performance (24 units)—12 units of studio coursework from Global Jazz Studies 171A through 171I, 4 units of small jazz combo (Global Jazz Studies 175), 8 units of large jazz ensemble (Global Jazz Studies 176A through 176C). Students must enroll in a studio class and at least one combo or ensemble each quarter.


Scholarly foundations (20 units)—Global Jazz Studies 101, 125; one course (at least 4 units) selected from each of the following three subject areas: African American Studies 108, M150D, M158C, Global Jazz Studies M109, M119, M130, M131, 165, 188, 199; Music Industry 102, 104A, 107A, 115.

Capstone seminar and project (4 units)—Global Jazz Studies 186A, 186B.

Global Jazz Studies
Lower-Division Courses
M12A-M12B. African American Musical Heritage. (5–6) (Same as African American Studies M12A-M12B and Ethnomusicology M12A-M12B.) Lecture, four hours; discussion, one hour. P/NP or letter grading. M12A. Sociocultural history and survey of African American music covering Africa and its impact on America; music of 17th through 19th centuries; minstrelsy and its impact on representation of blacks in film, television, and theater; religious music, including hymns, spirituals, and gospel; black music of Caribbean and Central and South America; and music of black Los Angeles. M12B. Sociocultural history and survey of African American music covering blues, pre-1947 jazz styles, rhythm ‘n’ blues, soul, funk, disco, hip-hop, and symbiotic relationship between recording industry and effects of cultural politics on black popular music productions.

19. Fiat Lux Freshman Seminars. (1 Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

M25. Global Pop. (5) (Same as Ethnomusicology M25.) Lecture, four hours; discussion, one hour. Development of world music or world beat, including its meaning and importance to contemporary culture as well as its history and impact. P/NP or letter grading.
M35. Blues, Society, and American Culture. (5) (Same as Ethnomusicology M35.) Lecture, four hours; discussion, one hour. Sociocultural history and survey of blues music tradition from its roots in West Africa to its emergence in African American oral culture, with emphasis on philosophical underpinnings and social and political impact of blues and its influence on development of country, jazz, gospel, rhythm and blues, rock, hip-hop music, and other mediums. P/N or letter grading.

M50A-M50B. Jazz in American Culture. (5-5) (Same as Ethnomusicology M50A-M50B.) Lecture, four hours; discussion, one hour. Course M50A is not required for development of American culture. Discussion of different compositional/performance techniques and approaches that distinguish different sub-styles of jazz from one another, as well as key historical figures that shaped development of jazz from its early years through modern jazz. Important historical social issues (segregation, Depression, World War II, Civil Rights Movement) that intersect with history of U.S. and jazz music. P/N or letter grading. M50A. Late 19th Century through 1940s; M50B. 1940s to Present.

71A-71I. Instruction in Jazz Performance. (2 each) (Formerly numbered Ethnomusicology 71A-71IF.) Studio and/or individual instruction. Limited to Global Jazz Studies majors. Knowledge of jazz repertoire, concepts, and techniques gained through private lessons on specific instruments and voice. Students must produce a body of work to demonstrate their performance skills and receive assessment of their progress in learning material. May be repeated for maximum of 12 units. Letter grading. 71A. Guitar; 71B. Piano; 71C. Bass; 71D. Saxophone; 71E. Trumpet; 71F. Trombone; 71G. Trumpet; 71H. Voice. Letter grading.

99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours. Exploration of assimilation and retention of jazz from U.S. in various countries, with particular emphasis on reading and oral traditions and features that form basis for new jazz-ethnic music blends. Letter grading.

M103. Creating Musical Community. (4) (Same as Ethnomusicology M103, Music M103, and Musicology M103.) Lecture, one hour; discussion, one hour. Limited to school of music majors. Faculty and students make music together in different modes. Students learn certain repertoire, refine it, and bring it to concert performance. Students critically engage musical literacies and notion of social contract that forms basis of performance. Students critically engage musical literatures and approaches. Letter grading.

M119. Cultural History of Rap. (5) (Same as African American Studies M107 and Ethnomusicology M119.) Lecture, four hours; discussion, one hour. Introduction to development of rap music and hip-hop culture, with emphasis on musical and verbal qualities, philosophical and political ideologies, gender representation, and influences on cinema and popular culture. P/N or letter grading.

122A-122B-122C. Jazz Styles and Analysis. (4—4—4) (Formerly numbered Ethnomusicology C122A-C122B-C122C.) Lecture, one hour; discussion, four hours; outside study, eight hours. Limited to Global Jazz Studies majors or consent of instructor. In-depth analysis of jazz styles and selected works in repertoire with students with music backgrounds. Letter grading. 122A. Early Jazz to Swing Era; 122B. Bebop to Avant-garde; 122C. Jazz since Sixties.

125. Jazz Arranging and Orchestration. (4) Lecture, three hours. Limited to Global Jazz Studies majors. Study of specific instruments and their unique use in application in jazz (jazz notation and terminology, transposition, woodwind doublings, brass mutes, etc.). Analysis of different writing techniques and approaches that distinguish different sub-styles of jazz from one another. Assignments focus on writing for medium and large ensembles, with final project of arrangement to be led by UCLA Jazz Orchestra. P/N or letter grading.

127A-127B-127C. Jazz Keyboard Harmony I, II, III. (2–2–2) (Formerly numbered Ethnomusicology 127A-127B-127C.) Laboratory, two hours; outside study, four hours. Course 127A with grade of C or better is requisite to 127B; course 127B with grade of C or better is requisite to 127C. Study of jazz harmony through use of piano keyboard. Letter grading.

128. Exploration in Rhythmics. (2) (Same as Ethnomusicology M128.) Lecture, two hours; outside study, four hours. Preparation: ability to read melodic or rhythmic notation. Investigation and exploration of musical time and rhythm in 20th- and 21st-century classical, jazz, world, and popular music. Concepts explored include meter, pulse, rhythmic cycles, hemiolas, and polyrhythms. P/N or Letter grading.


M130. Culture of Jazz Aesthetics. (4) (Same as Anthropology M158 and Ethnomusicology M130.) Lecture, three hours; discussion, one hour. Limited to Global Jazz Studies majors. Faculty and students make music together in different modes. Students learn certain repertoire, refine it, and bring it to concert performance. Students critically engage musical literacies and notion of social contract that forms basis of musical notation. Drawing from American music folk game traditions, highlights complex history of this country and way in which entire body is used as resource when instruments are unavailable. Letter grading.

M109. Women in Jazz. (4) (Same as African American Studies M109, Ethnomusicology M109, and Gender Studies H109.) Lecture, four hours; discussion, one hour. Limited to school of music majors. Faculty and students make music together in different modes. Students learn certain repertoire, refine it, and bring it to concert performance. Students critically engage musical literacies and notion of social contract that forms basis of musical notation. Drawing from American music folk game traditions, highlights complex history of this country and way in which entire body is used as resource when instruments are unavailable. Letter grading.

M151. Global Jazz Studies Seminar I. (4) Seminar, two hours; outside study, six hours. Limited to Global Jazz Studies majors. Supervised individual research project. May be repeated once for credit. P/N or letter grading.

M171A. Global Jazz Studies Seminar II. (4) Seminar, two hours; outside study, six hours. Limited to Global Jazz Studies majors. Supervised individual research project. May be repeated once for credit. P/N or letter grading.

M179. Latin Jazz. (4) (Same as Ethnomusicology M179.) Lecture, four hours; discussion, one hour. Limited to Global Jazz Studies majors. Supervised individual research project. May be repeated once for credit. P/N or letter grading.

M196. Jazz Teaching Practicum. (4) Seminar, two hours; fieldwork, four hours; outside study, seven hours. Limited to junior/senior Global Jazz Studies majors. Preparation: completion of one year of coursework in the Global Jazz Studies major with grade of C or better. Reading about and analyzing jazz in a more independent and in-depth way, using classroom and performance situations for learning. Letter grading.

M197. Directed Research in Global Jazz Studies. (2 to 4) Limited to senior Global Jazz Studies majors. Individual intensive study with scheduled meetings to be arranged between faculty member and student. May be repeated once for credit. P/N or letter grading.

Global Jazz Studies / 461

M198. Capstone Seminar (3) Seminar, two hours; outside study, seven hours. Limited to senior Global Jazz Studies majors. Integration of academic work and hands-on training in outreach program. Participation in theoretical discussions of jazz education and application of theoretical courses in elementary music education and social studies classrooms. P/N or letter grading.

M199. Individual Studies in Global Jazz Studies. (2 to 4) Tutorial, one hour; outside study, five to 11 hours. Preparation: 3.0 grade-point average. Limited to senior Global Jazz Studies majors. Individual intensive study with scheduled meetings to be arranged between faculty member and student. May be repeated once for credit. P/N or letter grading.
The curriculum draws on insights from disciplines across the humanities and social sciences to give students the theoretical and methodological skills and knowledge base necessary to understand this complex and rapidly changing world.

**Undergraduate Study**

The Global Studies major is a designated capstone major. As students progress through the major, they move from a set of broad themes, theories, and perspectives to a more specialized focus about which they develop a specific research expertise and write a thesis. In completing the capstone, students should demonstrate an appropriate mastery of a specialized area of global studies and a critical understanding of current scholarly concerns, literatures, and debates. They should also be able to identify and analyze primary sources and use those sources and appropriate scholarly literature to design and carry out a research project.

**Global Studies BA**

**Capstone Major**

**Learning Outcomes**

The Global Studies major has the following learning outcomes:

- Critical thinking about basic political processes, institutions, and concepts as they operate in different national and cultural contexts
- Impartial evaluation of arguments
- Application of mathematical and logical reasoning to political processes
- Use and evaluation of statistical and other types of evidence in arguments
- Recognition of limits of quantitative and non-quantitative analysis
- Knowledge of diverse theories of politics acquired through critical engagement with texts, media, and contexts
- Location, evaluation, and use of information and scholarship to place political events in broader historical, cross-national, and theoretical contexts
- Employment of cultural, hermeneutical, normative, and historical approaches
- Written and oral arguments using appropriate evidence, with sensitivity to opposing perspectives, about significant political processes, events, and concepts

**Admission**

Admission to the Global Studies major is by application only and is highly competitive, with only a limited number of students admitted each year. To be eligible to apply, UCLA students must have completed all nonlanguage preparation for the major courses and one modern foreign language equivalent to level 6 at UCLA in one modern foreign language; and five additional courses as follows: (1) one culture and society course selected from Anthropology 3, 4, Comparative Literature 1C or 2C, 1D or 2D, 4CW or 4DW, Ethnomusicology M25, Gender Studies 10, Geography 3, 6, History 2B, World Arts and Cultures 20, or 33, (2) one governance and conflict course selected from History 10B, 22, Political Science 10, 20, 50, 50R, or Sociology 1, and (3) one markets and resources course selected from Economics 1, 2, Environment 12, Clusters MIA, or Sociology 51. The remaining two courses, taken from two separate categories, may be selected from the three lists above. One course from the following list may be applied toward the culture and society category: Asian 70C, Asian American Studies 10, Chicana and Chicano Studies 108, French 14, 14W, History 8A, 9E, International and Area Studies 31, 33, 50, Italian 42A, 42B, 46, Middle Eastern Studies M50CW, Russian 90A, 90B, 90BW, Spanish 42, or 44. A minimum grade-point average of 3.25 is required in these courses.

**Transfer Students**

Transfer applicants to the Global Studies pre-major with 90 or more units must complete as many of the following introductory courses as possible prior to admission to UCLA: one modern world history course, one major world region languages and cultures course, one international politics course, one macroeconomics or microeconomics course, one statistics course, and demonstrated proficiency equivalent to level 3 at UCLA in one modern foreign language. Transfer students must apply for the major by the end of fall quarter of their junior year.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

**The Major**

**Required:** Global Studies 102, 103, 104, and six elective courses, two from each of the following categories:

**Culture and Society—Anthropology 146, M148, Asian American Studies M130C, 170, M172A, M172C, Chicana and Chicano Studies 120, 143, CM147, Com-
parative Literature 100, M148, English 130, 131, 133, 134, Film and Television 106C, 112, French 121, 142, Gender Studies 102, M147C, M162, Geography 141, 151, 175A, Political Science M184A, Religion M107, Southeast Asian 157, Society and Genetics 134, Sociology 151, 152, 154, M162, 191F.


Required Summer Global Learning Institute: After successful completion of two courses from Global Studies 102, 103, 104, students are expected to attend a summer Global Learning Institute at one of several locations around the world in which they enroll in Global Studies 110A and 110B.

Required Capstone: During their senior year, students must also take four capstone courses—Global Studies 191 and 194 in fall quarter, followed by 199A and 199B. Courses 199A and 199B culminate in a capstone senior thesis of 35 to 50 pages.

Honors Program
To qualify for departmental honors, students must:
1. Have a grade-point average of 3.5 or better in upper-division courses in the major;
2. Have a cumulative GPA of 3.25 or better, and;
3. Complete Global Studies 199B with a grade of A— or better. Honors or highest honors may be granted at the discretion of the faculty sponsor and the faculty committee to students demonstrating exceptional ability on the senior thesis.

Global Studies Minor
The Global Studies minor offers students a multidisciplinary curriculum in the humanities and social sciences through which they can explore the complex and multifaceted interconnections that characterize the contemporary world. The minor is designed to complement and enrich studies in their major.

To enter the minor, students must:
1. Be in good academic standing with a minimum 2.0 grade-point average; and
2. Have completed Global Studies 1 and one course in two of the following three categories:
   a. course in culture and society—Anthropology 3, 4, Asian 70C, Asian American Studies 10, Chicana and Chicano Studies 108, Comparative Literature 1C or 2C, 1D or 2DW, 4CW or 4DW, Ethnomusicology 25, French 14, 14W, Gender Studies 10, Geography 3, 6, History 28, 8A, International and Area Studies 31, Italian 42A, 42B, Middle Eastern Studies 56COW, Russian 90B, 90BW, Spanish 42, 44, World Arts and Cultures 20, or 33, (b) governance and conflict—History 108, 22, Political Science 10, 20, 50, 50R, or Sociology 1, and (c) markets and resources—Economics 1, 2, Environment 12, Clusters MIA, or Sociology 51.

Required Courses (22 to 25 units):
- Five courses from the following categories with at least two from the course prefix:

A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor.

Each minor course must be taken for a letter grade, and students must have an overall grade-point average of 2.0 or better in the minor. Successful completion of the minor is indicated on the transcript and diploma.

Global Studies Lower-Division Courses

1. Introduction to Globalization. (5)
   - Lecture, three hours; discussion, one hour. Introduction to concept and history of globalization, and to political, economic, social, and environmental dimensions of global integration today. Topics include finance and trade, colonialism, Industrial Revolution, urbanization, immigration, and climate change, among others. P/NP or letter grading.

2. International Diplomacy and Foreign Affairs. (2)
   - Lecture, 15 hours; discussion, 15 hours. Limited to high school students participating in Model United Nations (UN) program. One-week intensive summer course, including lectures in international relations and outside study. Development of position papers in simulation of United Nations and final presentation in respective UN committees. Particular emphasis on public speaking and cooperative debate. May be repeated for credit without limitation. Offered only as part of Summer Institute. P/NP grading.

3. Fiat Lux Freshman Seminars. (1)
   - Seminar, one hour. Discussion of class and current topics of interest. One-hour seminar for freshmen designed as adjunct to lower-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

90HC. Honors Contracts. (1)
   - Tutorial, three hours. Limited to students in College Honors Program. Designated as adjunct to lower-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

99. Student Research Program. (1 to 2)
   - Tutorial (supervised research or other scholarly work), three hours per week unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Courses

102. Globalization: Markets and Resources. (5)
   - Formerly numbered 100A.) Lecture, three hours; discussion, one hour. Requisite: course 1. Examination of how domestic and international politics determine how global economy is governed. Topics include monetary and capital policy, trade, international investment, and migration. Letter grading.

103. Globalization: Governance and Conflict. (5)
   - Lecture, three hours; discussion, one hour. Requisite: course 1. Exploration of globalization of governance and its effect on outbreak, management, and resolution of disputes, violence, and conflict. Review of international and regional institutions and their interaction with contemporary issues, which may include terrorism, human rights, climate change, and cybersecurity. Letter grading.

104. Globalization: Culture and Society. (5)
   - Formerly numbered 100B.) Lecture, three hours; discussion, one hour. Requisite: course 1. Investigation of circulation of peoples, goods, and media to examine interactions of globalization with local culture and formation of global cultures through practices and processes of globalization. Letter grading.

110A. Globalization in Context. (5)
   - Lecture, six hours. Requisite: course 100B. Corequisite: course 110B. Culture, economy, history, and politics of different locations around world and how they are affected by globalization. Field trips included to gain first-hand experience of these processes. Offered in summer only. P/NP or letter grading.

110B. Globalization in Context Research Seminar. (5)
   - Seminar, six hours. Requisite: course 100B. Corequisite: course 110A. Individual research projects on different aspects of globalization process in locations around world. Offered in summer only. P/NP or letter grading.

120. Introduction to International Business. (4)
   - Lecture, three hours; discussion, one hour (when scheduled). One-week intensive course that increasingly become globalized, presenting many new opportunities for businesses and entrepreneurs. However, recent world events have demonstrated volatile nature of globalization and pitfalls that can also manifest for firms doing business in global setting. Students gain understanding of dynamic environment of international business, and how firms navigate complex world of international business to capitalize upon opportunities and mitigate against risks. P/NP or letter grading.

125. Los Angeles as Global City: Exporter and Importer of Global Culture. (4)
   - Lecture, three hours; discussion, one hour. Requisite: course 120. Study of phenomenon of globalization through prominent case of Los Angeles. Focus on how city produces global culture, including filmed entertainment and culture of celebrity and food; and how it absorbs cultural inputs from world over. Emphasis on interactive relationship between export and import of global culture. City’s distinct cultural milieu influences nature of its cultural exports, but its viability as cultural capital depends on its ability to accommo-
date integrate diversity of cultures. Study creates immersive experience through films, guest speakers, and urban field trips. P/NP or letter grading.

140. Hollywood and America’s Global Image. (4) Lecture, three hours; discussion, one hour (when scheduled). Hollywood movies and television shows are meant to have global audiences by exporting stories and images that demonstrate our shared humanity. But they also reveal unpleasant truths about American attitudes towards foreign cultures as well as our own. Examination of critical aspects of Hollywood’s role in shaping America’s global image. Questioning of whether Hollywood can be more effective as America’s cultural ambassador. P/NP or letter grading.

160. Selected Topics in Global Studies. (4) Lecture, three hours; discussion, one hour (when scheduled). Examination of one or more topics related to global studies. May be repeated for credit with topic change. P/NP or letter grading.

188A-188B. Special Studies in Global Studies. (4–4) Seminar, three hours. Program-sponsored experimental or temporary courses, such as those taught by resident or visiting faculty members. May be repeated for credit with topic change. Letter grading.

189. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

189HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to upper-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.


192. Undergraduate Practicum in Global Studies. (2) Seminar, two hours; practicum, to be arranged. Limited to juniors/seniors. Training and supervised practicum for advanced undergraduate students to serve as undergraduate course assistants in global studies courses. Students assist in preparation and presentation of materials and development of innovative programs with guidance of faculty members. May not be applied toward major requirements. May be repeated for credit. P/NP grading.


Graduate Course

375. Teaching Apprentice Practicum. (1 to 4) Seminar, to be arranged. Preparation: apprentice personnel employment as teaching assistant, associate, or fellow. Teaching apprenticeship under active guidance and supervision of regular faculty member responsible for curriculum and instruction at UCLA. May be repeated for credit. S/U grading.

GRADUATE STUDENT PROFESSIONAL DEVELOPMENT

Graduate Division

1255 Murphy Hall
Box 952801
Los Angeles, CA 90095-2801
Graduate Division

310-825-3819
Graduate Academic Services e-mail

Graduate Student Professional Development

Graduate Courses

495CE. Supervised Preparation for Community-Engaged Teaching. (4) Seminar, two hours. Suitable for graduate students in any discipline. Introduction to best practices for experiential learning and academic civic engagement, with emphasis on critical service learning pedagogy and strategies for collaborating effectively with diverse communities of Los Angeles. Facilitated by Center for Community Learning. S/U grading.

496A. Introduction to Evidence-Based Undergraduate Teaching. (2) Seminar, 90 minutes. Designed for graduate students and postdoctoral scholars. Exploration and practice of fundamental principles of learning, backward design, assessment, active learning, and inclusive teaching. Lesson plan design with feedback. Meets associate level of CIRTL certification requirement. May be repeated once for credit. S/U grading.

496B. Teaching as Research. (2) Seminar, 90 minutes. Requisite: course 496A or equivalent. Students become reflective practitioners by applying systematic and reflective use of research methods to develop teaching practices in order to advance learning experiences and outcomes of students and teachers. Students produce proposal for TAR project. May be repeated once for credit. S/U grading.

496C. Implementing and Communicating Teaching as Research Project. (2 to 4) Tutorial, three to six hours; research group meeting, two to four hours. Requisite: course 496B. Implementation, data analysis, and communication of results of TAR project with feedback and approval of faculty advisor mentor and peer support in local community. Meets practitioner level of CIRTL certification requirement. S/U grading.

HEAD AND NECK SURGERY

David Geffen School of Medicine

62-132 Center for Health Sciences
Box 951624
Los Angeles, CA 90095-1624

Head and Neck Surgery

310-825-5179
Gerald S. Berke, MD, Chair

Scope and Objectives

The Department of Head and Neck Surgery academic programs consist of a nationally recognized residency program, medical school education, prestigious fellowships, and ongoing continuing medical education. A critical success factor in these academic efforts is the high level of clinical expertise demonstrated by all faculty members. Additionally, department faculty members have an active commitment to basic science and clinical research as an integral component of the program of instruction. These tenets not only ensure quality at every educational level, but also provide a superior milieu for the development of teacher-investigators.

The residency program is incorporated into the department patient care and research activities in six affiliated medical centers and exposes residents to all of the subspecialties during the course of their training. Medical student teaching is a combined effort by faculty members, fellows, and residents and consists of lectures, didactic learning, and hands-on experience in clinical and research settings. The department offers one- and two-year fellowships.

For more details on the Department of Head and Neck Surgery and courses offered, see the department website.

HEALTH POLICY AND MANAGEMENT

Jonathan and Karin Fielding School of Public Health

31-269 Center for Health Sciences
Box 951772
Los Angeles, CA 90095-1772

Health Policy and Management

310-825-2594
Department e-mail

Jack Needleman, PhD, Chair

Thomas H. Rice, PhD, Vice Chair

Professors

Kathryn A. Atchison, DDS, MPH
Roshan Bastani, PhD
Paul J. Chung, MD, MS
Jose J. Escarce, MD, PhD
Susan L. Ettner, PhD
Jonathan E. Fielding, MD, PhD, In Residence
Patricia A. Ganz, MD
Lillian Gelberg, MD, MSPH
Beth A. Glenn-Mallouk, PhD
Neal Halfon, MD, MPH
Scope and Objectives

The field of health policy and management examines the organization and financing of various health sectors and wider social systems activities to prevent and treat disease. This includes programs in both the public and private sectors at all levels—local, state, and federal.

Faculty members come from such diverse fields as economics, management, law, statistics, operations research, planning, medicine, history, sociology, and political science. These diverse disciplines are harmonized by their devotion to solving problems—through quantitative, qualitative, and mixed method analyses—in the financing and delivery of health policy and management, with a focus on populations rather than individual patients.

The Department of Health Policy and Management offers both practice-oriented and research-oriented graduate programs. The primary professional degree, the Master of Public Health (MPH), includes training in various aspects of health administration such as policy formulation, health planning, organization, and management. For information on the MPH and concurrent degree programs, see Public Health Schoolwide Programs.

For those interested in careers in research and teaching, the department offers MS and PhD degrees in Health Policy and Management. These programs maintain close ties with related activities in the schools of Dentistry and Medicine, including the UCLA National Clinician Scholars Program. The MS and PhD students have the opportunity to collaborate with the department’s seven existing centers by actively engaging in progressive health services research across a wide breadth of topics, examining issues and finding solutions to critical health care problems locally, nationally, and globally. Graduates of the academic degree programs pursue careers in universities, as well as in public and private agencies involved in health services research and health policy analysis.

Graduate Study

Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Division website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Graduate Degrees

The Department of Health Policy and Management offers Master of Science (MS), Doctor of Philosophy (PhD), and Executive MPH (EMPH) degrees in Health Policy and Management.

Health Policy and Management

Lower-Division Courses

18. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Courses

100. Health Care Systems and Health Policy. (4) Lecture, four hours; discussion, one hour. Structure and function of U.S. health care system, health care policy, and issues and forces shaping its future. P/NP or letter grading.


C121. Tobacco: Prevention, Use, and Public Policy. (4) Lecture, four hours. Designed for juniors/seniors. Study of tobacco use and its health consequences, including interplay of historical, biological, sociocultural, political, and economic forces with knowledge, attitudes, and behavior choices of individuals. Introduction to prevention interventions, cessation interventions, and tobacco efforts in U.S., and international trends in tobacco use. Concurrently scheduled with course C221. Letter grading.

140. Foundations of Maternal and Child Health. (4) Seminar, four hours. Introduction to field of maternal and child health, with focus on major issues affecting health and well-being of children and families over life course. Emphasis on health, prevention, and supportive programs at different stages of child’s life; application of life course health development framework to understand health disparities and implications for policy and practice. Letter grading.

M168. Healthcare for American Indians. (4) (Same as American Indian Studies CM168.) Lecture, two hours; discussion, one hour. Identification of traditional health beliefs, health practices, and healthcare systems of American Indian tribes to understand role of U.S. government in healthcare services for Indian people. Description of health problems that have affected American Indian people and definition of concepts of health status and measures taken to raise health status of American Indian people. Letter grading.

188SA. Individual Studies for USIE Facilitators. (1) Tutorial, to be arranged. Enforced corequisite: Honors Collegium 101E. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to discuss selected USIE seminar topic, conduct preparatory research, and begin preparation of syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.


188SC. Individual Studies for USIE Facilitators. (2) Tutorial, to be arranged. Enforced prerequisite: course 188SB. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with fac-
200A-200B. Health Systems Organization and Financing. (4-4) Lecture, three hours; discussion, one hour. Limited to graduate health services students. In-depth analysis of health services systems in U.S., using relevant theories, concepts, and models. S/U or letter grading.

M201. Topics in Theoretical Epidemiology. (2) (Same as Epidemiology M203.) Lecture, two hours. Topics selected from current research areas in epidemiologic theory and quantitative methods. Topics selected from biologic models, epidemiologic models, problems in inference, model specification problems, design issues, analysis issues, and confounding. May be repeated for credit with consent of instructor. S/U grading.

M203A. Applied Microeconomics. (4) (Formerly numbered 203A.) (Same as Public Policy M201A.) Lecture, four hours. Requisite: Mathematics 3A or 3B or 31A. Concepts of microeconomics, with emphasis on their application to actual situations and their use in problem solving and focus on theory of choice. Extensive use of differential calculus. Letter grading.

M203B. Applied Microeconomics. (4) (Formerly numbered 203B.) (Same as Public Policy M204A.) Lecture, four hours. Requisite: course M203A, and one course from Mathematics 3A, 3B, or 31A. Concepts of microeconomics, with emphasis on their application to actual situations and their use in problem solving and focus on theories of firms and markets. Extensive use of differential calculus. Letter grading.

M204A-M204B-M204C. Seminars: Pharmaceutical Economics and Policy. (1–1–2) (Same as Economics M204L-M204M-M204N.) Seminar, three hours every other week. Limited to public health and economics students. Various topics in economics of pharmaceutical industry, including rates of innovation, drug regulation, and economic impacts of pharmaceuticals. M204A: Introduction to health policy in the American healthcare system. Exploration of ways in which they actually function and how to ensure their quality and effectiveness. Examination of roles, activities, and daily challenges of managers and how these challenges can best be met on day-to-day basis. Emphasis on applied practice with intent being improvement of student managerial competencies and on development of skills to manage operational processes in delivery of health services, primarily directed to improving efficiency, effectiveness, performance, and quality of health services and improving QO techniques such as performance measurement, rapid cycle testing, breakthrough series, and interorganizational collaboration benefit quality and productivity. Letter grading.

215B. Applied Methods for Improvement/Implementation Science. (4) Lecture, four hours. Planning and management of improvement programs in current work of students and future roles as change agents and leaders of healthcare systems. Training in skills and analytic methods for applying improvement science in clinical settings and health systems. Completion of improvement projects to demonstrate competence in implementation science. Emphasis on case studies and applications so students gain skills in improvement program design and implementation. Analysis of approaches, potential strategies, and topics, and class discussions to allow students to apply this knowledge to organizational examples. Letter grading.


217. Evidence-Based Medicine and Organizational Change. (4) Lecture, three hours. Requisites: courses 200A, 200B, M422. Designed for graduate students in public health or other health sciences disciplines. Participation of students in critical review and discussion of selected papers from the medical literature, including clinical trials, meta-analysis, small and large area variations in care, and development and implementation of clinical guidelines. Emphasis on implications for health policy. Letter grading.

C221. Tobacco: Prevention, Use, and Public Policy. (4) Lecture, four hours. Designed for juniors/seniors and graduate students. Study of tobacco use and its health consequences, including interplay of historical, biological, sociocultural, political, and economic forces with knowledge, attitudes, and behavior choices of individuals. Introduction to prevention interventions, and control methods for tobacco efforts in U.S., and international trends in tobacco use. Concurrently scheduled with course C121. Letter grading.

225A-225B. Health Services Research Design. (6-6) Lecture, four hours; laboratory, two hours. Limited to departmental M.S. students. Introduction to design and implementation of proposed or ongoing research projects by faculty members and students, with discussion to determine relevant methodological and policy issues, as well as to offer constructive criticism. Letter grading.

227B. Special Topics in Health Services: Current Research Issues. (2) (Formerly numbered 227A.) Seminar, two hours. Designed for graduate students. Review of articles in health services journals nominated and selected published during the semester. Reading of articles to determine contribution to theory, methods, and/or implications for management or policy in health services organizations or health services as a field. May be repeated for credit with topic change. Letter grading.

M228. Introduction to Mixed Methods Research. (4) (Same as Community Health Sciences M228.) Seminar, three hours; discussion, one hour. Limited to graduate students. Highly recommended: courses 225A and 225B, or completion of coursework in basic research design and methods. Introduction to mixed methods research, with emphasis on its application to public health research. Equips students with skills to critique mixed method research designs and to design mixed methods research investigation for health issue of interest. Study of different mixed methods research designs most commonly used in health services research, including feasibility studies, convergent parallel design, sequential mixed methods, and multivariate studies. Use of combination of didactic and applied techniques. S/U or letter grading.

230A-230B. Health Economics: Low- and Middle-Income Countries’ Perspectives. (2-2) Seminar, two hours; discussion, two hours. Development of student thinking on how microeconomic theories help us understand determinants of health and behaviors of consumers and providers in health sector. Offers critical framework in evaluating efficiency of health systems in improving health of populations. Health economics field provides public policy tools to evaluate distributional benefits/penalties of policies such as sin taxes, and to assess extent market failures motivate role of government in health sector. Letter grading.

230A. Health Economics: Low- and Middle-Income Countries’ Perspectives. (2) Lecture, four hours. Preparation: completion of summer internship. Designed for doctoral students. Emphasis on topics which illuminate current issues in public health policy. Discussion of historical perspectives on health care providers, healthcare institutions, healthcare reform, research methods, public health activities, childbirth, and AIDS. S/U or letter grading.

232. Leadership Capstone Seminar. (4) Seminar, four hours. Preparation: completion of summer internship. Designed for doctoral students completing their master’s training in health management and health policy. Examination of leaders and leadership in healthcare and other organizations to provide broad introductory analysis of behavior, and characteristics of organizational leaders. Relationship and importance of vision, values, change, strategy, and communication. Identification of characteristics of successful leaders. Students evaluate their own leadership style and identify opportunities to further develop their leadership abilities. Letter grading.

M233. Health Policy Analysis. (4) (Same as Community Health Sciences M252.) Lecture, three hours. Requisites: courses 200A, M236, M297. Conceptual
and procedural tools for analysis of health policy, emphasizing role of analysis during various phases of lifecycle of public policy. Letter grading.

234. Health Services Organization and Management Theory. (4) Lecture, four hours, Preparation: two upper-division social sciences courses. Application of contemporary organization and management theory to systems that provide personal healthcare services. Environmental characteristics, missions/goals, structure, and processes of health services organizations. Letter grading.

235. Law, Social Change, and Health Service Policy. (4) Lecture, four hours. Preparation: two upper-level political science or sociology courses. Requisite: courses 206A, 206B, 206C, 206D, 206E, or 206F. Designed for doctoral students. Intended to train students in statistical and policy analysis methods used in health service research, with focus on practical application of advanced regression models. Letter grading.

239A. Special Topics in Health Services: Introduction to Decision Analysis and Cost-Effectiveness Analysis. (4) Lecture, four hours, Preparation: courses 200A, 200B, or 200C. Designed for students in graduate education. Focuses on the techniques of decision analysis and their appropriate applications across various levels and development of possible strategies for addressing the large-scale published cost-effectiveness analyses (CEAs), effectively present strengths and limitations of published CEA's. Methods to assess broad spectrum of medical technologies: therapeutic and diagnostic. Properties of various quality-adjusted life years (QALYs), conduct Markov analyses, critically analyze large-scale published cost-effectiveness analyses (CEAs), and develop conceptual frameworks, clinical practice patterns, public health interventions, and pharmaceuticals. Demonstration of how decision analysis provides basic framework for conducting various economic evaluations. May be repeated for credit with topic change. Letter grading.

239B. Special Topics in Health Services: Advanced Topics in Decision Analysis and Cost-Effectiveness Analysis. (4) Lecture, four hours, Preparation: courses 200A and 200B, or 233B. Designed for graduate students in statistics. Focuses on the conceptual frameworks, research designs and methods, and their appropriate applications across various practice settings and populations. Interdisciplinary discussion of international issues as well. S/U or letter grading.

249S. Introduction to Implementation Science. (4) Seminar, four hours, Preparation: good grasp of social research methods. Designed to provide basic understanding of science of implementing innovations and evidence-based approaches in real-world practice settings. Includes exposure to terminology, conceptual frameworks, research design and methods, and their appropriate applications across various practice settings and populations. Interactive class discussion and guest lectures by experts in implementation science. Letter grading.

251. Project Management for Health-Care Organizations. (4) Lecture, four hours, Exploration of opportunities for using project management, change management, and process improvement techniques to enhance execution of project and improvement initiatives within health-care organizations. Letter grading.

252. Medicare Reform. (4) Same as Community Health Sciences M249L. Lecture, three hours, outside study, nine hours. Designed for graduate students. Analytical and managerial skills learned earlier to be used to analyze policy problems with existing Medicare program and to develop specific options for reforming features of program to accommodate needs of a generational change in baby-boom generation. Letter grading.

255. Obesity, Physical Activity, and Nutrition Seminar. (4) Same as Community Health Sciences M234.) Seminar, three hours, outside study, one hour. Designed for graduate students. Multidisciplinary introduction at graduate level to epidemiology, physiology, and current state of preventive and therapeutic interventions for obesity in adults and children, including behavioral, and dietary interventions and physical activity promotion. S/U or letter grading.

260. World Health. (4) Lecture, two hours. Designed for graduate students. Overview of world health, with emphasis on health policies and problems in developing countries and health implications for global health, economic, and environmental issues, health of populations and defined subgroups. Letter grading.

269. Healthcare Policy and Finance. (4) Same as Public Policy M269.) Seminar, three hours, outside study, nine hours, Exploration of demand for health insurance, policies for public insurance (Medicaid and Medicare), uninsured, and health insurance reform. Examination of effects of managed care on health and costs, consumer protection movement, and role of health care professional in health policy. S/U or letter grading.

274. Health Status and Health Behaviors of Racial and Ethnic Minority Populations. (4) Same as Psychology M274.) Lecture, two hours; discussion, one hour. Limited to graduate students. Overview of physical and mental health status of major racial/ethnic groups in U.S. Where appropriate, discussion of international issues as well. S/U or letter grading.

285. Health Reform: Policy, Research, and Implementation Issues. (4) Seminar, three hours, Preparation: courses 200A, 200B. Limited to second-year MPH and doctoral students. Analysis of components of major federal healthcare reform legislative initiative to identify important policy implementation issues. Application of principles of stakeholder analysis to understand how and why this legislation was constructed and how it passed Congress. Conducting of policy analyses of selected components through completion of written assignments. Examination of respective roles of federal and state government in implementing and administering various components of Medicare, Medicaid, uninsured, and health insurance reform. S/U or letter grading.

286. American Political Institutions and Health Policy. (4) Lecture, two hours; discussion, one hour. To effectively participate in policy process as analyst, policymaker, advocate, or citizen, it is necessary to understand institutional and political context within which policy is made. Introduction to federal and state policy-making, with focus on health policy. Discussion of federalism and constitutionalism. Examination of stakeholders, public interest groups, and nature of issues and space for health policy process in context of participation of political institutions at federal level, Congress, President, executive agencies, courts, and administrative law. State responsibilities and federal/state relations. Historical and contemporary health policy-making, with focus on role of federal analytic agencies and private research and advocacy groups. Letter grading.

297. Politics of Health Policy. (4) Same as Community Health Sciences M297.) Lecture, three hours; discussion, one hour. Requisites: courses 200A and 200B, or Community Health Sciences 210. Examination of politics of health policy process, including ef-
and organizational impact. S/U or letter grading.

288. Role and Impact of Technology on Health Ser-

vices. (4) Lecture, four hours. Examination of role and impact of Health Information Systems in the U.S. from point of view of system itself. Exploration of various types of technologies for their policy, economic, and organizational impact. S/U or letter grading.

289. Healthcare Policy and Management. (3) Seminar, three hours. Limited to graduate students. Exploration of what constitutes and explains disparity in healthcare. Emphasis on understanding history of disparities in U.S., to understand current disparities, and on evaluating effectiveness of ongoing strategies to eliminate them, such as increasing insurance coverage and delivery of culturally competent healthcare. Examination of sociological models that explain disparities in healthcare and evaluation and expansion on these models. Letter grading.

M290. Evolving Paradigms of Prevention: Interven-
tions in Early Childhood. (4) (Same as Community Health Sciences M290) Three hours: Networking, one hour. Designed for graduate students. Introduction of early childhood interventions as means of preventing adverse health and developmental outcomes. Concepts of developmental vulnerability, approaches to assessment, models of service delivery, evaluation and cost-benefit issues, funding, and other policy issues. Letter grading.

375. Teaching Apprenticeship Practicum. (1 to 4) Sem-
inari, to be arranged. Preparation: apprentice personnel employment as teaching assistant, associate, or fellow. Teaching apprenticeship under active guidance and supervision of regular faculty member responsible for curriculum and instruction at UCLA. May be repeated for credit. S/U grading.


401. Public Health Informatics. (4) Lecture, three hours. Preparation: general familiarity and understanding of basic concepts in technology. Recommended prerequisite: course 251. Introduction to field of public health informatics and examination of impact of information technology on practice of public health. Entire process as it pertains to conceptualization and design to project planning and development to system implementation and use. Letter grading.


M411. Issues in Cancer Prevention and Control. (4) (Same as Community Health Sciences M411) Lecture, four hours. Designed for juniors/seniors and graduate students. Introduction to causes and characteristics of cancer epidemic, cancer control goals for nation, and interventions designed to encourage smoking cessation, sun protection, cancer screening, and other dietary, psychosocial, and lifestyle changes. Letter grading.

415. Organizational Analysis. (4) Seminar, four hours. Introduction to important questions and perspectives relevant to understanding organizational behavior and change in healthcare and public health environments. Active paradigms in organizational theory, particularly perspectives important for understanding delivery system change. Examination of empirical research to clarify how important organizational constructs have been operationalized and to highlight methodology-related challenges of studying organizations in healthcare and public health. Letter grading.

M420. Children with Special Healthcare Needs: Systems Perspective. (4) (Same as Community Health Sciences M420 and Social Welfare M290L) Lecture, three hours; fieldwork, one hour. Examination and evaluation of principals, policies, programs, and practices that have evolved to identify, assess, and meet special needs of infants, children, and adolescents with developmental disabilities or chronic illness and their families. Letter grading.

M422. Practices Evaluation in Health Services: Theor-
y and Methodology. (4) (Same as Sociology M422.) Lecture, four hours. Requisites: courses 200A, 200B. Introduction to evaluation of health services programs and policies. Exposure to basic theoretical concepts and specific evaluation methodologies and designs. Letter grading.

423. Advanced Evaluation Theory and Methods for

Health Services. (4) Lecture, four hours. Designed for those familiar with community health services. Examination of current theoretical concepts in evaluation to gain skills in integrating theory into program implementation and evaluation design. Development of student ability to apply various evaluation methodologies most appropriate to variety of settings both within and outside healthcare and public health, and consideration of advantages and disadvantages of potential design. Examination of shift in field of evaluation past decade from principal focus on program efficacy (i.e., internal validity) to more balanced approach considering efficacy in content of feasibility, reach, cost, and sustainability (i.e., external validity) to a more balanced approach considering efficacy and effectiveness of ongoing strategies to eliminate them, such as increasing insurance coverage and delivery of culturally competent healthcare. Examination of sociological models that explain disparities in healthcare and evaluation and expansion on these models. Letter grading.


M426. Child and Family Program Community Leadership Seminar. (2) (Same as Community Health Sciences M426.) Seminar, two hours. Designed for graduate students. Examination of characteristics of community-based organizations (CBOs) and role of leadership in decision-making process involved in major issues facing maternal and child health in Los Angeles County. Focus on specific leadership competencies that are or should be employed by organizations effective in shaping maternal and child health programs and policies (or any population-level policies and programs). Leaders from CBOs in Los Angeles meet weekly to discuss program experiences, and underscore community leadership concepts demonstrated by those CBOs. S/U or letter grading.

430. Healthcare Innovations and E-Health. (4) Lec-
ture, four hours. Introduction to new technologies in healthcare e-commerce/Internet/new media area, with emphasis on general background, review of applications, and discussion of organizational and managerial issues dealing with successful use and implementation of technologies. S/U or letter grading.

431. Organizational Behavior and Human Resourc-
es in Healthcare Organizations. (4) Lecture, four hours. Managerial skills and behaviors applied to components of organizations at seven levels: individual, interpersonal, group, and system. Core human resources skills required by managers. Unique features of health services organizations stressed in applications are presented. Letter grading.

432. Management of Healthcare Delivery Organiza-
tions. (4) Seminar, four hours. Preparation: summer internship, work experience in health services. Readings, case materials, and presentations focused on operations, performance management, and service quality of healthcare delivery institutions. S/U or letter grading.


M434. Building Advocacy Skills: Reproductive Health Focus. (4) (Same as Community Health Sciences M434.) Seminar, three hours. Recommended preparation: course 424. Introduction to advocacy skills for reproductive health issues. Examination of sociological models that explain disparities in reproductive health care and evaluation and expansion on these models.

435. Innovations and Current Trends in Ambulatory Care. (4) Lecture, four hours. Requisites: courses 234, 403. Designed to prepare students for financial management responsibilities in health care. Practical approach for analyzing, identifying, and making recommendations regarding fiscal issues facing health care organizations. Topics include revenue capture and cost classifications, break-even analysis under diverse payer scenarios, financial statement analytics, operational and capital budgeting, variance analysis, forecasting and pro forma, sensitivity analysis, FTE calculations, and utilization of financial databases. S/U or letter grading.

436. Healthcare Financial Management. (4) Lecture, four hours. Requisites: courses 234, 403. Designed to prepare students for financial management responsibilities in health care. Practical approach for analyzing, identifying, and making recommendations regarding fiscal issues facing health care organizations. Topics include revenue capture and cost classifications, break-even analysis under diverse payer scenarios, financial statement analytics, operational and capital budgeting, variance analysis, forecasting and pro forma, sensitivity analysis, FTE calculations, and utilization of financial databases. S/U or letter grading.

437. Legal Environment of Health Services Manage-

ment. (2) Lecture, two hours. Requisites: courses 200A, 200B. General survey of legal aspects of health services management, including guidelines for preventing and responding to legal issues, including negligence, informed consent, medical malpractice, and contracts. S/U or letter grading.

438. Issues and Problems of Local Health Adminis-

tration. (4) Lecture, three hours. Preparation: one health services course. Required preparation: Epidemiology 100. Overview of administrative issues currently faced by local health departments, including providing public health programs during fiscal constraints, quality improvement, interagency relationships and partnerships, and political and public interactions. Letter grading.

439. Data Software for Public Health Professionals. (4) Lecture, two hours; activity, one hour. Development of software skills and policies related to use of software (e.g., Excel), including use of formulas and functions, formatting and manipulating datasets, developing visualizations including charts and tables, using lookup and database functions, and implementing basic analytic methods. Letter grading.

440. Healthcare Information Systems and Tech-

nology. (4) Lecture, four hours. Preparation: comple-
tion of course 434. Introduction to the design, implemen-
tation, and marketing of computer information systems in health information technology (HIT) for those working in healthcare, with emphasis on development of knowledge and skill to plan, manage, and implement systems in health care. Applications of clinical and business partners and evolving HIT spaces. Background and evolution of HIT; how it is planned, implemented, and managed; and how it can be used in the healthcare environment. Core concepts, external research organizations, regulatory organizations, providers, and patients/consumers. Fundamentals of technology, electronic medical records.
599. Doctoral Dissertation Research. (2 to 12) Tutorial, to be arranged. May not be applied toward any degree course requirements. May be repeated for credit. S/U grading.

History

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Scope and Objectives

History is the study of the past of our own society and how it emerged out of the traditions that produced it. At the same time, self-knowledge for students of history comes not only from self-discovery, but from a comparison of their own tradition and experience with those of others. It is only by studying the history of other civilizations and cultures that we can hope to gain perspective on our own.

The course offerings in the Department of History are designed to bring about an understanding of the forces that have shaped the many cultures of this country and the world. UCLA has one of the largest, most distinguished, and most diverse history faculties in the country. Its main emphasis is on the many aspects of social history; but intellectual, cultural, and political history are also strongly represented.

Of all undergraduate majors, History is probably the most flexible and far-reaching. Leading to a Bachelor of Arts degree, it is excellent preparation for a wide variety of careers—law, teaching, business, the communications media, public services, and medicine.

The graduate program leads to the PhD degree in History (a master’s degree may be earned in the process of completing PhD requirements). Traditionally, the MA and PhD in History have led to careers in high school, college, and university teaching. Increasingly, they are also being put to use in government service, international business, museum and archival work, and journalism.

Undergraduate Study

The History major is a designated capstone major. Undergraduate students take a capstone seminar in which they demonstrate mastery of a specialized area of history and a critical understanding of current scholarly concerns, literature, and debate, then design and complete a research project using those primary sources and literature.

History BA

Capstone Major

The History Department undergraduate program consists of 16 courses in history (six lower-division—the preparation for the major, including the premajor requirements; 10 upper-division—the major). Each course must be taken for a letter grade.

Learning Outcomes

The History major has the following learning outcomes:

- Demonstrated appropriate mastery of a specialized area of history
- Demonstrated critical understanding of current scholarly concerns, literature, and debate
- Identification and analysis of primary sources
- Design and execution of a research project, drawing on primary sources and appropriate scholarly literature
- Demonstrated ability to organize and present a brief oral presentation about research

Premajor

While students are completing the lower-division preparation for the major courses, they may be classified as History premajors.

After completing the six courses with a minimum grade-point average of 2.0, students should petition to enter the major in one of the undergraduate counseling offices, 6284 or 6290 Bunche Hall.

Preparation for the Major

Required: Six lower-division courses history courses as follows: two history survey courses selected from History 1A, 1B, 2C, 2B, 2C, 3A, 3B, 3C, 3D, M4, 5, 8A, 8B, 8C, 9A, 9B, 9C, 9D, 9E, M10A, M10B, M11A, M11B, M12A, M12B, M12C, 13A, 13B, 13C, 14, 20, 21, or 22; one course selected from History 94, 96W, or 97A through 97O; three additional lower-division history courses (except History 19, 89, 89HC, 99).

Transfer Students

Transfer applicants to the History major with 90 or more units must complete the following introductory courses prior to admission to UCLA: one semester or two quarters of history of Western civilization or world history, one historical practice course, and three additional lower-division history courses.

Transfer credit for the premajor courses is subject to department approval. Transfer students should consult with the undergraduate counselors before enrolling in any courses for the major.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

The Major

Required: At least 10 upper-division history courses, including (1) two courses in U.S. history, (2) two courses in non-Western history from the same area (i.e., Latin America, Asia, Near East, Africa), (3) two courses in European history or in history of science, (4) one course from 187A through 199, and (5) one capstone seminar from the History 191 series.

The requirements for U.S., non-Western, and European history may be fulfilled with either upper or lower-division courses, but majors are required to take a minimum of 10 upper-division history courses.


There is no language requirement for the major; however, students wishing to enter the honors program or planning to do graduate work in history are urged to pursue language study early in their undergraduate careers.

Advanced Placement Credit in History

Effective fall quarter 2002 for entering freshmen, no course credit is granted for any AP examination.

Honors Program

The honors program is designed for History majors who are interested in completing a year-long research project that culminates in an honors thesis. A 3.5 departmental grade-point average is required for admission. To graduate with departmental honors, students must have a cumulative or overall GPA of at least 3.0 in all University-level coursework and at least a 3.5 GPA in all coursework required for the major.

The honors thesis must be completed in three terms, on the basis of work carried out in History 198A, 198B, and 198C. Students must register their intention to undertake an honors thesis with the undergraduate affairs vice chair no later than spring quarter of their junior year.

When students register for honors, they must provide the undergraduate affairs vice chair with a two-paragraph description of their thesis project, which must be approved in writing by the faculty member who agrees to act as their adviser. The undergraduate affairs vice chair must also approve the proposed project in writing.

The faculty adviser is primarily responsible for guiding the thesis work to its completion and assigns grades for the honors courses after the thesis is complete. The honors thesis should be 40 to 60 pages in length and be based on primary source material. Determination of the level of honors awarded (no honors, honors, or highest honors) is made by the undergraduate affairs vice chair, acting in conjunction with the honors committee, at the end of the term in which the thesis is completed.

History Minor

The History minor introduces students to historical processes and institutions.

To enter the minor, students must have an overall grade-point average of 2.0 or better and file a petition in the Undergraduate office, 6284 Bunche Hall.

Required Lower-Division Courses (10 units): Any two lower-division history courses.

Required Upper-Division Courses (20 units): Any five upper-division history courses. At least three of the five courses must be taken in residence at UCLA.

A maximum of 4 units of special studies courses (199) approved by the adviser and a maximum of 4 units of capstone seminars (191) may be applied toward the minor.
A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor.

Each minor course must be taken for a letter grade, and students must have an overall grade-point average of 2.0 or better in the minor. Successful completion of the minor is indicated on the transcript and diploma.

History of Science, Technology, and Medicine Minor
The History of Science, Technology, and Medicine minor takes as its subject matter the ideas, practices, and people concerned with the knowledge of the natural and social world. Using the tools of historical analysis, it explores the development, significance, and impact of science, technology, and medicine around the world. The goal of the minor is to give undergraduates majoring in fields other than science, technology, and medicine the opportunity to pursue a rigorous program in the historical dimensions of science, technology, and medicine, and their place in society. Students will learn to think critically and write analytically about these subjects.

To enter the minor, students must be in good academic standing (2.0 grade-point average), have completed 45 units and at least one lower-division course in the history of science or medicine for a letter grade, and file a petition with an adviser in the History Department.

Students must take seven courses to satisfy the requirements for the minor. The lower-division requirement is designed to give the student a broad understanding (in time and space) of the historical development of science, technology, and medicine. The upper-division requirement allows students to choose from an array of more focused courses.

Required Lower-Division Courses (10 units): Two courses from History 28B, 3A through 3D.

Required Upper-Division Courses (20 units): Five courses on topics in history of science, technology, and medicine: History 179A, 179B, 179C, 180A, M180B, 180C, 187I, 191I.

Students are required to write at least one research paper on a topic in history of science, technology, or medicine. To this end, they must take at least one of the following: History 191I (capstone research seminar); History 199 (individual independent study approved by department adviser); or an honors col- legium seminar with a required research paper.

History 191I and 199 may be applied only once toward the minor.

Honors colleagues courses with significant history of science, technology, and medicine content may be applied toward the upper-division course requirement for the minor.

One upper-division course outside the department may be counted toward the minor, with approval of the history of science field coordinator. The course must address social, historical, and philosophical aspects of science, technology, and medicine.

A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor.

Each minor course must be taken for a letter grade, and students must maintain an overall grade-point average of 2.0 or better in the minor. Successful completion of the minor is indicated on the transcript and diploma.

Graduate Study
Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Division website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Graduate Degrees
The Department of History offers Master of Arts (MA), Candidate in Philosophy (CPhil), and Doctor of Philosophy (PhD) degrees in History.

History
Lower-Division Courses
1A. Introduction to Western Civilization: Ancient Civilizations, Prehistory to circa AD 843. (5) Lecture, three hours; discussion, one hour. Survey of diverse cultures that shaped foundation of Western civilization to onset of 9th century AD. Investigation of first civilizations in Near East and Egypt. Analysis of worlds of Greeks and Romans. Examination of ways in which western European societies created new syntheses through selective appropriation of Greek and Roman cultures and introduction of new cultural forms. P/NP or letter grading.

1AH. Introduction to Western Civilization: Ancient Civilizations, Prehistory to circa AD 843 (Honors). (5) Lecture, three hours; discussion, two hours. Honors sequence parallel to course 1A. P/NP or letter grading.

1B. Introduction to Western Civilization: Circa 843 to circa 1715. (5) Lecture, three hours; discussion, one hour. Introductions to history of the West and its connections to rest of world from 843 to 1715. Profound social, political, cultural, and intellectual changes that affected development of modern world. Topics covered include economic, social, and cultural aspects of feudal system; relationship between Church and empire; new religious movements (including the Reformation); formation of nation-states; civilization in Near East and Egypt. Analysis of worlds of Greeks and Romans. Examination of ways in which western European societies created new syntheses through selective appropriation of Greek and Roman cultures and introduction of new cultural forms. P/NP or letter grading.

1BH. Introduction to Western Civilization: Circa 843 to circa 1715 (Honors). (5) Lecture, three hours; discussion, two hours. Honors sequence parallel to course 1B. P/NP or letter grading.

1C. Introduction to Western Civilization: Circa 1715 to Present. (5) Lecture, three hours; discussion, one hour. Introduction to history of the West and its connection to rest of world after 1715, during period of sweeping political, social, and cultural tensions and transformations. Topics covered include industrialization, rise of nationalism and mass politics, revolutionary movements, urbanization, mass global migrations, European expansion and imperialism, and decolonization, leading to emergence of new nation states in Europe’s former colonies. P/NP or letter grading.

1CH. Introduction to Western Civilization: Circa 1715 to Present (Honors). (5) Lecture, three hours; discussion, two hours. Honors sequence parallel to course 1C. P/NP or letter grading.

2A. Social Knowledge and Social Power. (5) Lecture, three hours; discussion, two hours. History of social knowledge and social power in the 19th and 20th centuries. Everyday ideas and practices about human nature, common sense, and community and relation of these practices to social thought, social engineering, and social science. Themes include development of social knowledge through public activities and discourses; how social knowledge differs in agrarian, mercantile, industrial, and information-based political economies; and how social science addresses these issues. P/NP or letter grading.

2C. Religion, Occult, and Science: Mystics, Heretics, and Witches in Western Tradition, 1000 to 1600. (5) Lecture, three hours; discussion, two hours. Specific aspects of elite and popular culture in medieval and early modern Europe. Manner in which men and women sought to explain, order, and escape terrors of their lives by embracing transcendentally religious experiences and dreaming of apocalypse and witchcraft. Examination of experiences in context of genesis of the state, birth of a new science, and economic and social change. P/NP or letter grading.

2B. Holocaust: History and Memory. (5) Lecture, three hours; discussion, two hours. Holocaust may not be applied toward courses on science general education requirements. P/NP or letter grading. A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor.

History / 471

2A. Social Knowledge and Social Power. (5) Lecture, three hours; discussion, two hours. History of social knowledge and social power in the 19th and 20th centuries. Everyday ideas and practices about human nature, common sense, and community and relation of these practices to social thought, social engineering, and social science. Themes include development of social knowledge through public activities and discourses; how social knowledge differs in agrarian, mercantile, industrial, and information-based political economies; and how social science addresses these issues. P/NP or letter grading.

2C. Religion, Occult, and Science: Mystics, Heretics, and Witches in Western Tradition, 1000 to 1600. (5) Lecture, three hours; discussion, two hours. Specific aspects of elite and popular culture in medieval and early modern Europe. Manner in which men and women sought to explain, order, and escape terrors of their lives by embracing transcendentally religious experiences and dreaming of apocalypse and witchcraft. Examination of experiences in context of genesis of the state, birth of a new science, and economic and social change. P/NP or letter grading.

2B. Holocaust: History and Memory. (5) Lecture, three hours; discussion, two hours. Holocaust may not be applied toward courses on science general education requirements. P/NP or letter grading. A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor.

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8A. Colonial Latin America. (4) Lecture, three hours; discussion, two hours. General introduction to Latin American history from contact period to independence (1490s to 1820s), with emphasis on convergence of Native American, European, and African cultures in Latin America. Exploration of ethnic, political, and economic development of colonial institutions and societies; and emergence of local and national identities. Readings focus on writings of Latin American men and women from the period of letter grading.

8AH. Colonial Latin America (Honors). (5) Lecture, three hours; discussion, two hours. Honors course parallel to course 8A. P/NP or letter grading.

8B. Modern Latin America. (5) Lecture, three hours; discussion, two hours. Exploration of modern Latin American history, with focus on political, social, and economic history of Latin America after independence, region that includes Mexico, Central and South America, and Caribbean. Formation of independent nations and political regimes and one quest for sovereignty and its challenges in shadow of U.S., approached from bottom up through lens of social history, everyday life, and popular culture. P/NP or letter grading.

8BH. Modern Latin America (Honors). (5) Lecture, three hours; discussion, one hour. Honors course parallel to course 8B. P/NP or letter grading.

8C. Latin American Social History. (5) Lecture, three hours; discussion, two hours. Historical and contemporary perspectives of ordinary people in Latin American society. Each lecture/film session centers on a major Latin American movie illustrative of a theme in social history, everyday life, and popular culture. P/NP or letter grading.

8CH. Latin American Social History (Honors). (6) Lecture, three hours; discussion, two hours. Honors course parallel to course 8C. P/NP or letter grading.

9A-9E. Introduction to Asian Civilizations. (5 each) Lecture, three hours; discussion, two hours. P/NP or letter grading. 9A. History of India. Introductory survey for beginning students of major cultural, social, and political ideas, traditions, and institutions of Indian civilization. 9B. History of China. Survey of Chinese history from earliest recorded time to the present, with emphasis on development of Japan as a cultural and daughter of China. Attention to manner in which Chinese culture was Japanized and aspects of Japanese civilization which became unique. Creation of the modern state in the last century and impact of Western civilization on Japanese culture. 9C. History of Japan (Honors). Honors course parallel to course 9B. 9D. History of Southeast Asia. Introduction to history of Muslim world from advent of Islam to present day. 9E. Southeast Asian Crossroads. Overview of history of region united by its wet tropical environment and divided by a variety of natural, religious, and political pluralism, with focus on Vietnamese, Thai, Filipino, Khmer, Burmese, and Malay-Indonesian patterns.

M10A-10B. History of Africa. (3–5) P/NP or letter grading. M10A. To 1800. (Same as African American Studies M10A.) Lecture, three hours; discussion, one hour. Exploration of development of African societies from earliest times to late 18th century. 10B. 1800 to Present. Lecture, three hours; discussion, two hours. Not open for credit to students with credit for course 10BH or 10BW. Survey of social, economic, and political developments in Africa since 1800, with focus on slave trade, colonialism, and anti-Imperialist struggle. Attention to different ideologues (nationalism, socialism, apartheid), rural/urban tensions, changing role of women.

10BH. Introduction to Civilizations of Africa (Honors). (4) Lecture, three hours; discussion, two hours. Not open for credit to students with credit for course 10B or 10BW. Honors course parallel to course 10B. P/NP or letter grading.

10BW. Introduction to Civilizations of Africa since 1800. (5) Lecture, three hours; discussion, two hours. Enforced requisite: English Composition 3 or 3H or English as a Second Language 36. Not open for credit to students with credit for course 10B or 10BW. Survey of social, economic, and political developments in Africa since 1800, with focus on slave trade, imperialism and colonialism, and nationalism and independence. Attention to different ideologues (nationalism, socialism, apartheid), rural/urban tensions, changing role of women. Four papers required. Satisfies Writing II requirement. Letter grading.

11A-11B. History of China. (5–5) Lecture, three hours; discussion, one hour. P/NP or letter grading. 11A. To 1600. Lecture, and seminar topics. Development of Chinese civilization and modernization of China since antiquity to 1600. Focus on social, political, intellectual, and economic aspects of early and middle imperial China. 11B. Circa 1600 to 2000. Survey of history of China. Exploration of characteristics of Ming and Qing empires and turning points in China's history as both nation and global leader in human immigration, with review of historical foundations of mass imprisonment in Los Angeles. Introduction to the concept of a society of mass incarceration. P/NP or letter grading.

11AH-11BH. History of China (Honors). (5–5) Lecture, three hours; discussion, two hours. Honors sequence parallel to courses 11A, 11B, P/NP or letter grading. 11AH. To 1600. (Honors) 11BH. 1600 to 1950 (Honors).


12B. Inequality: History of Neoliberalism. (5) Lecture, three hours; discussion, one hour. Exploration of origins, ideology, and consequences of neoliberalism. Broad theory that society is best organized on principles of free trade, deregulation, and privatization. Combina- tion of political, economic, and intellectual history to construct genealogy of neoliberal thinking by attending to development of neoliberalism as a form of con- cerns, neoliberalism, imperialism, rise of social democracy and mil- itary Keynesianism, and Mount Pelerin Society's Cold War restructuring of modern political economy. Coverage of economic crisis of 1970s, restructuring of global political economy in U.S., Europe, global south—speci- fically debt, structural adjustment policies, environ- mental destruction, and military intervention. Tracing of roots of global north-south divide to reveal how neoliberal policies represent longer process of accumulation by dispossession and enclosure rather than sudden radical break from Keynesian model. P/ NP or letter grading.

12C. Inequality: Global History of Anti-Colonial Thought and Struggle. (5) Lecture, three hours; dis- cussion, one hour. Ongoing growth and normalization of poverty, violence, and racial hatred of social systems in the world today. Readings and discussions designed to introduce students to historical and theoretical roots of current social and political struggles and the historical and theoretical roots of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of study at UCLA. P/NP grading.

13A-13B-13C. History of the U.S. and Its Colonial Origins. (5–5–5) Lecture, three hours; discussion, one hour. Students recommended for History majors planning to take more advanced courses in history of any region bordering on Atlantic period from 1500 to 1900. Exploration of idea of Atlantic world and few of major historical trends that shaped its history, including migration, slavery, impe- rial conflicts, and revolution. Atlantic history approach avoids national frameworks that assume creation of later national division in order to understand larger, in- tegrated region, one that gave rise to nation states. In re-examining how past is studied, highlights key connections, interactions, and circuits that gave rise to modern world. P/NP or letter grading.

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Limited to maximum of 20 lower-division students. Readings and discussions designed to intro- duce students to current research in discipline. Culmi- nating project may be required. P/NP or letter grading.

88E. Sophomore Seminar: Special Topics in History. (5) Seminar, five hours. Enforced requisite: 10 GE lecture course: see Schedule of Classes for spe- cific requisite lecture and seminar topics. Designed for sophomores. Limited to maximum of 20 lower-division students. Readings and discussions designed to introduce students to current research in discipline. Culmi- nating project may be required. P/NP or letter grading.

88F. Sophomore Seminar: Special Topics in History. (5) Seminar, five hours. Enforced requisite: GE lecture course: see Schedule of Classes for spe- cific requisite lecture and seminar topics. Designed for sophomores. Limited to maximum of 20 lower-division students. Readings and discussions designed to introduce students to current research in discipline. Culmi- nating project may be required. P/NP or letter grading.

88G. Sophomore Seminar: Special Topics in History. (5) Seminar, five hours. Enforced requisite: GE lecture course: see Schedule of Classes for spe- cific requisite lecture and seminar topics. Designed for sophomores. Limited to maximum of 20 lower-division students. Readings and discussions designed to introduce students to current research in discipline. Culmi- nating project may be required. P/NP or letter grading.

88H. Sophomore Seminar: Special Topics in History. (5) Seminar, five hours. Enforced requisite: GE lecture course: see Schedule of Classes for spe- cific requisite lecture and seminar topics. Designed for sophomores. Limited to maximum of 20 lower-division students. Readings and discussions designed to introduce students to current research in discipline. Culmi- nating project may be required. P/NP or letter grading.

88I. Sophomore Seminar: Special Topics in History. (5) Seminar, five hours. Enforced requisite: GE lecture course: see Schedule of Classes for spe- cific requisite lecture and seminar topics. Designed for sophomores. Limited to maximum of 20 lower-division students. Readings and discussions designed to introduce students to current research in discipline. Culmi- nating project may be required. P/NP or letter grading.

88J. Sophomore Seminar: Special Topics in History. (5) Seminar, five hours. Enforced requisite: GE lecture course: see Schedule of Classes for spe- cific requisite lecture and seminar topics. Designed for sophomores. Limited to maximum of 20 lower-division students. Readings and discussions designed to introduce students to current research in discipline. Culmi- nating project may be required. P/NP or letter grading.
Weekly focus on one particular theme, with lecture material supplemented by translations of writings of princes, poets, tribesmen, travelers, and mystics who created Persian republic of letters between Shiraz, Samarkand, and Delhi, and even as far as Siberia and China. Class is divided into lectures, discussions, and small groups, and might be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

94. What Is History? An Introduction to Historical Thinking and Practice. (4) Lecture, two hours; discussion, two hours. What is history, who is that we study, how do we study it, and why should we study it? Introduction to methods of historical thinking, such as source-based analysis, historical debate, and comparative history. Exploration of how we come to know about the past and why it matters. In-depth examination of how the historian works and analysis of sources and written materials. Pr/P or letter grading.

96W. Introduction to Historical Practice. (5) Seminar, three hours. Requisite: English Composition 3. Introduction to study of history, with emphasis on historical theory and research methods. Satisfies Writing II requirement. Letter grading.

97. Historical Practices Adjunct Seminar. (1) Seminar, one hour. Corequisite: any course from History 97A through 97O. Limited to History majors. Exploration of topics covered in courses 97A through 97O in greater depth through supplemental readings, discussions, or other activities. Pr/P or letter grading.

97A-97O. Introduction to Historical Practice: Variable Topics. (4 each) Seminar, three hours. Discussion classes of no more than 15 students. Introduction to study of history, with emphasis on sources and the intellectual processes by which history is written, results of these processes, and sources and development of history. Attention also to representative historians. Pr/P or letter grading.

101. Topics in World History. (4) Lecture, three hours; discussion, one hour (when scheduled). Design for juniors/seniors. Examination of specific historical themes from world historical perspective. May be repeated for maximum of 16 units with topic and/or instructor change. Pr/P or letter grading.

C101A-C101B. Variable Topics: Interdisciplinary Studies. (4-4) Lecture, three hours; discussion, one hour (when scheduled). Lecture, three hours; discussion, one hour (when scheduled). Course C101A is not required to C101B. Design for juniors/seniors. Topics may include gender, world history, masculinity, and ethnicity. Pr/P or letter grading.

102A. Iran and Persianate World. (4) Lecture, three hours; discussion, one hour (when scheduled). Design for juniors/seniors. Development of model of Persianate world, to include together histories of Iran, India, and central Asia (including Afghanistan) between circa 1200 and 2000. Movement and interaction of different peoples between major cultural centers where Persian was used as common language of intellectual, religious, social, and political exchange.

107E. Caucasus under Russian and Soviet Rule. (4) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Survey of political, economic, social, and cultural history of Caucaic region since 1801. Georgian, Armenian, and Azerbaijani republics under Russian rule; nationalism question and Soviet national republics. Pr/P or letter grading.

108A. History of North Africa from Islamic Conquest. (4) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Survey of political, social, economic, and religious history of Islamic West (Maghrib) from Muslim conquest in 7th and 8th centuries CE until 1578. Pr/P or letter grading.

108B. History of Islamic Iberia. (4) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Survey of political, social, economic, religious, artistic, and literary history of Islamic civilization in Western Europe. Pr/P or letter grading.


109B. History of Israel-Palestinian Conflict, 1861 to Present. (4) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Examination of origins of Arab-Israeli dispute from mid-19th century through four waves of state formation and expulsion/flight of three quarters of million Palestinians from their homes. Exploration of social history of Palestine up to Zionist colonization, origins of Zionism and Palestinian nationalism, varieties of Zionism and Palestinian identity, and their consequent symbolic connotations Great Revolt and 1948 nakba (disaster), construction of national identity in Israel, 1967 and its aftermath, Intifada, and redemption of conflict as result of Oslo. Pr/P or letter grading.

M110A-M110B-M110C. Iran, Islamic Civilization. (4-4-4) (Same as Ancient Near East 105A-105B-105C and Ancient Near East 111A-111B-111C.) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Survey of political, social, economic, and cultural history of the Islamic world from its origins to 1979 revolution in Iran. Sasanian conquest of Achaemenid Persia. Emphasis on political history, state structure, empire's religions, and Greco-Persian interactions. Further affinities between history and the Islamic world,尤其是 the aspects related to the Iranian and international history. Pr/P or letter grading.

110A. History of Achaemenid Empire. From the fall of Elam and rise of Medes to Macedon-ian conquest of Achaemenid Persia. Emphasis on political history, state structure, empire's religions, and Greco-Persian interactions. Further affinities between history and the Islamic world, especially the aspects related to the Iranian and international history. Pr/P or letter grading.

110B. History of Sassanian Empire—From Ardashir I to Rise of Peroz (circa 224–459 CE). Focus on the early development of Islam with special attention to the rise of a new political power in the region. Pr/P or letter grading.

110C. History of Islamic Empire, 622 to 1268. From the rise of the Umayyad dynasty in Syria to the decline of the Abbassid Caliphate. Pr/P or letter grading.

111A-111B-111C. Topics in Middle Eastern History. (4-4-4) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. May be repeated for maximum of 16 units with topic and/or instructor change. Pr/P or letter grading.

111A. History of Early Sassanian Empire—From Ardashir I to Rise of Peroz (circa 224–459 CE). From fall of Arsacids to Muslim conquest of Iran. Emphasis on political history, state structure, empire's religions, and Greco-Persian interactions. Further affinities between history and the Islamic world, especially the aspects related to the Iranian and international history. Pr/P or letter grading.

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111D-111E-111F. Topics in Middle Eastern History. (4-4-4) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. May be repeated for maximum of 16 units with topic and/or instructor change. Pr/P or letter grading.
112A-112B. History of Ancient Mediterranean World. (4–4) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. P/NP or letter grading. 112A. Survey of history of ancient East from earliest times to foundation of Persian Empire. 112B. History and institutions of Greeks from their arrival in mainland Greece to Alexander. M112C. History of Ancient Mediterranean World. (4) Same as Classics M114A. Lecture, five hours. Intensive on-site study of history and culture of ancient Rome from founding of city to conversion of Christianity. Part of UCLA Summer Travel Program. P/NP or letter grading.

112D. History and Monuments of Ancient Greece: Field Studies. (4) Fieldwork, three hours. Enforced corequisite: course 112B. Examination of history, art, and monuments of ancient Greece through daily lectures and field walks to museums and archaeological sites. Part of UCLA Summer Travel Program. P/NP or letter grading.

112E. History and Monuments of Rome: Field Studies. (4) Same as Classics M114B. Fieldwork, five hours. Enforced corequisite: course M112C. Examination of history, art, and monuments of ancient Rome through daily lectures and field walks to museums and archaeological sites. Field trips outside Rome to Pompeii, Hadrian's Villa, and ancient Ostia. Receptions at ruins of Roman antiquity in medieval, Renaissance, and modern era explored in their historical context. Part of UCLA Summer Travel Program. P/NP or letter grading.

113A-113B. History of Ancient Greece. (4–4) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. P/NP or letter grading. 113A. Rise of Greek City-State. Emphasis on archaic period and early classical age through Persian Wars. 113B. Classical Period. Clash between Athens and Sparta, consequent rise of Macedon, and after Alexander's last effort to turn back to them.

120A. Rise of Rome. (4–4–4) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. P/NP or letter grading.

120B. Early Rome. (4) Lecture, three hours; discussion, one hour (when scheduled). Designed for seniors. Survey of Western Mediterranean Europe, social/economic, rural with political economy, including its relation with other cultures. P/NP or letter grading.

120C. Late Republic. (4) Lecture, three hours; discussion, one hour (when scheduled). Designed for seniors. Social struggles of late republic. P/NP or letter grading.

120D. Early Empire. (4) Lecture, three hours; discussion, one hour (when scheduled). Designed for seniors. Political, social, economic changes in 3rd century. P/NP or letter grading.

121A. Western Europe, 1914 to 1945. (4) Lecture, three hours; discussion, one hour (when scheduled). Designed for seniors. Restoration politics, Industrial Revolution, uprisings of 1848, unification of Germany and Italy, imperialism, rise of social welfare state. P/NP or letter grading.
paleo-ene War. Consideration of absolutism as political system, and baroque and Enlightenment cultures as new discourses on power and hierarchy. P/NP or letter grading.

125B. Nationalism and Modernization in 19th-Century Germany. (4) Lecture; three hours; discussion; one hour (when scheduled). Designed for juniors/seniors. Problems of class society and state formation, emancipation, assimilation, growth of national consciousness, emergence of bourgeois public sphere, dynamics of state in society, and end of period post-Napoleonic tensions between reform and reaction, 1848, and national unification. P/NP or letter grading.

125C, 20th-Century Germany. (4) Lecture; three hours; discussion; one hour (when scheduled). Designed for juniors/seniors. Transitions that Germany has faced during this century: two world wars, shift from monarchy to republic to totalitarian system to divided nation, and finally reunification. Consideration of political, social, economic, and cultural spheres. P/NP or letter grading.

125D. History of Low Countries. (4) Lecture; three hours; discussion; one hour (when scheduled). Designed for juniors/seniors. Examination of aspects of Dutch (and on occasion Belgian) history from medieval period to period after World War II, with emphasis on political, social, and cultural history. Topics include Middle Ages, Dutch Republic in 17th and 18th centuries, Low Countries from 1830 to 1918, Netherlands and Belgium in context of Europe after 1945. P/NP or letter grading.

126. Europe in Age of Revolution, circa 1775 to 1815. (4) Lecture; three hours; discussion; one hour (when scheduled). Designed for juniors/seniors. Period from revolt of Thirteen Colonies to French Revolution of 1789, and Napoleonic regime, viewing social and political changes unleashed by these revolutionary movements in comparative and transnational perspective. P/NP or letter grading.

M127A-M127D. History of Russia. (4 each) Lecture; three hours; discussion; one hour (when scheduled). Designed for juniors/seniors. P/NP or letter grading.

M127A. Origins to Rise of Muscovy. (4) Same as Russian M118.) Lecture; three hours; discussion; one hour (when scheduled). Designed for juniors/seniors. Ki- evan Russia and its culture, Appanage principalities and towns; Mongol invasion; unification of Russian state by Muscovy, Autocracy and its Servitors; serfdom; and P/NP or letter grading.

127B. Imperial Russia from Peter the Great to Nich- olas II. (4) Lecture; three hours; discussion; one hour (when scheduled). Designed for juniors/seniors. West- ernization of state and society; centralization at home and expansion abroad; problem of institutions of industrialization; movements of political and social protest; non-Russian peoples; political reforms and social changes; Revolution of 1905; Russia in World War I; fall of the Romanov dynasty. P/NP or letter grading.

127C. Revolutionary Russia and Soviet Union. (4) Lecture; three hours; discussion; one hour (when scheduled). Designed for juniors/seniors. Revolutions of 1917, Civil War, consolidation of Bolshevik Regime; succession crisis and ascendency of Stalin, collectiv- ization and industrialization; foreign policy and World War II; death of Stalin, de-Stalinization, developments since; stagnant or stable? P/NP or letter grading.

127D. Culture and Society in Imperial Russia. (4) Lecture; three hours; discussion; one hour (when scheduled). Recommended preparation: course 127B or Russian 99A or 119. Designed for juniors/seniors. Thematic examination of culture and society in Russia during era of state-sponsored Westernization (1869 to 1917). Topics include nobility, peasantry, and village life from serfdom to postemancipation, urban soci- ety, world of the intelligentsia, urban workers, clergy, religion, popular culture, accommodation, and resis- tance. P/NP or letter grading.

128A-128B. History of Italy. (4–4) Lecture; three hours; discussion; one hour (when scheduled). Designed for juniors/seniors. P/NP or letter grading.

128A. 1350 to 1559. Most important social, economic, political, and cultural developments in history of Italy during later Middle Ages and Renaissance. 128B.
first half of 19th century and how these changes helped to drive wedge between North and South. P/NP or letter grading.

139A. U.S., Civil War and Reconstruction. (4) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Role of sectionalism, anti-slavery crusade; formation of Confederate States; war politics; and political reconstruction. P/NP or letter grading.

139B. U.S., 1875 to 1900. (4) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Reconstruction, presidential politics, and development of modern industrial structure was economy from 1790 to 1910. During this period technological skeleton of modern industrial structure was formed. Why and how American economy evolved into dual economy, characterized by center of firms large in size and periphery of smaller firms. 141B. 1929 to 1960. Political, economic, intellectual, and cultural aspects of American democracy. 140C. Since 1960. History of political, social, and diplomatic developments that have shaped U.S. since 1960.

141A-141B. American Economic History. (4) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Focus on selected economic themes, technical analysis of major issues in the American economy, and on growing interdependency between U.S. and world economies. 142A-142B. Intellectual History of U.S. (4) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Principal ideas about humanity and God, nature and society, that have been at work in American history. Sources of these ideas, their connections with one another, their relationship to American life, and their expression in great documents of American thought. P/NP or letter grading.

142D. American Popular Culture. (4) Lecture, three hours; discussion, one hour (when scheduled). Recommended requisites: courses 13B, 13C. Designed for juniors/seniors. Survey of American cultural history since 1865, with emphasis on historical development of urban, consumer-oriented American mass culture that enveloped diverse groups of Americans as producers and consumers. Development of an American popular culture according to changing set of political, economic, and social circumstances. Evolution of national and global framework for mass circulation of popular cultural expressions, as well as arrival of new technologies that enabled that development. P/NP or letter grading.


144A. America in World. (4) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Reconsideration of U.S. exceptionalist approach to world views, importance of thinking about crucial aspects of American history in more international context that goes well beyond foreign relations and international affairs to reconceptualize aspects of American culture, economy, politics, and identity. Emphasis on transnational flows of people, ideas, goods, wealth, and politics, as well as comparative studies of all these things and more. P/NP or letter grading.


145A-145B. U.S. Urban History. (4–4) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. P/NP or letter grading.

145A. U.S. Cities. Struggles, social, political, economic, and social development of U.S. cities in relation to broad trends in U.S. history as well as to their own more special histories. Emphasis on urban political economy and history of urban political processes, and continuity of Native American and African American urban cultures. Focus on selected Indian peoples in each period. P/NP or letter grading. 145B. Precontact to 1830. 145B. 1830 to Present. Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. History of Native Americans from contact to present, with emphasis on historical dimensions of culture change. In-depth analysis of political processes, Native American cultures. P/NP or letter grading.

146A-146B. American Working Class Movements. (4–4) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Major episo- nodal in social, trade union, and cultural history of American working class from Colonial times to present, with emphasis on both organized and unorganized labor, history of Knights of Labor, AFL-CIO, and development of labor politics. P/NP or letter grading.

146C. Migrant Nation: How Mobility Shapes American Society, Politics, and Culture. (4) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Major historical themes related to migration and mobility in the United States. The concept of mobility has varied in meaning over time and across different periods and geographic regions. Students do primary research papers based on local material and comparative case studies. May be repeated for maximum of 16 units with topic and/or instructor change.

146D. U.S. and Comparative Immigration History. (4) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Major themes related to immigration in the United States. May be repeated for maximum of 16 units with topic and/or instructor change.

147D. History of Women in Colonial British America and Early U.S., 1600 to 1860. (4) Same as Gender Studies M147D.) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Use of overlapping diaspora model that integrates North Atlantic (Europe), South Atlantic (Afro-Caribbean), Pacific (China/Japan/Hawaii), and Latin (Mexico to Brazil) worlds to provide chronological and analytic survey of American and comparative immigration from 1750 to present. Special focus on Southern California. P/NP or letter grading.

147G. History of Women in U.S., 1860 to 1980. (4) Same as Gender Studies M147G.) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Introduction to major themes in history of American women from abolition of slavery and Civil War to rise and consequences of second-wave feminism. P/NP or letter grading.

147E. History of Deaf Communities in America. (4) Same as American Sign Language M120.) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. P/NP or letter grading. 148A. Introduction to Public/Applied History. (4) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. General survey of historical definitions of, and debates about, public and applied history, that is, history in non-academic set- tings across different periods and geographic regions. Survey supplemented with case studies drawn from historical research used to inform museum exhibitions, public policy, historic commemoration, digital projects, and documentary and popular media productions. Through assignments in analysis, writing, and collaborative research, students engage with variety of approaches, tools, and media. Research on local historical topics to foster well-grounded understanding of how history is applied and interpreted in variety of places, settings, and media for variety of audiences and purposes. P/NP or letter grading.

149A-149B. North American Indian History. (4–4) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. History of Native Americans from contact to present, with emphasis on historical dimensions of culture change. In-depth analysis of political processes, Native American cultures. Focus on selected Indian peoples in each period. P/NP or letter grading. 149A. Precontact to 1830. 149B. 1830 to Present. Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Examination of slavery experiences in various New World slave societies, with emphasis on outlining similarities and differences among legal status, treatment, and slave cultures of North American, Caribbean, and Latin American slave societies. P/NP or letter grading.

150B-M150C. Introduction to Afro-American History. (4–4) Same as African American Studies M150B-M150C.) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Exploration of African American experience, with emphasis on three great transitions of Afro-American life: trans- formation from Africa to New World slavery, transition from slavery to freedom, and transition from rural to urban milieu. P/NP or letter grading.

150D. Recent African American Urban History: Funk Music and Politics of Black Popular Culture. (4) Same as African American Studies M150D.) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Exploration of musical genre known as funk that emerged in its popular form during late 1960s and reached popular high point, in black culture, during 1970s. Funk, fusion of gospel, blues, jazz, rhythm and blues, soul, rock, and many other musical styles, offer students unique window into recent African American history. P/NP or letter grading.

154. History of California. (4) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Economic, social, intellectual, and political development of California from earliest times to present. P/ NP or letter grading.

155. History of the Western World Since 1500. (4) Same as Chicana and Chicano Studies M158B.) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Social, economic, cultural, and political development of Los Angeles and its environs from time of its founding to present. Emphasis on diverse peoples of area, changing physical environment, various interpretations of city, and Los Angeles’ place among American urban centers. P/ NP or letter grading.

156. Topics in U.S. History. (4) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Examination of specific historical topics and individuals when special. May be repeated for maximum of 16 units with topic and/or instructor change. P/ NP or letter grading.

157A. Early Latin America. (4) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Latin American history from conquest to independence, with emphasis on society, culture, and ethnic aspects. P/ NP or letter grading.

157B. Indians of Colonial Mexico. (4) Lecture, three hours; discussion, one hour (when scheduled). Designed for seniors/juniors. Survey of social and cultural history of Indians of Mexico, especially central Mexico, from time of European conquest until Mexican independence, with emphasis on internal views of Indians and their experience of colonization as revealed in Indian groups and patterns on basis of records produced by Indians themselves. P/ NP or letter grading.

159. Latin America in 19th Century. (4) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Intensive analysis of economic, social, and political problems of Latin American nations from their independence to around 1910. P/ NP or letter grading.

160A. Latin American Elitelore. (4) Lecture, three hours; discussion, one hour (when scheduled). Designed for seniors/juniors. Elitelore (defined as oral or noninstitutionalized knowledge involving leaders’ conceptual and perceptual life history views) in contrast to folklore (followers’ traditional or popular views). Elitelore genres include oral history, literature, and cinema. P/ NP or letter grading.

160B. Mexican Revolution since 1910. (4) Lecture, three hours; discussion, one hour (when scheduled). Designed for seniors/juniors. Examination of organization and structure of Mexican Revolution, and El Chicano Movement to exculcate untold stories about women’s participation in and contribution to making of Chicana and Chicano history. P/ NP or letter grading.

151A. History of Chicano Peoples. (4) Same as Chicana and Chicano Studies M159A.) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Survey lecture course on historical development of Mexican (Chicano) community and its heritage, with emphasis on major formative events affecting community. With special focus on labor and politics. Provides integrated understanding of change over time in Mexican community by inquiry into major formative events affecting community. Within framework of dominance and resistance, discussion deals with social structure, economy, labor, culture, political organization, conflict, and ideology. Designed for seniors/juniors. History of Chicana and Chicano communities and people in the United States and Mexico. Lectures, special presentations, reading assignments, written examinations, library and/or field research, and submission of paper. P/ NP or letter grading.

151B. History of Chicano Peoples. (4) Same as Chicana and Chicano Studies M159B.) Lecture, three hours; discussion, one hour (when scheduled). Designed for seniors/juniors. Survey course on historical development of Mexican (Chicano) community and its heritage, with emphasis on major formative events affecting community. With special focus on labor and politics. Provides integrated understanding of change over time in Mexican community by inquiry into major formative events affecting community. Within framework of dominance and resistance, discussion deals with social structure, economy, labor, culture, political organization, conflict, and ideology. Designed for seniors/juniors. History of Chicana and Chicano communities and people in the United States and Mexico. Lectures, special presentations, reading assignments, written examinations, library and/or field research, and submission of paper. P/ NP or letter grading.

151C. Understanding Whiteness in American History and Culture. (4) (Same as Chicana and Chicano Studies CM182.) Lecture, three hours; discussion, one hour (when scheduled). Designed for seniors/juniors. History, construction, and representation of whiteness in American society. Readings and discussions trace evolution of white identity and explore its significance to historical construction of race class in American history. Letter grading.

151D. Chicana Historiography. (4) (Same as Chicana and Chicano Studies CM182B.) Lecture, four hours. Examination of Chicana historiography, looking closely at how practice of writing history is molded by Chicanas into particular narratives. Using Chicana feminist approaches to study of history, revisiting of specific historical periods and movements such as Spanish Conquest, Mexican Period, American Conquest, Mexican Revolution, and Chicano Movement to exculcate untold stories about women’s participation in and contribution to making of Chicana and Chicano history. Letter grading.


152. Asians in American History. (4) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Study of West as frontier and as region, in transit from Atlantic seaboard to Pacific, from 17th century to present. P/ NP or letter grading.

153. American West. (4) Lecture, three hours; discussion, one hour (when scheduled). Designed for seniors/juniors. Study of West as frontier and as region, in transit from Atlantic seaboard to Pacific, from 17th century to present. P/ NP or letter grading.

154. History of California. (4) Lecture, three hours; discussion, one hour (when scheduled). Designed for seniors/juniors. Economic, social, intellectual, and political development of California from earliest times to present. P/ NP or letter grading.

155. History of the Western World Since 1500. (4) Same as Chicana and Chicano Studies M158.) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Social, economic, cultural, and political development of Los Angeles and its environs from time of its founding to present. Emphasis on diverse peoples of area, changing physical environment, various interpretations of city, and Los Angeles’ place among American urban centers. P/ NP or letter grading.

156. Topics in U.S. History. (4) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Examination of specific historical topics and individuals when special. May be repeated for maximum of 16 units with topic and/or instructor change. P/ NP or letter grading.

157A. Early Latin America. (4) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Latin American history from conquest to independence, with emphasis on society, culture, and ethnic aspects. P/ NP or letter grading.

157B. Indians of Colonial Mexico. (4) Lecture, three hours; discussion, one hour (when scheduled). Designed for seniors/juniors. Survey of social and cultural history of Indians of Mexico, especially central Mexico, from time of European conquest until Mexican independence, with emphasis on internal views of Indians and their experience of colonization as revealed in Indian groups and patterns on basis of records produced by Indians themselves. P/ NP or letter grading.

159. Latin America in 19th Century. (4) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Intensive analysis of economic, social, and political problems of Latin American nations from their independence to around 1910. P/ NP or letter grading.

160A. Latin American Elitelore. (4) Lecture, three hours; discussion, one hour (when scheduled). Designed for seniors/juniors. Elitelore (defined as oral or noninstitutionalized knowledge involving leaders’ conceptual and perceptual life history views) in contrast to folklore (followers’ traditional or popular views). Elitelore genres include oral history, literature, and cinema. P/ NP or letter grading.

160B. Mexican Revolution since 1910. (4) Lecture, three hours; discussion, one hour (when scheduled). Designed for seniors/juniors. Examination of organization and structure of Mexican Revolution, and El Chicano Movement to exculcate untold stories about women’s participation in and contribution to making of Chicana and Chicano history. Letter grading.

160C. History of Argentina. (4) Lecture, three hours; discussion, one hour (when scheduled). Designed for seniors/juniors. History of economic, political, social, and cultural developments that have shaped Argen-
ment of agriculture, growth of trade, rise of states, and incorporation of region into world economy. P/NP or letter grading.


169A-169B. Thought and Society in China. (4-4) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Recommended preparation: courses 11A or 11B. Designed for juniors/seniors. Analysis of relations of power and cultural expressions of dominance and resistance in late imperial China (1000 to 1700), with emphasis on interplay of economic forces, ideas, and social and political institutions. Examination of institutions of state, family, school, and city; idioms of folk religion, death, and afterlife; political, legal, and medical discourses of body, personhood, and social identity; love, sexuality, and private life. P/NP or letter grading.

170B. Selected Topics in Chinese History from 1500. (4) Lecture, three hours; discussion, one hour (when scheduled). Recommended requisite: course 11B. Designed for juniors/seniors. Selected topics that may vary from year to year. Recent offerings include law, society, and popular culture in Chinese modern and contemporary history. May be repeated for maximum of 16 units with topic and/or instructor change. P/NP or letter grading.
176A. Philippine History. (4) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Social, cultural, and political history of Philippine societies from Spanish conquest through independence. Emphasis on questions of identity under colonialism, understanding Revolutions of 1898 and 1898, and politics of Philippine nationalist discourse. Readings include introduction to major issues in Philippine historiography and literature. P/NP or letter grading.

176B. National Histories of Southeast Asia. (4) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Lecture. Topics include gender and sexuality in island Southeast Asia, and economic history of Southeast Asia. P/NP or letter grading.

177A. History of Medicine: Foundations of Modern Medicine. (4) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Survey of history and culture of medicine in the context of technology, including political, social, and economic developments as well as international relations in post-1954 period. P/NP or letter grading.

177B. Comparative Histories of Southeast Asia. (4) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Variable topics include history of Southeast Asia, economy, and industrialization. P/NP or letter grading.

178A. Topics in History of Science. (4) (Same as Gender Studies M180B.) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Historical cases illustrating how gender enters practices and concepts of science. Topics include science and technology, conceptions of nature, persona of man of science, role of women in scientific revolution, scientific investigations of women and femininity. P/NP or letter grading.


M181. Topics in Jewish History. (4) (Same as Jewish Studies M181B.) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Examination of major issues in Jewish history. May be repeated for maximum of 16 units with topic and/or instructor change. P/NP or letter grading.

M181SL. Jewish Thought, Politics, and Ethics: From Theory to Practice. (4) (Same as Jewish Studies M181SL.) Lecture, three hours; fieldwork, two hours (when scheduled). Designed for juniors/seniors. Examination of Jewish thought and politics in Los Angeles, with special emphasis on pivotal roles Jews have played in shaping Los Angeles and role that Los Angeles has played in reshaping Jewish identities, communities, and traditions. Course concentrates on themes related to regionalism in American Jewish history, comparative immigration and migration patterns, and frontier and borders, while providing overview of historical methodologies and interpretation. Examination of ethical and methodological implications of writing history in digital age and learning how to read and analyze these new media works as primary and secondary historical sources. P/NP or letter grading.

M182A. Ancient Jewish History. (4) (Same as Jewish Studies M182A and Religion M182A.) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Survey of early modern Jewish history beginning with enormous repercussive expulsion of Jews from Spain in 1492, followed by transformations in Jewish society and identity over five centuries in Europe and Middle East, and concluding with nationalism. P/NP or letter grading.

M182B. Medieval Jewish History. (4) (Same as Jewish Studies M182B and Religion M182B.) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Examination of unfolding of Jewish history from rise of Christianity to expulsion of Jews from Spain in 1492. P/NP or letter grading.

M182C. Modern Jewish History. (4) (Same as Jewish Studies M182C.) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Survey of early modern Jewish history beginning with enormous repercussive expulsion of Jews from Spain in 1492, followed by transformations in Jewish society and identity over five centuries in Europe and Middle East, and concluding with nationalism. P/NP or letter grading.

183A-183B. Third Reich and Jews. (4–4) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Topics include German polities and political culture, and Jewish history through required service work with community partners and development of digital public history projects. P/NP or letter grading.

M184A. History of Anti-Semitism. (4) (Same as Jewish Studies M184A.) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Survey of origins and historical development of anti-Semitism. P/NP or letter grading.

M184B. History of Zionism and State of Israel. (4) (Same as Jewish Studies M184B.) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Experience of Jews in America, both historical and contemporary. P/NP or letter grading.

185A. History of Religions: Myth. (4) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Nature and function of myth in history of religion and culture. Examples selected from nonliterate as well as from other Asian and European traditions. P/NP or letter grading.

185B. Religions of South and Southeast Asia. (4) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Topic varies from year to year and include religion of Veda; Brahmanism; (later) Hinduism. Consult Schedule of Classes for specifics. May be taken independently for credit. P/NP or letter grading.

185C. Religions of South and Southeast Asia. (4) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Topics vary from year to year and include religion of Veda; Brahmanism; (later) Hinduism. Consult Schedule of Classes for specifics. May be taken independently for credit. P/NP or letter grading.

M185D. Religions of Ancient Near East. (4) (Same as Ancient Near East M185D and Religion M185D.) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Main polytheistic systems of ancient Near East, with emphasis on Mesopotamia and Syria, and with reference to religion of ancient Israel: varying concepts of divinity, hierarchies of gods, prayer and cult, magics, wisdom, and moral conduct. P/NP or letter grading.

185E. Special Topics in History of Religions. (4) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Topics announced in Schedule of Classes and include ancient Germanic cults; Renunciation; and myths of low countries; goddesses; religion in secular age. May be repeated for maximum of 16 units with topic and/or instructor change. P/NP or letter grading.

M185F. History of Early Christianity. (4) (Same as Religion M185F.) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Christian movement from its origins to circa 160 CE, stressing its continuity/ discontinuity with Judaism, various responses to Jesus of Nazareth, writings produced during this period, movement’s encounters with its religious, social, and political world, and methods of research. P/NP or letter grading.

M185G. Religious Environment of Early Christians. (4) (Same as Religion M185G.) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Rich variety in religious practice and thought in Mediterranean world of 1st century CE as in context of developing Christian movement. Topics include Pharisees, Qumran, Philo, Stoics, Epicureans, traditional Greek and Roman religions, mystics, astrology, magic, gnosticism, and emperor-worship. P/NP or letter grading.

M185L. Jessie’s History of Nazareth in Historical Research. (4) (Same as Religion M185L.) Lecture, three hours; discussion, one hour (when scheduled). Recommended preparation: completion of M181SL. Designed for juniors/seniors. Stimulated by significant post-Enlightenment historical evaluations, students are led into firsthand knowledge (in translation) of various multilayered sources for reconstructing teaching, and initial impact of Jesus of Nazareth in his social, economic, political, and religious contexts. P/NP or letter grading.
M186A. Women and Gender, Prehistory to 1792. (4) (Same as Gender Studies M186A.) Lecture, three hours; discussion, one hour (when scheduled). Designed for seniors/juniors. Exploration of history of women, gender, and sexuality from prehistory to 1792. First half of course will explore gender dimensions of Atlantic slavery, and first manifestations of feminist consciousness in second half. Objects or texts created by women examined or read through. P/NP or letter grading.

M186B. Global Feminisms to 1880. (4) (Same as Gender Studies M186B.) Lecture, three hours; discussion, one hour (when scheduled). Designed for seniors/juniors. Introduction to movements for women's rights (educational, political, economic, sexual, and reproductive) around world and over one and half centuries. P/NP or letter grading.


C187N-C187R. Topics in Historiography. (4 each) Seminar, three hours. Proseminar on historiography involving close reading and critical discussion of secondary scholarship on selected topics. Reading, discussion, and analytical writing culminating in one or several historiographical essays. May be repeated once for credit. P/NP or letter grading. C187N. India. (Formerly numbered 187N.) May be concurrently scheduled with course C200K; C187O. World. (Formerly numbered 187O.) May be concurrently scheduled with course C200F; C187P. Theory of History. May be concurrently scheduled with course C200Q; C187R. Japan. (Formerly numbered 187R.) May be concurrently scheduled with course C200M.

188. Special Courses in History. (4) Lecture, three hours. Departmentally sponsored experimental or temporary courses, such as those taught by visiting faculty members. May be repeated for credit with topic change.

188SA. Individual Studies for USIE Facilitators. (1) Tutorial, to be arranged. Enforced corequisite: Honors College 101E. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to discuss selected USIE seminar topic, conduct preparatory research, and begin preparation of syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.

188SB. Individual Studies for USIE Facilitators. (1) Tutorial, to be arranged. Enforced corequisite: Honors College 101E. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to finalize course syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.

188SC. Individual Studies for USIE Facilitators. (2) Tutorial, to be arranged. Enforced corequisite: Honors College 101E. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor while facilitating USIE 88S course. Individual contract with faculty mentor required. May not be repeated. Letter grading.

189. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor.

May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

189HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to upper-division lecture course. Individual dual study with instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

191A-191F. Capstone Seminars: History. (4 each) Seminar, three hours. Designed for seniors. Limited to 15 students meeting biweekly. Organized around topics on basis with reading, discussion, and development of culminating project. May be repeated once for credit. P/NP or letter grading. 191A. Ancient History; 191B. Medieval; 191C. Europe; 191E. Latin America; 191F. Near East; 191G. East Asia; 191L. Jewish History; 191M. Southeast Asia; 191Q. Digital History; 191R. Japan.

C191D-C191P. Topics in History. (4 each) Seminar, three hours. Designed for seniors. Limited to 15 students meeting with faculty member. Reading and discussion of selected topics, and development of culminating project. May be repeated once for credit. P/NP or letter grading. C191D. C187A. May be concurrently scheduled with course C201H; C191J. Africa. (Formerly numbered 191J.) May be concurrently scheduled with course C201F; C191K. History of Eastern Europe. (Formerly numbered 191K.) May be concurrently scheduled with course C201H; C191N. India. (Formerly numbered 191N.) May be concurrently scheduled with course C201C; C191O. World. (Formerly numbered 191O.) May be concurrently scheduled with course C201W; C191P. Historical Theory. May be concurrently scheduled with course C201G.

M191DC. CAPPPP Washington, DC, Research Seminars. (8) (Same as Communication M191DC, Political Science M191DC, Public Affairs M191DC, and Sociology M191DC.) Seminar, three hours. Limited to CAPPPP Prog. Students for undergraduates in student-centered program in Washington, DC, focusing on and development and execution of original empirical research based on experiences from Washington, DC-based field placements. Study of variety of qualitative methods (observation, interviewing, etc.), with comparison to quantitative analysis. Examination of features of solid and significant research; intensive writing. Letter grading.

M194DC. CAPPPP Washington, DC, Research Seminars. (4) (Same as Political Science M194DC and Sociology M194DC.) Seminar, three hours. Limited to CAPPPP Prog. Students for undergraduates in student-centered program in Washington, DC, focusing on and development and execution of original empirical research based on experiences from Washington, DC-based field placements. Supervised field research project. May be repeated for credit. P/NP or letter grading.

195. Community or Corporate Internships in History. (4) Tutorial, three hours. Limited to juniors/seniors. Internship in supervised setting in community agency or business. Students meet on regular basis with instructor and provide periodic reports of their experience. May be repeated for credit. Individual contract required. P/NP or letter grading.

198A. Honors Research in History. (4) Tutorial, to be arranged. Course 198A is requisite to 198B. Limited to juniors/seniors. Development of honors thesis or comprehensive research project under direct supervision of faculty member. May be repeated for maximum of 16 units. Individual contract required. Letter grading.

198B. Honors Research in History. (4) Tutorial, to be arranged. Requisite: course 198A. Limited to juniors/seniors. Continued development of honors thesis or comprehensive research project under direct supervision of faculty member. May be repeated for maximum of 16 units. Individual contract required. In Progress grading (credit to be given only on completion of course 198B).

198C. Honors Research in History. (4) Tutorial, to be arranged. Requisite: course 198B. Limited to juniors/seniors. Completion of honors thesis or comprehensive research project under direct supervision of faculty mentor. May be repeated for maximum of 16 units. Individual contract required. Letter grading.

199. Directed Research in History. (4) Tutorial, three hours. Limited to juniors/seniors. Supervised individual research or investigation under guidance of faculty mentor. Culpinaring paper or project required. May be repeated for credit; History majors limited to 8 units. Individual contract required. P/NP or letter grading.

Graduate Courses


C200F-C200Q. Topics in Historiography. (4 each) Seminar, three hours. Designed for graduate students. Proseminar on historiography involving close reading and critical discussion of secondary scholarship and primary sources on selected topics. Reading, discussion, and analytical writing of several historiographical essays. May be repeated for credit. S/U or letter grading. C200F. World. May be concurrently scheduled with course C187O; C200K. India. (Formerly numbered 200K.) May be concurrently scheduled with course C187N; C200M. Japan. (Formerly numbered 200M.) May be concurrently scheduled with course C187Q; C200R. Theory of History. (Formerly numbered 200R.) May be concurrently scheduled with course C187P.

M200V. Advanced Historiography: Afro-American. (4) (Same as African American Studies M200A.) Seminar, three hours. May be repeated for credit. S/U or letter grading.

M200W. Advanced Historiography: American Indian Peoples. (4) (Same as American Indian Studies M200A.) Lecture, 90 minutes; seminar, 90 minutes. Introduction to culture-histories of North American Indians and review of Indian concepts of history. Stereo-
typical approach to content and methodologies related to Indian past that is interdisciplinary and multicultural in its scope. Letter grading.


200Y. Advanced Historiography: Application of Economics to History. (4) Discussion, three hours.

200Z. Advanced Historiography: Chicano. (4) Discussion, three hours. Graduate survey of leading literature in Chicano history, with emphasis on new methodological and theoretical approaches in the field.

201A-201V. Topics in History. (4 each) Seminar, three hours. Graduate courses involving reading, lecturing, and discussion of selected topics. May be repeated for credit. When concurrently scheduled with course 191, undergraduates must obtain consent or instructor to enroll. S/U or letter grading. 201A. Ancient Greece; 201B. Ancient Rome; 201C. Medieval; 201D. Early Modern Europe; 201E. Modern Europe; 201F. Russia/Eastern Europe; 201G. Britain; 201H. Latin America; 201J. Near East; 201L. China; 201M. Japan; 201N. Science/Technology; 201R. Jewish History; 201S. Armenia and Caucasus; 201T. Southeast Asia; 201U. 201U. Digital History.

201H-201W. Topics in History. (4) Seminar, three hours. Designed for graduate students. Reading and discussion of selected topics. May be repeated for credit. May be concurrently scheduled with course C191D-C191F. S/U or letter grading. 201H. U.S. (Formerly numbered 201H.) May be concurrently scheduled with course C191D; 201K. India. (Formerly numbered 201K.) May be concurrently scheduled with course C191J-C191K. S/U or letter grading. 201L. Africa. (Formerly numbered 201N.) May be concurrently scheduled with course C191J-C191K. S/U or letter grading. 201M. History of Religion. (Formerly numbered 201O.) May be concurrently scheduled with three hours. May be repeated for credit. May be concurrently scheduled with course C191K; 201V. Early Modern Europe; 201V. Modern Europe; 201V. Latin America; 201V. Near East; 201V. China; 201V. Japan; 201V. Science/Technology; 201V. Jewish History; 201V. Armenia and Caucasus; 201V. Southeast Asia; 201V. Digital History.

211A-211B. Seminar: Modern History. (4) Seminar, three hours. Course 211A is requisite to 211B. In Progress (211A) and letter (211B) grading.

212. Methods in Armenian Oral History. (4) Seminar, three hours. Uses and techniques of Armenian oral history; personal narrative and postinterview; methods of compilation and evaluation. Field assignments, interviews, and summaries and/or paper based on interviews. S/U or letter grading.

213A-213B. History of Women, Men, and Sexuality. (4) Seminar, three hours. S/U or letter grading. 213A. Readings include historiography and theory, as well as classic and new historical studies drawn widely from U.S., European, Latin American, Middle Eastern, and Asian history to have diversity of interests and perspectives represented and discussed. 213B. Enforced requisite: course 213A. Research, analysis, drafting, and rewriting of student final papers.

213C. History of Women, Men, and Sexuality Historiography. (4) Seminar, three hours. Limited to graduate students. Exposure to newest branch of gender history; study of masculinity. Focus not on men per se, but on values, practices, and texts that constitute masculinity as one gender. Readings focus on broad range of chronological periods from antiquity to 20th century and geographical areas including Americas, Europe, and Asia, before and after letter grading.

214. Topics in World History. (4) (Formerly numbered C214.) Seminar, three hours. Graduate seminar utilizing world-historical perspective to examine variety of broad themes in human history. Topics vary annually. Letter grading.

215A-215B. Seminars: Ancient History. (4-4) Seminar, three hours. Course 215A is requisite to 215B. In Progress (215A) and letter (215B) grading.

216A-216B. Seminars: Byzantine History. (4-4) Seminar, three hours. Course 216A is requisite to 216B. In Progress (216A) and letter (216B) grading.

217. Sources and Handbooks of Medieval History. (4) Seminar, three hours. Preparation: reading knowledge of German or French. Introduction to types of medieval source materials and the handbooks needed to use them.

M218. Paleography of Latin and Vernacular Manuscripts, 900 to 1500. (4) (Same as Classics M218, English M215, and French M210.) Lecture, three hours; discussion. Introduction to history of Latin and vernacular manuscript book from 900 to 1500 to (1) train students to make informed judgments with regard to place and date of origin, (2) provide training in accurate reading of late medieval and early modern manuscripts, and (3) examine manuscript book as witness to changing society that produced it. Focus on relations between Latin manuscripts and vernacular manuscripts with regard to their respective presentation of written texts. S/U or letter grading.

221A-221B. Seminars: Medieval History. (4-4) Seminar, three hours. Course 221A is requisite to 221B. In Progress (221A) and letter (221B) grading.

222. Colloquium for Entering Graduate Students in Modern European History. (4) Seminar, three hours. Normally limited to and required of all modern European history graduate students. Introduction to topics, methods, and historiography of modern European history.

226A-226B. Seminars: Italian Renaissance. (4-4) Seminar, three hours. Course 226A is requisite to 226B. In Progress (226A) and letter (226B) grading.

227A-227B. Seminars: Reformation. (4-4) Seminar, three hours. Course 227A is requisite to 227B. In Progress (227A) and letter (227B) grading.

229A-229B. Seminars: Early Modern European History. (4-4) Seminar, three hours. Course 229A is requisite to 229B. In Progress (229A) and letter (229B) grading.

M230A-M230B. Seminars: Modern European History. (4-4) (Same as Art History M230B-M230C.) Seminar, three hours. Course M230A is requisite to M230B. May be repeated for credit with consent of adviser. In Progress (M230A) and letter (M230B) grading.

231A-231B. Seminars: Modern European Intellectual and Cultural History. (4-4) Seminar, three hours. Course 231A is requisite to 231B. In Progress (231A) and letter (231B) grading.

232A-232B. Seminars: French History of 19th and 20th Centuries. (4-4) Seminar, three hours. Course 232A is requisite to 232B. In Progress (232A) and letter (232B) grading.

233A-233B. Seminars: Russian/Soviet History. (4-4) Seminar, three hours. Course 233A is requisite to 233B. In Progress (233A) and letter (233B) grading.

234A-234B. Seminars: Modern History of Spain, Portugal, and Italy. (4-4) Seminar, three hours. Course 234A is requisite to 234B. In Progress (234A) and letter (234B) grading.

235A-235B. Economic History of Europe, 1780 to 1939. (4-4) Seminar, three hours. Course 235A is requisite to 235B. Cyclical trend, various economic regimes, and integration into international economy of European and world economy, emergence of Western core and its relation with European peripheries. Comparative analysis on different regions, stressing main characteristics of postwar European economy. In Progress (235A) and letter (235B) grading.

235C-235D. Economic History of 20th-Century Europe. (4-4) Seminar, three hours. Course 235C is requisite to 235D. Cyclical trend, various economic regimes, and integration into international economy of European and world economy. In Progress (235C) and letter (235D) grading.

M236A. Proseminar: Political Psychology. (4) (Same as Political Science M236A and Psychology M232A.) Seminar, three hours. Introduction to political psychology, with emphasis on psychology, politics, mass attitudes, group conflict, political communication, and elite decision making.

236B-236C. Seminars: Psychohistory. (4-4) Seminar, three hours. Course 236B is requisite to 236C. Exploration of individual and group psychological processes and their uses in historical research. In Progress (236B) and letter (236C) grading.

239A-239B. Seminars: English History—Middle Ages. (4-4) Seminar, three hours. Course 239A is requisite to 239B. In Progress (239A) and letter (239B) grading.

240A-240B. Seminars: English History—Modern History. (4-4) Seminar, three hours. Course 240A is requisite to 240B. In Progress (240A) and letter (240B) grading.

241A-241B. Seminars: German History. (4-4) Seminar, three hours. Course 241A is requisite to 241B. Designed for graduate students. In Progress (241A) and letter (241B) grading.


244A-244B. Seminars: British Empire History. (4-4) Seminar, three hours. Course 244A is requisite to 244B. In Progress (244A) and letter (244B) grading.
HONORS COLLEGIUM
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Program e-mail
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Kelly A. Lytle Hernández, PhD (African American Studies, History)
Christina G.S. Palmer, PhD (Human Genetics, Psychiatry and Biobehavioral Sciences, Society and Genetics)
Zrinka Stahuljak, PhD (Comparative Literature, French and Francophone Studies)
Christopher C. Tilly, PhD (Sociology, Urban Planning)
Aaron Tornell, PhD (Economics)
Aradhna K. Tripati, PhD (Atmospheric and Oceanic Sciences; Earth, Planetary, and Space Sciences; Environment and Sustainability)

Scope and Objectives
The Honors Collegium is a series of courses with an interdisciplinary emphasis designed for students enrolled in College Honors. It encourages animated discussion among students, as well as between students and professors and seeks to promote scholarly exchange across the major disciplines at UCLA. And it offers small classes and individual attention.

Undergraduate Study
Each Honors Collegium course is staffed by a director who is distinguished in teaching and scholarship and may include a variable number of guest lecturers and additional specialists in their fields. Some courses satisfy general education requirements and serve as preparation for numerous majors in the College of Letters and Science. Counselors are available in the Honors Programs Office, A311 Murphy Hall, to advise and help students plan an integrated academic program.

Courses in the Honors Collegium are mainly interdisciplinary seminars, and the courses vary each year. Refer to the Schedule of Classes for current course listings.

Honors Collegium
Lower-Division Courses

1. Plague Culture. (5)
Seminar, three hours. Study of episodes and metaphors of plague in Western culture from ancient times to the AIDS epidemic. Topics include scriptural, ancient tragedy, Black Death, realist novel, high aesthetic metaphors of plague, Nazi propaganda, existential and absurdist thought, postwar cinema, contemporary American theater, and contemporary science and medicine. P/NP or letter grading.

2. Comparative Genocide. (4)
Lecture, four hours; discussion, one hour. Social comparative study of genocide, combining theoretical concepts with case studies (such as Armenia, the Holocaust, American Indians, Uganda under Amin and Obote, etc.). P/NP or letter grading.

3. Personal Brain Management. (5)
Seminar, four hours. Designed for College Honors students. Available psychotherapies, educational media, and drugs can alter our way of thinking. New wave of information technologies and biotechnologies is changing existing landscape. Survey of available tools that claim neuroplastic brain-changing effects, consideration of future developments, and engagement of students in discussion on ethical and philosophical implications of these developments. P/NP or letter grading.

4. Welcome to Dark Side: Human Pathology in World Literature. (5)
Seminar, three hours. Designed for College Honors students. Exploration of various aspects of pathological human behavior and how they are portrayed in classic literary works. Span discipline of comparative literature (French, German, American Gothic, modern English), medicine/psychiatry, and history. Major themes include fear and oppression; murder and infanticide; despair and suicide; barbarism and suppression; hatred and revenge; incest and shame; jealousy and paranoia; madness and psychosis; sociopathy and evil. Elucidation of themes through texts, and discussion of each text in its historical, social, and cultural context. Examination of pathological behaviors in context of their medical and psychiatric framework when they correspond to clinical diagnostic entity. Texts used as springboard to elaborate on recurrent themes of history of human civilization. P/NP or letter grading.

5. Representing Cleopatra: History, Drama, and Film. (5)
Seminar, three hours. Examination of legendary queen of Egypt as seen by her contemporaries and study of origins of myths about her and ways in which subsequent cultures and eras have imagined her in literary, visual, and cinematic representations. P/NP or letter grading.

Seminar, three hours. Review of physics and chemistry of concepts of energy, history over ages of turning of discoveries into products in this area, including use of fossil fuels, and discussion of current energy issues, including alternative energies, P/NP or letter grading.

7. Saint and Heretic: Joan of Arc and Gilles de Rais, History and Myth. (5)
Seminar, three hours. Examination of both history of Joan of Arc and Gilles de Rais and of way in which, over time, their histories became intertwined. Seminar, three hours. Examina-

8. Life, Death, and Everything in Between. (5)
Seminar, three hours. Designed for College Honors students. Literature course with classic texts used to explore various aspects of human condition as they relate to health and illness. Broad themes including creation, death, deformity, madness, contagion, infirmity, and alienation to be drawn from texts spanning Shakespeare to Plato. Texts selected to illuminate one central aspect of human experience to be examined in its historical context as well as in context of contemporary practice of medicine. Exploration of social, philosophical, and ethical issues pertaining to each theme and timely and controversial aspects of modern healthcare. P/NP or letter grading.

Seminar, four hours. Opportunity for collaboration between those in science-related disciplines and those in arts/humanities-related disciplines. New ways in which visual science can be communicated, using tools, techniques, and systems that are typically outside science education. Science students learn innovative ways of presenting scientific data and design and design, and art students learn how to apply their skills to topics they might not usually address. P/NP or letter grading.

10. Language and Gender: Introduction to Gender Differences and Stereotypes. (5)
Seminar, four hours; discussion, one hour. Designed for College Honors students. Prior knowledge of any foreign language not required. Introduction to language from sociological perspective of gender. Use of research and examples primarily in English, Japanese, and Russian to explore nature of and stereotypes about male and female gendered and gendered language, as reflected in lexicon, language behavior, phonetics and intonation, and language acquisition and linguistic change. P/NP or letter grading.

11W. Postmodern Culture. (5)
Seminar, four hours. Encouraged requisite: English Composition 3 or 3H or English as a Second Language 36. Exploration of theories and art (literature, music, film, fine art) that emerged after World War II in what has come to be known as postmodern era. Art criticizes master narratives of earlier age and fosters fragmentation, skepticism toward universal truth, commodification of knowledge, media creating reality, and globalization in industry and society. Satisfies Writing II requirement. Letter grading.

12. Sacred Form: Literature and Poetry in India from Bronze Age to Premodern Times. (4)
Seminar, three hours. Exploration of cultural and literary development in India from early religious poetry (prior to 1000 BC) to broad range of literary styles and diverse religious and philosophical movements, from classical, medieval, and premodern periods. P/NP or letter grading.

13. Inquiry in Numbers. (5)
Seminar, four hours. Preparation: high school algebra. Designed for College Honors students. Examine mathematics to see mathematics as mathe-
maticians do, not as means to end, but as beautiful and artful in its own right, including elementary number theory and study of whole numbers. Development of rich and elegant theory of prime numbers, factorization, and modular arithmetic. P/NP or letter grading.

Seminar, three hours. Examination of interaction of science and society and effects of this interaction on history, development of societies, evolution of revolutionary ideas as modeled in Galileo, Darwin, and others, and selected contemporary issues such as genetic engineering and war against infectious diseases. P/NP or letter grading.

15. Symmetry. (5)
Seminar, four hours. Symmetry is one of fundamental intellectual frameworks of civilization, one that permeates sciences, arts, and other en
deavors. Symmetry as it appears in mathematics, physics, and biology. Connections to and discussion of visual arts and music. Guest speakers from UCLA community to complement scientific point of view. P/NP or letter grading.

Seminar, three hours. Study of methods, including computer laboratory work, of quantifying voice production. Study of students’ own vocal productions as well as recorded samples of famous singers. P/NP or letter grading.
17. Art, Entertainment, and Social Change. (5) Seminar, three hours. Designed for College Honors students. Integrative examination of evolving impact of arts and entertainment industry on various aspects of social change as environmental movements, politics and activism, and the role of local politics, and community. P/NP or letter grading.

18. Trial of Socrates. (5) Seminar, three hours. Examination of life and times of Socrates and trial that led to his execution, including in-class staging. P/NP or letter grading.

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their area of expertise and illustrating many paths of discovery at UCLA. P/NP grading.

20. What Is This Thing Called Science?: Nature of Modern Science. (5) Lecture, three hours; discussion, one hour. Exploration of difference between science and other systems of knowledge; study of history and philosophy of science and examination of its reliability as objective knowledge. P/NP or letter grading.

21W. Rise and Fall of Modernism. (6) Seminar, three hours: writing laboratory, two hours. Enforced requisite: English Composition 3 or 3H or English as a Second Language 36. Study of early and middle 20th-century's attempt to construct significance in a general climate of disillusionment by way of the sexual, revolutionary, and other intellectual movements. Satisfies Writing II requirement. Letter grading.

22. Comparative Odysseys. (5) Seminar, three hours. Designed for College Honors students. Greek and Chinese classics have in common two modes of heroism: one glorifying prowess and the other celebrating mental cunning. Both modes are associated principally with modernity and change. Introduction of these traditional constructions of heroic, particularly conflation of courage and violence. Readings include Homer, Homer, and Anthony Yu, Tripmaster Monkey by Maxine Kingston, and Ignorance by Milan Kundera. P/NP or letter grading.

23. Political Dissidence Today and in Ancient Greece: Trial and Death of Socrates in Its Classical and Legal Context. (5) Seminar, three hours. Study of trial and death of Socrates by examining its relevance today to legal treatment of dissent and civil disobedience in the U.S. and to variety of contemporary theories and movements. Introduction of the legal system, values that sustained that system, and new ways to think about roles of law. P/NP or letter grading.

24. We Could Be Heroes: Race, Gender, and the Contemporary Hero Narrative. (5) Seminar, four hours. Ways in which hero narratives represent and work through issues of racial and gender identity. Interdisciplinary consideration of hero narratives in film alongside literary and media arts genres including graphic novel, blaxploitation films, hip-hop concept music, animated television series, and novel. Critical reading and analysis of these texts to question often-fraught racial and gender politics embedded in these cultural productions as way to access role that racial and gender dynamics have on world at large. P/NP or letter grading.

25. Politics and Passion: Judgment, Justice, and Emotions. (5) Seminar, four hours. How to combine judgment and emotions without them standing in way of justice, including our ability to listen and respond to pain of others. What should govern our political life? Should it be our reason or our emotions? Or is there some way to combine the two? Exploration of these questions through debates on place of emotions in politics, from ancient to contemporary thinkers within philosophical framework. P/NP or letter grading.

26. Representing Medicine: Art, Literature, and Film. (5) Seminar, four hours. Limited to Freshman Summer Program students. Exploration of interdisciplinary dimensions of medical representation, with emphasis on cross-cultural and literary portrayals of professionalism, including representations of doctor/patient relations, healthcare sites and circumstances, aging, alternative treatments, and mental health. Offered in summer only. P/NP or letter grading.

27. Varied Mathematics. (5) Seminar, four hours. Informatory approach to mathematics and engineering topics. Ideas through stories from history and anthropological sources. Simplicity of topics that cause difficulties in traditional mathematics. Examples emphasize practical solutions. In place of terms used in mathematics, relevant views from popular culture, including graphic novel, blaxploitation films, and student contributions. Sources include computer, control, space, and other contemporary scientific issues, and recoinceptualizing Space, Earth, South America, and Polynesia. P/NP or letter grading.

28. Material Culture and the Museum: Introduction to Collections-Based Research. (5) Seminar, three hours. Examination of relationship between people, objects, and ideas. Insight into way that human beings have historically and contemporaneously created and conceived of things and their use and importance in daily life and in performance of cultural identity. Consideration of social questions including how past and present intersect, how people have made sense of world over time and space, and how objects, heritage, collectors, and public museums converge, diverge, and intersect. P/NP or letter grading.


31. Scientific Method: Critical Inquiry into Question of Extraterrestrial Life. (4) Lecture, three hours; discussion, one hour. Course does not presume to answer questions of whether extraterrestrial life exists in the universe but rather uses this question as a pedagogic tool to introduce central ideas, techniques, and limitations of the scientific method—what questions would need to be debated in order for scientific knowledge to be established, and what obstacles would have to be overcome just to address this question. P/NP or letter grading.

32. Global Geographies and Ideologies of Home. (5) Seminar, three hours. Designed for College Honors students. Home is potently symbolic notion across eras and cultures, locale from which we depart and to which we may return. Broader notions of home, as homeland, incessantly form basis of conflicts between people and nations. Investigation of what home is through challenging works of theory surrounding notions of space, place, longing, belonging, exile, and return, and through literature works of literature, film, and performance. P/NP or letter grading.

37W. Sampling and Remix: Aesthetics and Politics of Cultural Appropriation. (5) Seminar, three hours; laboratory, two hours. Enforced requisite: English Composition 3 or English as a Second Language 36. Limited to College Honors students. Contemporary media literacy has spurred production of amateur remixed productions of cultural data texts. But this is only one moment within far-reaching genealogy of cultural appropriation. Use of remix as lens through which to explore aesthetics and politics of historical and contemporary processes of cultural appropriation, including remixes of political speech, viral videos, and comedy mashups. Examination of fine line between horrific cultural allusion and allegations of theft. Satisfies Writing II requirement. P/NP or letter grading.

38. Film and History/Film as History. (5) Seminar, four hours. Designed for College Honors students. How do films reflect on, and even constitute, historical events? Examination of relationship between film and history and some ways in which film has functioned as history. Tracking questions of film and history from silent era to postfilm digital present, exposure to major issues in scholarly body of work in film and media studies while also learning about ways that films can engage with history. P/NP or letter grading.

39. Philosophy Ramble. (5) Seminar, three hours. Designed for College Honors students. Grounded in Aristotle-style philosophy found in Martha Nussbaum's Cultivating Compassion and N.M.S. Hacker's Totellean-style philosophy found in Plato's Academy, class takes regular walks together, using UCLA and West Los Angeles Lyceum, engaging in intellectual dialog in historical tradition of exercising both body and mind. P/NP or letter grading.

40W. Transformations of Cultural Stories across Disciplines and Texts. (5) Seminar, four hours. Enforced requisite: English Composition 3 or English as a Second Language 36. Tracing of writing and rewriting of traditional story types, specifically the adventure story as represented by Defoe's Robinson Crusoe and its remanifestations in the fairy tale and the fairy tale as represented by Cinderella and its various cross-cultural remanifestations. Satisfies Writing II requirement. Letter grading.

41. Understanding Ecology: Finding Interdisciplinary Solutions to Environmental Problems. (5) Seminar, four hours. Designed for College Honors students. Exploration of ecological basis of planet's most important environmental issues, including global climate change, ocean acidification, biodiversity loss, deforestation, pollution, and declining freshwater resources and fisheries. Examination of both hard science and interdisciplinary solutions (social, political, educational) to environmental problems. P/NP or letter grading.

43W. Science, Rhetoric, and Social Influence. (6) Seminar, four hours. Enforced requisite: English Composition 3 or English as a Second Language 36. Science writing, particularly scientific texts, both contemporary and historical, that have been used to communicate science to and influence large groups of people and that have informed and encouraged our practice science writing themselves. Satisfies Writing II requirement. Letter grading.

44. Drugs in Society: Interdisciplinary Perspective on Drug Use, Abuse, Treatment, and Intervention. (5) Seminar, three hours. Examination of drug use and abuse and consequent social issues and policies both historically and in the contemporary U.S., including exploration of current research on neurochemical properties of different drugs and responding to clinical interventions. P/NP or letter grading.

45. Politics of Reproduction. (4) Seminar, three hours. Designed for College Honors students. Examination of the politics of reproduction in the context of individual, local, and global interests as they shape and reflect reproductive practices, public policy, and exercise of power. P/NP or letter grading.
49. Evidence in Law: Science, History, and Journalism. (4) Seminar, four hours. Rigorous study of ways in which lawyers, scientists, historians, and journalists handle evidence, with aim of advancing cross-disciplinary inquiry to produce a common vocabulary and set of shared procedures for discussion of evidentiary issues in differing fields of inquiry. P/NP or letter grading.

50. Creating Your Roadmap. (5) Seminar, three hours. Introduction to selected signature approaches to learning (interdisciplinary, experiential, integrative, illustrative), ways of being (inclusivity, self-awareness, curiosity, independence, resilience, generosity, distinctiveness), ways of doing (collaboration, activity, innovation). Incorporation of empirical research and writing from different academic disciplines to help students understand rationales behind those approaches and applications for undergraduate academic, professional, and personal growth during their undergraduate careers. May be repeated for maximum of 10 units. P/NP or letter grading.

51. Music and Society. (5) Seminar, four hours. Minimal experience reading music desirable but not required. Analysis of Western art music, with focus primarily, but not exclusively, on music of late-18th through early-20th centuries through multiple analytical prisms: sociological, historical, political, and musical. P/NP or letter grading.

52. Culture and History of Ukraine. (4) Seminar, three hours. Study of major-upon-upon writings from Thomas More’s classical text to recent ecological and feminist utopian texts, with purpose of uncovering societal, intellectual, and cultural landscapes underlying quest for a more perfect society. P/NP or letter grading.

53. Language, Performance, and Culture. (5) Lecture, three hours. Mixture of lecture and discussion on topic of language and its relationship to performance and culture in the 20th and 21st centuries. Study of theorists such as Saussure, Wittgenstein, Stanley Cavell, Judith Butler, and others, playwrights such as Wilde, Stein, and Samuel Beckett, and films such as “His Girl Friday” and “Monkey Business.” P/NP or letter grading.

54. World Literature and Culture of the American South. (6) Seminar, four hours; writing laboratory, two hours. Enforced requisite: English Composition 3 or 3H or English as a Second Language 36. Examination of historical imagination as it is expressed in such writers as William Faulkner, Allen Tate, Flannery O’Connor, Richard Wright, Walker Percy, and William Faulkner; Civil War and WPA/FSA photography; and in Southern rhetoric and political document. Satisfies Writing II requirement. Letter grading.

55W. Nabokov and Reading Minds. (5) Seminar, three hours; fieldwork, one hour. Examination of phobias, including inquiry into how people are distressed by intense fear, examination of structures and processes of irrational fears, and discussion of course and fear reduction strategies. P/NP or letter grading.

57W. Worlds of Neil Gaiman: Graphic Novels, Social Media, and Fantasy Fiction. (5) Seminar, four hours. Enforced requisite: English Composition 3. Designed for College Honors students, but open to all majors. Rotation of Earth imposed diurnal oscillations of physical changes on all living organisms on Earth. P/NP or letter grading.

70A. Gene Discovery Laboratory. (5) Seminar, three hours; laboratory, five hours. Recommended prerequisite: requisite coursework in human: research and seminar discussion that apply experimentally concepts and techniques taught in course 70A. P/NP or letter grading.

71. Cross-Cultural Approaches to Media History and Culture. (8) Seminar, three hours. Examination of media, media history, and media culture from cross-cultural perspective, one that demands redefinition of media and understanding of art in cross-cultural context. P/NP or letter grading.

72. Cross-Cultural Approaches to Media History and Culture. (5) Seminar, three hours. Examination of multiple encounters between Greeks and Persians in antiquity, from origins of Achaemenid Empire through its conflict with the Hellenic world of Mediterranean, to Alexander’s defeat of Darius III. Consideration of mutual constructions of other in antiquity, Near Eastern versus Greek testimony, and art and architectural evidence of these two civilizations. P/NP or letter grading.

78. Science and Religion from Copernicus to Darwinism. (5) Seminar, three hours. Designed for College Honors students. Examination of multiple encounters between Greeks and Persians in antiquity, from origins of Achaemenid Empire through its conflict with the Hellenic world of Mediterranean, to Alexander’s defeat of Darius III. Consideration of mutual constructions of other in antiquity, Near Eastern versus Greek testimony, and art and architectural evidence of these two civilizations. P/NP or letter grading.

87. Personal Financial Health: Theory and Practice. (6) Seminar, three hours; fieldwork, four hours. Designed for College Honors students. Special economics or mathematics preparation not required. Theory and practice of managing financial health, allowing for broad discussion of larger theoretical picture of variables affecting economy and practical hands-on look at personal finance, including budgeting, debt, insurance, investing, and purchasing. Examination of variety of financial issues through three principal standpoints: psychology of finance, historical perspective of finance, and socioeconomic perspective of finance. P/NP or letter grading.

90. Cossacks and Narratives about Them. (5) Seminar, four hours. Designed for College Honors students. Examination of narratives of Ukrainian (Zaporozhian) Cossacks and Russian (Don) Cossacks. Both emerged in 15th and 16th centuries as warrior societies along contact zone between Black Sea and Atlantic. Their frontier status and liminal culture proved to be mythic, and Cossacks figure prominently in imagination of cultures they impacted over centuries, especially in folklore. Limitations of government’s attempts to control Cossacks through these media to understand not just Cossack society but ways in which Cossacks have been viewed through paradigms of Polish, Russian, Ukrainian, Jewish, and western European cultures. P/NP or letter grading.

92. Community and Labor Development from Ground Up. (4) Lecture, three hours; discussion, one hour. Introduction to practical applications of community development and outreach efforts in Los Angeles area, with projects from Community Outreach Partnership Center within School of Public Policy and Social Research. P/NP or letter grading.

93W. Polite and Rhetoric of Literature. (6) Seminar, four hours; writing laboratory, two hours. Enforced requisite: English Composition 3 or 3H or English as a Second Language 36. Examination of relationship among politics, rhetoric, and literature in study of literature from classical times to the present, broadening into general discussions of development of language. P/NP or letter grading.

94. Conflicts between Languages. (5) Seminar, three hours. Introduction to potentially conflict-ridden language situations in three countries abroad and discussion of various aspects of minority languages in the U.S. P/NP or letter grading.

95. Biological Clock. (5) Seminar, four hours. Designed for College Honors students, but open to all majors. Rotation of Earth imposed diurnal oscillations of physical changes on all living organisms on Earth. P/NP or letter grading.
101A. Student Research Forum. (2) Lecture, two hours. Designed to promote deep engagement in university research, including instruction on securing research opportunities, skills necessary for research and professional success, exploring research internships and off campus, and communication of research. P/NP grading.

101B. UCLA Undergraduate Science Journal. (2) Seminar, two hours. For students on editorial board of annual UCLA Undergraduate Science Journal, including study of writing in sciences and honing of editing and production skills. May be repeated for maximum of 10 units. P/NP grading.

101C. UCLA Undergraduate Journal for Humanities and Social Sciences. (2) Seminar, two hours. For students on editorial board of annual Apeligh journal of undergraduate research and writing, including study of writing in various disciplines and honing of editing and production skills. May be repeated for maximum of 10 units. P/NP grading.

101D. Counseling Multicultural Communities. (2) Seminar, two hours. Study of issues of culture and identity in cross-cultural counseling, including development of working model. P/NP grading.

101E. Leading Undergraduate Seminars. (1) Seminar, one hour. Limited to students who have been accepted into Student Initiated Education (USE) program. Learning and exploration of issues that are integral to developing seminars and development of skills to become effective student facilitators. Practical teaching strategies and techniques, as well as pedagogical, organizational, and technological issues confronted by new instructors. Discussion of key topics, followed by discussion of syllabi that help in structuring the seminar, and conducting of micro-teaching presentations. Guest speakers expand on topics that arise from class discussions. May be repeated once for credit. P/NP grading.

101F. Integrity in Research. (2) Seminar, two hours. Limited to students in CARE, HHMI, MARC, and UC Leads programs. Discussion about integrity in research, career, and personal life, and important issues that impact scientific investigation. P/NP grading.

101G. Graduate School Preparation. (2) Seminar, two hours. Limited to AAP students. Designed to help AAP students familiarize themselves with academic disciplines they would like to pursue in graduate school. Through course readings, guest speakers, and interactive assignments, students learn more about their graduate school options and how to navigate application process. P/NP grading.

101I. Research Today: Sources, Tools, and Strategies. (2) Lecture, two hours: activity, two hours. Introduction to research in digital age, offering opportunity to develop research skills through exploration of library and Internet resources, exposure to rare and unique materials, experimentation with digital tools, and interaction with librarians and other experts, and interactive creation of research project proposal. Designed to prepare students for capstone or thesis experience in humanities or social sciences. P/NP grading.

101J. Mellon Mays Research Seminar. (2) Seminar, two hours. Limited to current Mellon Mays Undergraduate Fellows and designed to support them in their current research projects and graduate school preparation. Topics include research, conferences, posters, presentations, and as well as graduate school application materials. May be repeated for maximum of 10 units. P/NP grading.

101K. Preparing for Prom@UCLA Success: Fellowships, Graduate School, and More. (2) Seminar, two hours. Prepares students to achieve goals beyond UCLA. Participants reflect on values and interests, and learn what is required for effective applications to graduate school, scholarships, and more. Review of process of applying for nationally competitive awards such as Truman, Rhodes, Marshall, and others. Students learn to craft effective curricula vitae, strong personal statements, and compelling research proposals. Students learn to solicit strong letters of recommendation. Selection for scholarship/fellowship application process, as well as graduate school and job application process. P/NP grading.

101M. Culture, Media, and Los Angeles. (6) (Same as African Studies M102 and Asian American Studies M162) Lecture, four hours: screening, two hours. Designed for juniors/seniors. Role of media in society and its influence on contemporary cultural environment, specifically in Los Angeles, issues of representation as they pertain to race, ethnicity, gender, and sexuality. P/NP or letter grading.

103. Scientific Knowledge, Industrial Growth, and Social Policy. (5) Lecture, three hours; laboratory, two hours. Examination, using nanotechnology, of both benefits and risks to economy and society when new technologies are in process of development. P/NP or letter grading.

104. Fundamental Forms of Social Relationships from Theory to Research Design. (5) Seminar, three hours. Relational models theory posits that four elementary models organize social coordination, emotions, motives, and norms in virtually all domains and cultures. Study and development of relationship research questions, planning of study, design of its methodology, and writing of research proposal. P/NP or letter grading.

105. Racial and Ethnic Disparities in Healthcare. (5) Seminar, three hours. Examination of ways in which race and ethnicity impact delivery of healthcare in U.S. and discussion of policies and proposals to address disparities in healthcare. P/NP or letter grading.

M106. Imaginary Women. (5) (Same as Gender Studies M106.) Seminar, four hours. Designed for junior/senior College Honors students. Study of four female icons: the Virgin Mary, infanticide mother, intellectual woman, and warrior woman—as they appear in their classical and modern manifestations in European and American cultures. P/NP or letter grading.

107. Literature and Political Order: Homer, Shakespeare, Dostoevsky. (5) (Same as Gender Studies M107) Seminar, three hours. Designed for College Honors students. Examination of political order and questions of violence, power, leadership, and the politics and ideologies of literary texts, specifically iliad by Homer, Julius Caesar and Henry IV, Part 1 by Shakespeare, and Brothers Karamazov by Dostoevsky. P/NP or letter grading.


M109. Foreign Exchange Market and Exchange Rate Forecasting. (5) (Same as Economics M123.) Seminar, four hours. Introduction to forecasting of exchange rates for global economy. Use of real-world data through use of powerful computer platform called Tradestation in computer laboratory. Analysis of how foreign exchange market works, what financial instruments are used in this market, and what main theoretical determinants of exchange rates are. Generation of exchange rate forecasts by combining theoretical concepts with real-world data using concepts and techniques from computer science, linguistics, and statistics. How to write simple code to generate exchange rate forecasts and to evaluate accuracy of student forecasts. P/NP or letter grading.

110. Marxist and Post-Marxist Approaches to Cultural Studies. (4) Seminar, four hours. Examination of Marxist and post-Marxist approaches to study of culture, including classic texts of Marxist works, and the Marxist roots of postmodernism. P/NP or letter grading.

111. Stress and Coping. (4) Seminar, four hours. Examination of research and theory on stress and coping, with emphasis on physical and mental consequences of stress and moderators of both social support and personality in coping strategies. P/NP or letter grading.

113. Hyperconnected World: Society and Internet. (5) Seminar, three hours. Designed for College Honors students. Exploration of social, political, economic, psychological, and cultural dimensions of our hyperconnected world via Internet. Topics include institution of social relationships online, virtual versus real communities, identity and its creations, trust and deception, politics and social media, surveillance and privacy, economics, intellectual property, culture, education, and digital wellness. P/NP or letter grading.

114. Architecture from Los Angeles: Work of Frank Gehry, Thom Mayne, and Greg Lynn. (5) Seminar, three hours. Within last 30 years, architectural work originating in Los Angeles but reaching world both in material construction and aesthetic influence has emerged. Study of works of three seminal architects—Frank Gehry, Thom Mayne, and Greg Lynn. Site visits and hands-on practice in how to read architectural plans and how to use computers and modeling in architectural study and design. P/NP or letter grading.

115. Poetry and Society in England, 1588 to 1688: Verse, Politics, Religion, and Sexuality from Spanish Armada to Glorious Revolution. (5) Seminar, three hours. Designed for College Honors students. Poetry of England in century between 1588 and 1688 through prism of evolving political, philosophical, theological, sexual, economic, and scientific practices of that day and vice versa to understand poetry in cultural and historical context. Students research widely on range of subjects from alchemy to zoology and become class resource on some relevant topic such as Renaissance medicine, Calvinism, Scholasticism, Cromwell and New Model Army, Elizabethan foreign policy. Stuart architecture, agricultural and dietary changes, and printing and publishing conventions. P/NP or letter grading.

M116. Art Alive: Art and Improvisation in Museums. (4) (Same as Theater M187.) Seminar, four hours. Offered in collaboration with Los Angeles County Museum of Art (LACMA). Interpretation of art in collection through acting, dialogues, movement, and music. Research into history and art history and production of creative performance piece required. P/NP or letter grading.

117. London and Culture of Male Homosexuality, 1870 to 1900. (6) Seminar, four hours. Designed for College Honors students. Examination of male homosexual subculture that thrived in London during period when significant writer Oscar Wilde (1850 to 1900) was sent to jail for committing acts of gross indecency. Study of Wilde trials, cultural consequences of Labouchere Amendment criminalizing male homosexual acts, some of Wilde’s writings, and exciting new writings that have come to light offering insight into links that gay men in London had with theatrical world, prostitution, aristocrats, and underground publishing. P/NP or letter grading.

M212. Philanthropy as Civic Engagement. (5) Seminar, three hours; discussion, two hours. Designed for College Honors students. Study of history, philosophy, and concepts across disciplines to develop student hypotheses and conclusions. P/NP or letter grading.

126. Communities and Nations in Conflict: Theory and Practice of International Conflict Resolution. (8) Lecture, three hours; discussion, one hour. Introduction to the science of conflict resolution with emphasis on international conflict. Transitional justice mechanisms, from international criminal tribunals, special courts, and International Criminal Court to indigenous approaches such as community justice systems. Examination of environmental conflict resolution, homeland security and terrorism, role of gender and race, and temporary inequalities in contemporary American public school, showing how such entrenched inequalities tend to become permanent. Field component included. P/NP or letter grading.

127. Citizenship, Leadership, and Service. (4) Seminar, three hours; fieldwork, three hours. Interactive participation sessions between citizenship, leadership, and service, including both theoretical work in classroom and practical work in service organizations in the field. P/NP or letter grading.

128. What We Laugh Together: Humane, Social, Scientific, and Biological Perspectives. (5) Seminar, four hours. Designed for College Honors students. Application of venerable humanist insights to contemporary social phenomenon of human laughter and humor. While Aristotle and Hobbes thought humor was bad for society, Locke and Voltaire would have disputed them for different reasons. Use of their ideas to critically evaluate how social scientists investigate mass media political satire of today. P/NP or letter grading.

129. Research in Psychology and Legacy of John Wooden. (8) Seminar, four hours. Designed for College Honors students. Study of how economic, political, and social forces shape health policy and even biomedical science. What are best ways to confront specific health challenges? Analysis of scientific, medical, social, economic aspects of health inequities, drug pricing, and disability policy, as well as roles of experts and expertise in formulating goals and strategies. Topics include aging, autism, AIDS, breast cancer, clean water, gun violence, prostate cancer, rare diseases, and vaccines. P/NP or letter grading.

130. Speeding the Cure: Can Activists Make a Difference? (5) Seminar, three hours. Examination of role that individuals and groups playing game titled Greenwich Village, 1913: Suffrage, Labor, and New Woman. P/NP or letter grading.

131. Global Dimensions of Education and Inequality. (5) Seminar, three hours. Examination of role that education plays in maintaining and perpetuating poverty and inequality. Examination of how various reform strategies that have been proposed to spur development of human capital and local development are impacting the way people worldwide in rich and poor countries. Examination of how different countries have used education to promote social equality and development and analysis of why some countries appear to be making more progress than others. Consideration of how factors such as history, particularly related to colonialism, political economy, and culture affect character and performance of schools. P/NP or letter grading.

132. New Women and Activism from America to Asia. (5) Seminar, three hours. Designed for College Honors students. Spanning of academic disciplines and regional boundaries by looking at women's movement in 20th century, with examination of how issues of women's rights, labor rights, and race/nation identities united and divided women across classes and national borders. Examination of suffrage movement in 1913 New York and parallel movements in East Asia (Japan, Korea, China) that adopted and adapted some of these same ideas to their own unique historical circumstances. Use of hike and objective of this historical role-playing game titled Greenwich Village, 1913: Suffrage, Labor, and New Woman. P/NP or letter grading.

133. Practice and Ethics of Ethnographic Fieldwork. (5) Seminar, three hours. Examination of ethics and practices of ethnographic fieldwork. This is not field methods course but one intended to convey rich knowledge fieldwork can produce in many disciplines and kinds of ethical issues raised in doing fieldwork. P/NP or letter grading.

134. Democracy and Utopias. (3) Seminar, three hours. Designed for College Honors students. Political culture of modern democracy fosters hope of progress and constant reform and is also wary of radical upheavals. Political culture of ancient Greek democracy made possible two centuries of having achieved unmatched superiority over any other society and birth of utopia. Democracy praised itself as perfect form of government, but it let flourish counter- factions and divisions that are today, and blissful political order. Examination of this paradoxical link between democracy and utopia by tracing its history in works of Aristokrates, Plato, Thomas More, Thomas Campanella, and Charles Fourier to show relevance to contemporary politics. P/NP or letter grading.

135. Poetry and Society in England, 1588 to 1688. (5) Seminar, four hours. Reading and discussion of poems to comprehension and meaning and place in configurations of rapidly transforming society. Tensions and changes in the culture, and lives of authors, these works help explain. How and why metaphysical and cavalier movements emerge in an age of intense struggle. Interplay of form, context, and meaning within these modes. Evidence offered about personal psychology, gender politics, and status competitions of this period and its poets, especially Donne, Herbert, Jonson, Carew, and Marvell. What kind of work were the poems doing? How, and how well, were they doing it? And, what kind of work should we do with them now? P/NP or letter grading.

136. Art, Entertainment, and Social Change. (5) Seminar, three hours. Integrative examination of evolving art and entertainment industry on various aspects of social change. Seminar, four hours. Examination of how various groups of people have re-sponsored to these forces to have better understanding of how race, empire, and social justice have connected these distant and diverse areas and peoples. P/NP or letter grading.

137. Living Drama in America: Perspectives on Race and Buddhism. (5) Seminar, three hours. Deconstruction of and deeper histories behind images of Buddhism such as bald, saffron-robed monks; ornate, golden temples with scent of incense; serene Zen meditation centers; and popular Buddhists from Richard Gere to Thich Nhat Hanh to the Dalai Lama. P/NP or letter grading.


140. Domains and Subdomains in Social Psychology of Privilege and Oppression in Public Education. (8) Lecture, four hours; discussion, one hour; tutoring, three hours. Study of social arrangements and temporary inequalities in contemporary American public school, showing how such entrenched inequalities are subtle and deep and their impact on student performance. Field component included. P/NP or letter grading.

142. Free Will and Moral Responsibility: From Neuroscience to Philosophy and Back. (5) Seminar, four hours. Survey of methods, motivations, and conclusions of neuroscientific investigations of free will. Consideration of extent to which neuroscientific investigations of free will inform neuroscience and whether and how experiments could be designed and carried out to better correspond with philosophical and legal debate on free will. P/NP or letter grading.

M143. Latino Immigration History and Politics. (4) (Same as Chicana and Chicano Studies M124.) Lecture, four hours. Overview of Mexican, Central Ameri- can, and Latin American migration to U.S., examining social, political, and economic contexts out of which different waves of Latin American immigration have occurred. P/NP or letter grading.

144. International Development: Using Your Major For Doing Well and Doing Good. (5) Seminar, six hours. The adoption of the United Nations’ Sustainable Development Goals (2015) called for addressing extreme poverty, disease, environmental degradation, gender inequality, and other problems afflicting people across the globe. Sustainability entails development solutions that endure and engage local people. The aim is to leverage local capacities to improve living conditions. Students address questions such as: How does your major relate to one or more of these goals? Which goal speaks to your interest? What key concept or passion do you have that could connect to addressing one or more of the goals? P/NP or letter grading.


146. Imaging Global Climate Change. (5) Seminar, three hours. Designed for College Honors students. Global and comparative study of regions in front line of climate change, such as tropical island and polar regions, in which human activities threaten the planet’s ecosystems. P/NP or letter grading.

147. The Anthropocene: An Archaeological Perspective. (5) Seminar, four hours. Examination of new geological time period called the Anthropo- cene, in which environment is profoundly impacted by human activities. Evidence that anthropogenic forces have affected conditions on Earth during past two centuries, including burning of fossil fuels, ocean acidification, and ozone depletion. P/NP or letter grading.


149. Art and Trauma. (5) Seminar, three hours. Examination of how slavery, war, psychiatric institutionalization, and child sexual abuse shaped singular artistic visions. Depictions of severe trauma can be expressed in several ways: for example, in metaphorical and literal psychological process (e.g., depression), or symbolic unfolding (e.g., disintegration of individual). Manner in which trauma is embedded in brain and stored in memory is also critical. Exploration of research on memory and trauma, post-traumatic stress disorder (PTSD), and how severe trauma impacts brain. Studio component in form of individual and group projects to offer more tangible insight into process of art and trauma. P/NP or letter grading.

150. Solo Performer’s Toolbox: Storytelling for Art- ists and Non-Skilled Talkers. (5) Seminar, three hours. Designed for College Honors students. Creation and pre- sentation of original one-person performance speech. Development and writing of original script through exploration of personal themes, tone, and subject matter.Js. Focus on popular plays and synthesis of this knowledge to benefit writing and perfor- mance. Identification and exploration of student’s unique personal voice in order to establish clear and creative point of view in developing or performing their story. Analysis of dramatic structure, dramatic action, and creation of believable and interesting character. Focus, concentration, imagination, and relaxation during their solo performance, and maintenance of profes- sional decorum and discipline. P/NP or letter grading.

151. Victorian Sexual Scandals. (5) Seminar, three hours. Designed for College Honors students. Introduction to four major sexual scandals that took place in London between 1870 and 1895. Understanding ways in which institutions create frameworks for under- standing dissident sexualities and gender identities, and relations between sexual scandal and legal ac- tions. Victorian trials of Jack the Ripper, and Frederick Park. Examination of extent of queer networks among gay men, transgender individuals, and their apparent straight admirers during time of Offences against the Person Act 1861, The Maiden Tribute of Modern Bab- ylon, in which journalist W. T. Stead exposed extent of sexual trafficking of children. Series of murders in which bodies of women (several of whom were sex workers) were mutilated and dismembered, attributed to Jack the Ripper. Trials of Oscar Wilde who was sent to jail for two years in solitary confinement with hard labor for gross indecency. P/NP or letter grading.

152. Past People and Their Lessons for Our Own Future. (5) (Same as Anthropology M148 and Geog- raphy M142.) Lecture, two hours; discussion, two hours. Examination of modern and past people that met varying fates, as background to examination of how other modern people are coping or failing to cope with similar issues. Letter grading.

153. Comedy in Literature. (5) Seminar, three hours. Intense discussion of work of literature, typically play, novel, or short story, that engages themes of literature from Greeks to 20th century. P/NP or letter grading.

154. Political Opposition in Early Modern Europe. (5) Seminar, three hours. Designed for College Honors students. Examination of tradition of radical political opposition to absolutism, from French Revolu- tion. Topics include Machiavelli’s contributions to political thought, turmoil of 16th-century France and Dutch Republic and their radical underside of Protest- ant thought, French Wars of Religion, Dutch revolt against Spanish, English Civil Wars, and radical thought of European Enlightenment and its contribu- tions to French Revolution, P/NP or letter grading.

M157. International Relations of Middle East. (4) (Same as Middle Eastern Studies M119.) Seminar, three to four hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Role of great powers in Middle East, with emphasis on American, Soviet, and West European policies since 1945. P/NP or letter grading.


160. Asceticism. (5) Seminar, three hours. Designed for College Honors students. Historical overview of lit- erature and medieval periods. Study of asceticism from desert fa- thers to medieval female mystics, Weber on Protes- tantism, Nietzsche on ascetic ideal, and Foucault on


166. Stories of Cultural Distance and Imposed As- similation. (5) Seminar, four hours. Study of how fic- tion, memoir, and film have represented involuntary cross-cultural assimilation as seen from perspective of involuntary others, usually family members, coming to terms with their own and their relatives’ cultural iden- tity. P/NP or letter grading.

168. Paris: Biography of City from 1715 to World War II. (5) Seminar, three hours. Designed for College Honors students. Exploration of history of Paris from death of Louis XIV to World War II. Study of conse- quences of rapid urbanization and reasons why Paris became fulcrum for political revolutions. Examination of Paris as locus of modernism, its rebuilding and de- sign under Baron George Haussmann, impact of World War I and expat culture, and city’s housing conditions. P/NP or letter grading.

169. Imposture and National Identity. (5) Seminar, three hours. Cross-cultural approach to study of im- posture (assumption of false identity) as window through which to examine cultural modernity and na- tional identity. Study of literature, history, and film from Australia, United Kingdom, the U.S., Near East, and South Asia as way of trying to define both hypocrisies and creativity of imposture. P/NP or letter grading.


171. Rationality and Emotions. (5) Seminar, three hours. Historical study of way in which philosophers, social theorists, and cognitive scientists have charac- terized relationship between rationality and emotions, culminating in emerging consensus that emotions can influence rational decision making. Readings range from philosophy of ancient Greeks to writings of contemporary neuroscientists. P/NP or letter grading.

172. French Thinkers of Society. (5) Seminar, four hours. In-depth study of distinguishing perspectives of French theorists who wrote on society and its impact on individuals. Theorists include Pascal, Rousseau, Marcel Mauss, and Emile Durkheim from early modern period. Contemporary thinkers include Michel Fou- cault, Michel de Certeau, and Pierre Bourdieu, and two postmodern theorists, Guy Debord and Jean Bau- drillard. P/NP or letter grading.

173. American Political Thought from Revolution to Civil War. (5) Seminar, three hours. Historical of na- ture of American political thought between Revolution and Civil War. Topics include nature of rights, feder-
alism, constitutionalism, and democracy, as well as morality of slavery and legitimacy of succession. P/NP or letter grading.

173A. Liberty, Government, and Society in European Thought. (5) Seminar, three hours. Examination of great works of European thought from 17th through 18th centuries, including works of John Locke, Montesquieu, David Hume, Edmund Burke, and Thomas Payne, with emphasis on legal, social, and moral preconditions of liberty. P/NP or letter grading.

173B. Nature, Culture, and Capitalism in European Thought. (5) Seminar, three hours. Course 173A is not requisite to 173B. Designed for College Honors students. Examination of great works of European thought from 17th through early 20th centuries, including works by Thomas Hobbes, Adam Smith, Jean-Jacques Rousseau, John Stuart Mill, and Max Weber, with emphasis on intellectual foundations of liberal democracy and capitalism. P/NP or letter grading.

174. Future Impact of Nano in New Technologies. (5) Seminar, four hours. Examination, for general audience, of science behind nanotechnology and way in which one can potentially influence medical care, environment, energy issues, military, government, and economics. Demonstration of how nano, like current technology, cannot be separated from ethical, cultural, political, and social issues. P/NP or letter grading.

176A. Context of Arab World: Cairo and Alexandria. (4) Seminar, four hours: fieldwork, eight hours. Enforced corequisite: course 176B. Introduction to some of most important cultural, historical, and political currents in contemporary Arab world, with special focus on Cairo and Alexandria. Offered in summer only. P/NP or letter grading.

176B. Reading Arab World: Cairo and Alexandria. (4) Seminar, four hours: fieldwork, eight hours. Enforced corequisite: course 176B. Introduction to some of most salient literature in contemporary Arab world, with focus on Cairo and Alexandria. Offered in summer only. P/NP or letter grading.

177. Biotechnology and Art. (5) Seminar, six hours. Bioartists use cells, DNA molecules, proteins, and living tissues to transform, mimic, and extend scientific, social, and aesthetic issues of sciences. Study of how bioart blurs distinctions between science and art through combination of artistic and scientific processes, creating wide perspective of possibilities. Exploration of history of biotechnolgy as well as social implications of this science. P/NP or letter grading.

178. Secret Coups, Imperial Wars, and American Democracy since World War II. (5) Seminar, three hours. Study of U.S. involvement, both covert and overt, in expeditionary wars since World War II, including involvement in Vietnam, Korea, Cuba, Iran, Guatemala, Nicaragua, and Chile, and implication of these actions for vitality of American democracy. P/NP or letter grading.

182. From Scientific Revolution to Industrial Revolution. (5) Seminar, four hours. Designed for College Honors students. Examination of most important development in making of Western power and hegemony: rise of new science and its relationship first to British, then European, Industrial Revolution. Once seen as solely product of material factors such as abundant coal, high wages, and available labor, Industrial Revolution is shown as also possessing critically important scientific components. One important port of culture derived from Newtonian science and mechanics. P/NP or letter grading.

183B. Being Human: Identity in Age of Genomics and Neuroscience. (Same as Genetics M163 and Society and Genetics M183.) Seminar, three hours. Exploration of relationship between identity and mental illness through different approaches to nature and treatment of mental disorder, from biomedical accounts of brain-based pathology (and identity) to Mad Pride movement emphasis on mental diversity. Enabling philosophical questions regarding personal identity, consciousness, selfhood and mind-body relationship are investigated through consideration of conditions such as dissociative identity disorder, trauma, psychosis, autism, and depression. P/NP or letter grading.

184. Indian and Pakistan: Historic Roots of Conflict and Prospects for Cooperation. (5) Seminar, three hours. Designed for College Honors students. History of India and Pakistan from demise of British India’s Empire in mid-August 1947, with independence of Punjab and Bengal and bifurcated Pakistan, to current state of both nations and their potential for conflict and cooperation. P/NP or letter grading.

1885A. Individual Studies for USIE Facilitators. (1) Tutorial, to be arranged. Enforced requisite: course 1885B. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to discuss selected USIE seminar topic, conduct preparatory research, and begin preparation of syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.


1885C. Individual Studies for USIE Facilitators. (2) Tutorial, to be arranged. Enforced requisite: course 1885B. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor while facilitating USIE 88S course. Individual contract with faculty mentor required. May not be repeated. Letter grading.

189. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

189HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to upper-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

193A. Journal Club Seminars. (2) Seminar, two hours: discussion, two hours. Study of key research journals and important research articles. Presentations by program faculty members and other leading researchers. May be repeated for credit. P/NP grading.

193B. Journal Club Seminars: Arts and Humanities Summer Research Program. (2) Seminar, one hour: discussion, one hour. Limited to students selected for Humanities Summer Research Program. Study of humanities research journals and monographs. Weekly student research reports and presentations by humanities faculty members. May be repeated for credit. P/NP grading.

193C. Journal Club Seminars: Mellon Mays Undergraduate Research Scholars. (2) Seminar, one hour: discussion, one hour. Limited to Mellon Mays undergraduate fellows. Study of key research journals and important research articles in arts, humanities, and social sciences. Weekly research reports and presentations by Mellon Mays students. Presentations by program faculty members and other leading researchers. P/NP grading.

199. Directed Honors Studies. (4) Tutorial, two hours. Preparation: minimum of 4 units completed in Honors Collegium with grade of B or better, overall UCLA grade-point average of 3.0 or better. Special research/thesis tutorial with director of one Honors Collegium course to pursue in greater depth significant topics from graduation course. May be repeated for credit. P/NP or letter grading.
Graduate Degrees

The Department of Human Genetics offers Master of Science (MS) degree in Genetic Counseling, and Master of Science (MS) and Doctor of Philosophy (PhD) degrees in Human Genetics. An MD/PhD program is also offered.

Human Genetics

Scope and Objectives

The goal of the graduate program is to train the next generation of leaders in human genetics. This broad and rapidly evolving field of research incorporates multiple areas of modern experimental biology (including but not limited to molecular and behavioral genetics, epigenetics, biochemistry, cell and developmental biology, imaging, and large-scale omics approaches such as genomics, transcriptomics, and functional genomics) and of computational biology (including bioinformatics and biostatistics). In their research, students tackle Mendelian diseases and genetically complex traits of key relevance to human health.

A wide variety of courses is offered to equip future independent researchers with fundamental knowledge about state-of-the-art methods for generating experimental data on a genome-wide scale and computational and statistical approaches to draw from the data sound conclusions of biological and medical significance. In addition, courses on medical and ethical issues provide students with a societal perspective on human genetics.

The program offers the MS and PhD degrees; graduate study leading to a PhD degree is emphasized. Under special circumstances, and only after consultation with and approval by the Department of Human Genetics, individuals may apply for admission to the MS program.

Graduate students are expected to demonstrate integrity, creativity, critical thinking, perseverance, motivation, and determination to work hard; effective and appropriate oral and written communication skills needed for scientific presentation of the data including content, organization, logical flow, grammar, vocabulary, and proper citations; and the ability to design, revise, create, and implement experimental protocols and computational programs. They learn topics including transfer of biological information in a living organism, how genotype affects phenotype (subsuming environment), genetic variation in population, principles of research in genetics and genomics; and themes including evolution of thought in genetics and genomics history, how genetic informs disease and vice versa, genomics and integrating current tools in genomics research (statistical analysis, big data, and bioinformatics), and analysis in genetics and genomics.

Graduate Study

Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Division website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

188SA. Individual Studies for USIE Facilitators. (1) Tutorial, to be arranged. Enforced requisite: course 188SA. Enforced corequisite: Honors Collegium 101E. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to discuss selected USIE seminar topic, conduct preparatory research, and begin preparation of syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.

188SC. Individual Studies for USIE Facilitators. (2) Tutorial, to be arranged. Enforced requisite: course 188SB. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor while facilitating USIE 88S course. Individual contract with faculty mentor required. May not be repeated. Letter grading.

199. Special Studies in Human Genetics. (2 to 8) Tutorial, to be arranged. Students select instructor among eligible research faculty and carry out independent research project under instructor supervision. P/NP or letter grading.

Graduate Courses

M203. Stochastic Models in Biology. (4) (Same as Biomathematics M203.) Lecture, four hours. Requisite: Mathematics 170A or equivalent experience in probability. Mathematical background of biological relationships, with particular attention to areas where conditions for deterministic models are inadequate. Examples of stochastic models from genetics, physiology, ecology, and variety of other biological and medical disciplines. S/U or letter grading.

M207A. Theoretical Genetic Modeling. (4) (Same as Biomathematics M207A and Biostatistics M272.) Lecture, three hours; discussion, one hour. Requisites: Mathematics 115A, 131A, Statistics 100B. Mathematical models in statistical genetics. Topics include population genetics, genetic epidemiology, gene mapping, design of genetics experiments, DNA sequence analysis, molecular phylogeny, S/U or letter grading.

M207B. Applied Genetic Modeling. (4) (Same as Biomathematics M207B and Biostatistics M237.) Lecture, three hours; laboratory, one hour. Requisites: Biomathematics 200B, 202B (may be taken concurrently) or equivalent coursework or consent of instructor. Covers basic genetic concepts (prior knowledge of human genetics not required). Topics include statistical methodology underlying genetic analysis of both quantitative and qualitative complex traits. Laboratory for hands-on computer analysis of genetic data; laboratory reports required. Course complements M207A; students may take either and are encouraged to take both. S/U or letter grading.

210. Topics in Genomics. (2) Seminar, two hours. Survey of current biological theory and technology used in genomics research. Topics include genomics technology, functional genomics, proteomics, statistical genetics, bioinformatics, and ethical issues in human genetics. S/U grading.

M211. Mathematical and Statistical Phylogenetics. (4) (Same as Biomathematics M211 and Biostatistics M239.) Lecture, three hours; laboratory, one hour. Theoretical models in molecular evolution, with focus on phylogenetic techniques. Topics include evolutionary tree reconstruction methods, studies of viral evolution, phylogenetic methodology, and comparative genomics. Examples from evolutionary biology and medicine. Laboratory for hands-on computer analysis of sequence data. S/U or letter grading.

CM234. Machine Learning Applications in Genet- ics. (4) (Same as Bioinformatics M224 and Computer Science CM224.) Lecture, four hours; discussion, two hours; outside study, six hours. Requisites: Computer Science 32 or Program in Computing 10C with grade of C– or better, Mathematics 33A, and one course from Civil Engineering 110, Electrical and Computer Engineering 131A, Mathematics 170A, or Statistics 100A. Designed for engineering students as well as students from biological sciences and medical school. Introduction to computational analysis of genetic variation and computational interdisciplinary research in genetics. Topics include computational and statistical approaches to draw samples from evolutionary biology and medicine. Laboratory for hands-on computer analysis of genetic data; laboratory reports required. Course complements M207A; students may take either and are encouraged to take both. S/U or letter grading.

224. Seminar. (1 to 2) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

299. Student Research Program. (1 to 2) Individual study leading to a PhD degree is emphasized. Under special circumstances, and only after consultation with and approval by the Department of Human Genetics, individuals may apply for admission to the MS program.

Graduate students are expected to demonstrate integrity, creativity, critical thinking, perseverance, motivation, and determination to work hard; effective and appropriate oral and written communication skills needed for scientific presentation of the data including content, organization, logical flow, grammar, vocabulary, and proper citations; and the ability to design, revise, create, and implement experimental protocols and computational programs. They learn topics including transfer of biological information in a living organism, how genotype affects phenotype (subsuming environment), genetic variation in population, principles of research in genetics and genomics; and themes including evolution of thought in genetics and genomics history, how genetic informs disease and vice versa, genomics and integrating current tools in genomics research (statistical analysis, big data, and bioinformatics), and analysis in genetics and genomics.

Graduate Study

Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Division website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.
on formulating interdisciplinary problems as computational problems and then solving those problems using computational techniques from statistics and computer science. Concurrently scheduled with course CM124. Letter grading.

M226. Machine Learning and Bioinformatics. (4) (Same as Biological Chemistry M226 and Computer Science M226.) Lecture, four hours; outside study, eight hours. Enforced requisite: Computer Science 32 or Program in Computing 10C with grade of C– or better. Recommended: one course from Biostatistics 100A, 110A, Civil Engineering 110, Electrical Engineering 131A, Mathematics 170A, or Statistics 100A. Familiarity with probability theory, linear algebra, and algorithms expected. Designed for engineering students and others as well as students from biological sciences and medical school. Biology has become data-intensive science. Bottleneck in being able to make sense of biological processes has shifted from data generation to statistical models and inference algorithms that can analyze these datasets. Statistical machine learning provides important toolkit in this endeavor. Biological datasets offer new challenges to field of machine learning. Examination of statistical and computational aspects of machine learning technologies and their application to key biological problems. Letter grading.

M228S. Seminar: Current Topics in Bioinformatics. (4) (Same as Biological Chemistry M228S and Computer Science M228S.) Seminar, four hours; outside study, eight hours. Designed for graduate engineering students and general public from biological sciences and medical school. Introduction to current topics in bioinformatics, genomics, and computational genetics and preparation for computational interdisciplinary research. Topics include genomics, functional genomics, epigenetics, and stem cells. Reading materials include original research articles and reviews or book chapters. Letter grading.

236A. Advanced Human Genetics A: Molecular Aspects. (4) Lecture, three hours; discussion, one hour. Recommended: one course from statistics and computer science and medical school. Understanding general knowledge equivalent to Biostatistics 100A or Statistics 13 and general genetics knowledge equivalent to Ecology and Evolutionary Biology 121. Human Genetics 236A, or Molecular, Cell, and Developmental Biology 144. Statistical and population genetics related to analysis of complex human genetic traits. Reading materials include original research papers and reviews. Letter grading.

C226C. Societal and Medical Issues in Human Genetics. (5) Lecture, three hours; discussion, two hours. Sequence of entire human genome is now sequencing in clinical setting. Human Genome Project. Introduction to bioinformatics, genomics, and computational genetics related to analysis of complex human genetic traits. (4) (Same as Pathology M225.) Lecture, three hours. Basic principles of cyogenetics and techniques of gene mapping. Selected regions of human genomic map scrutinized in detail, particularly gene families and clusters of genes that have remained linked from mouse to man. Discussion of localizations of disease genes. Letter grading.

M206A. Introduction to Bioinformatics. (4) (Same as Bioinformatics M221, Chemistry CM260A, and Computer Science CM221.) Course, four hours; discussion, two and one half hours; outside study, seven hours. Introduction to bioinformatics, genomics, and computational genetics and preparation for computational interdisciplinary research in genetics and genomics. Topics include genome analysis, regulatory genomics, association analysis, association study design, isolated and admixed populations, population substructure, human structural variation, polymorphisms, and genomic technologies. Computational techniques include those from statistics and computer science. Letter grading.

282. Topics on Scientific Careers. (2) Lecture, two hours. Limited to graduate students. Covers topics relevant to the scientific writing and presentation (including to non-scientific audiences), grant writing and reviewing, curricula vitae, hiring processes, professional media usage, developing short- and long-term goals, and balancing career and non-work life expectations of industry, government, teaching-college, and research-college careers. Active participation and oral and written presentations required. S/U or letter grading.

400A. Principles and Practices in Medical Genetics 1. (3) Lecture, three hours. Limited to Genetic Counseling students and open to medical students, molecular and cell biology students, and graduate students in genetics. Focus on medical and genetic information to genetic counseling. Includes lectures, problem-based learning scenarios, examinations, and written reflections. Grand Rounds/Seminar series attendance is required component. Letter grading.

400B. Principles and Practices in Medical Genetics 2. (3) Lecture, three hours. Limited to Genetic Counseling students and open to medical students, molecular and cell biology students, and graduate students in genetics. Focus on medical and genetic information to genetic counseling. Includes lectures, problem-based learning scenarios, examinations, and written reflections. Grand Rounds/Seminar series attendance is required component. Letter grading.

400C. Principles and Practices in Medical Genetics 3. (3) Lecture, three hours. Limited to Genetic Counseling students and open to medical students, molecular and cell biology students, and graduate students in genetics. Focus on medical and genetic information to genetic counseling. Includes lectures, problem-based learning scenarios, examinations, and written reflections. Grand Rounds/Seminar series attendance is required component. Letter grading.

401. Fundamental Genetic Counseling Skills. (4) Lecture, four hours. Limited to Genetic Counseling students. Introduction to profession of genetic counseling. Addresses fundamental genetic counseling skills and structure of genetic counseling session using didactic and active learning techniques, including role-plays, supplemented by activities in clinical settings. Topics include history of profession, theories of psychosocial counseling and its principles including reciprocal-engage model of genetic counseling, active listening, verbal and non-verbal communication, validation, decision-making, self-disclosure and self-involving skills, and structure of genetic counseling session. Practical exercises and supplementary activities address constructing genetic counseling session, obtaining and telling family history, drawing and interpreting pedigrees, interpreting medical records, assessing level of patient and family understanding, case preparation, risk communication, decision making, referrals. General Genetic Case Conference attendance and clinic observations are required component. Letter grading.

402. Reproductive Genetics in Practice. (4) Lecture, four hours. Limited to Genetic Counseling students. Focus on reproductive genetic counseling. Reproductive topics include prenatal screening and prenatal diagnosis, invasive and non-invasive procedures, fetal ultrasound, carrier screening, infertility assessment, preimplantation genetic diagnosis, and in vitro fertilization, reproductive options. Practical exercises include case preparation, medical and family history analysis, risk assessment and counseling, differential diagnosis development, diagnostic testing selection (including analytic validity, clinical validity, and clinical utility of screening and diagnostic tests), results interpretation, patient education, and psychosocial counseling specific to perinatal setting. General Genetics Case Conference attendance and clinic observations are required component. Letter grading.

403. Specialty Genetics in Practice. (4) Lecture, four hours. Limited to Genetic Counseling students. Focus on specialty genetics topics including cancer, cardio-genetics, and neurogenetics. Exploration of aspects of these disciplines in context of genetic counseling. Discussion of impact of our growing knowledge of both common and rare genetic etiology on risk assessment, clinical management, and genetic counseling. Practical exercises include case preparation, medical and family history analysis, risk assessment and counseling, differential diagnosis development, diagnostic testing selection (including analytic validity, clinical validity, and clinical utility of diagnostic and predictive tests), results interpretation, patient education, and psychosocial counseling specific to cancer genetics, cardio-genetics, and neurogenetics. Patients as guest speakers offer patient perspective and experience. Letter grading.

404. Advanced Genetic Counseling Skills. (4) Lecture, four hours. Requisite: at least four hours visiting/observingshadowing at least two resource clinics/centers and at least four hours observing bereavement group(s) in past year. Limited to Genetic Counseling students. Focus on advanced psychosocial topics in genetic counseling specific to social and legal issues in genetics and genetic counseling. Topics include family dynamics, burden of disease, crisis intervention, dynamics of grief and bereavement, multi-cultural competency, coping, disclosure, confidentiality and countertransference, and disability organizations and advocacy. Practice exercises include role-playing in range of advanced psychosocial situations, shad-
Owing support groups and families, simulating patient full session under different scenarios including with interpreters and group presentations. Letter grading.


410. Translational Genomics. (3) Lecture, two hours. Limited to Genetic Counseling students, and open to medical genetics, molecular and cytogenetics fellows with permission. Introduction to next generation sequencing (NGS) technologies, bioinformatics pipelines for analyzing NGS data, clinical interpretation of variants using ACMG guidelines, various databases used for variant interpretation, interpretation of exome clinical report, process of communicating results to patients and ethical, legal, and social implications (ELSI) of personal genomics. Offers hands-on laboratory-style experience to interpreting human exome/ge nome test, make informed decisions about clinically significant findings, and communicate results to patient or patient's family. Attendance at weekly Genome Data Board meeting is required. Letter grading.

411. Foundations in Genetic Counseling Research. (2) Lecture, two hours. Limited to Genetic Counseling students. First of two-course series. Overview of research process, including literature review, research design, measurement methods, qualitative methods, and quantitative methods. Includes theory and elements of statistical analysis, data coding, data analysis tools, and interpretation of statistical results. Introduction to necessary tools to understand published research in genetic counseling and foundations necessary for design, conduct, and interpretation of their capstone project. How to conduct human subjects research responsibly and understand informed consent process. Letter grading.

412. Research Applications in Genetic Counseling. (2) Lecture, two hours. Enforced prerequisite: course 411. Limited to Genetic Counseling students. Second of two-course series. Practical hands-on approach to conducting research in genetic counseling. Students engage in research process, including study design and sampling, elements of developing and using instruments to measure variables of interest, criteria for systematic literature review, appropriate univariate and multivariate analyses, and interpretation and report writing. Focus on skills students need to develop and conduct their capstone projects and research in genetic counseling. Students design projects for their capstone project, develop research question, and submit research proposal for final project. Letter grading.

430. Clinical Applications of Cytogenetics and Molecular Techniques. (1) Lecture, one hour. Cytogenetics and molecular laboratory techniques to diagnose human genetic disorders. Topics include types of abnormalities seen in human genetic disorders, phenotypic consequences associated with these abnormalities, recurrence risks, and implications of common cytogenetic and molecular technologies in clinical testing, current nomenclature, and written components of laboratory reports. Includes laboratory tours. Letter grading.

431A. Fieldwork. (1) Fieldwork, three to four hours; discussion, one hour. Limited to Genetic Counseling Students. First fieldwork rotation to establish basic skills in genetic counseling. Students are supervised by certified genetic counselors and medical geneticists. In group discussion setting, students present cases along with relevant psychosocial, ethical, and professional issues to engage in active reflection of clinical supervision experiences, understand dynamics and responsibilities of supervisor/supervisee relationship, and identify personal growth opportunities and limitations in scope of patient practice. S/U grading.


431C. Fieldwork. (5) Fieldwork, 15 to 20 hours; discussion, one hour. Requisite: course 431B. Limited to Genetic Counseling Students. Students use progressive genetic counseling skills with direct patient contact in different clinical settings. Students are supervised by certified genetic counselors and medical geneticists. In group discussion setting, students present cases along with relevant psychosocial, ethical, and professional issues to engage in active reflection of clinical supervision experiences, understand dynamics and responsibilities of supervisor/supervisee relationship, and identify personal growth opportunities and limitations in scope of patient practice. S/U grading.

596. Directed Individual Study and Research. (2 to 12) Tutorial, to be arranged. Individual study or research for graduate students. May be repeated for credit. S/U grading.

597. Preparation for MS Comprehensive Examination or PhD Qualifying Examinations. (2 to 12) Tutorial, to be arranged. Individual study for MS comprehensive examination or PhD qualifying examinations may be repeated for credit. S/U grading.

598. MS Thesis Research and Writing. (2 to 12) Tutorial, to be arranged. Preparation of research data and writing of MS thesis. May be repeated for credit. S/U grading.


INDIVIDUAL FIELDS
College of Letters and Science
School of the Arts and Architecture
School of Theater, Film, and Television

Highly motivated students in the College or schools shown below who find that no single major accommodates their specific interest in a given subject may propose designing their own major. Proposals are prepared with faculty guidance and sponsorship and are thoroughly examined for cogency, completeness, and academic merit. Requirements for individual majors vary among the College and schools.

College of Letters and Science
A311 Murphy Hall
Box 951414
Los Angeles, CA 90095-1414

Honors Programs
310-825-1533

Individual Field of Concentration BA, BS

Learning Outcomes
The Individual Field of Concentration majors have the following learning outcomes:

• Design of a course of study that shows a deep understanding of how the disparate disciplines are connected
• Demonstrated understanding of how the research and creative methodologies of different disciplines can interface with and illuminate the understanding of another
• Demonstrated ability to read in the scholarly discourse and style of different disciplines
• Development of a voice in written thesis for an interdisciplinary audience
• Written thesis that demonstrates mastery of diverse fields as a result of research sources and production of scholarly work outside of traditionally defined academic boundaries

School of the Arts and Architecture
2200 Broad Art Center
Box 951620
Los Angeles, CA 90095-1620
Office of Student Services
310-206-3564

Individual Field BA

Learning Outcomes
The Individual Field major has the following learning outcomes:

• Demonstrated understanding of how the research and creative methodologies of different disciplines can interface with and illuminate the understanding of another
• Design of a course of study that shows a deep understanding of how the disparate disciplines are connected
• Demonstrated ability to read in the scholarly discourse and style of different disciplines
• Development of a voice in written thesis for an interdisciplinary audience
• Written thesis that demonstrates mastery of diverse fields as a result of research sources and production of scholarly work outside of traditionally defined academic boundaries
• Production of a final paper or creative project that synthesizes and integrates a principal theme or themes common to coursework and diverse fields of knowledge

School of Theater, Film, and Television
103 East Melnitz Building
Box 951622
Los Angeles, CA 90095-1622
Student Services Office
310-206-8441

Individual Field BA

Learning Outcomes
See the school website for Individual Field major learning outcomes.
**INDO-EUROPEAN STUDIES**

Interdepartmental Program
College of Letters and Science

100 Dodd Hall
Box 951417
Los Angeles, CA 90095-1417

**Indo-European Studies**

310-825-4171

Brent H. Vine, PhD, Chair

Faculty Committee

David M. Goldstein, PhD (Linguistics)
Stephanie W. Jamison, PhD (Asian Languages and Cultures)
Christopher M. Stevens, PhD (Germanic Languages)
Brent H. Vine, PhD (Classics)

**Scope and Objectives**

The primary focus of the interdisciplinary Indo-European Studies program is the study of the ancient Indo-European languages and of their reconstructed ancestor, Proto-Indo-European, based on methods drawn from comparative-historical, theoretical, and computational linguistics. Goals of this study include the reconstruction of the Proto-Indo-European language, elucidating its subsequent development into the historical Indo-European languages, and showing how data from the archaic Indo-European languages contribute to a theory of language. There is also attention to other aspects of the nonmaterial culture of the speakers of Proto-Indo-European (such as social structure, religious beliefs, mythology, and poetics), and how these are reflected in the textual traditions of the ancient Indo-European languages.

**Graduate Study**

Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Division website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

**Graduate Degrees**

The Indo-European Studies program offers Master of Arts (MA), Candidate in Philosophy (CPhil), and Doctor of Philosophy (PhD) degrees in Indo-European Studies.

**Indo-European Studies Lower-Division Courses**

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.


20HC. Honors Contracts. (1) Seminar, three hours. Limited to students in College Honors Program. De-signed as adjunct to lower-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities led by lecture course instructor. May be applied toward honors credit for eligible stu-dents. Honors content noted on transcript. P/NP or letter grading.

Graduate Courses


**Upper-Division Courses**

131. European Archaeology, Neolithic to Bronze Age. (4) Lecture, four hours. Survey of European cultures from beginning of food-producing economy in 7th millennium BC to beginning of Bronze Age in 3rd millennium BC. P/NP or letter grading.

132. European Archaeology: Bronze Age. (4) Requir-es: course 131. Survey of European cultures from around 3000 BC to the period of destruction of the Mycenaean culture about 1200 BC. Aegean area and rest of Europe.

140. Food in Language and Myth. (4) Lecture, three hours; discussion, one hour. Introduction to study of food in fields of linguistics and mythology. What is special about language used to talk about food, what is history of food words, and how does language im-pact appreciation of food? How do myths and nar-ratives revolving around food function in different cul-tures? Students explore history of food words and learn how to analyze food myths. Students become aware of how language in food is manipulated and how to tell more effective stories about food. P/NP or letter grading.

M150. Introduction to Indo-European Linguistics. (5) Same as Linguistics M150. Lecture, four hours; discussion, one hour (when scheduled). Enforced re quir-ise: Linguistics 1 or 20. Indo-European languages (ancient and modern), including their relationships, characteristics, and functions in written and social contexts; nature of reconstructed Indo-European proto-language and Proto-language. One or more Indo-European languages may be investigated in de-tail. P/NP or letter grading.

C160. Indo-European Comparative Mythology and Poetics. (4) Seminar, three hours. Preparation: famil-iarity with at least one ancient Indo-European lan-guage. Comparison of major Indo-European mytho-logical and poetic traditions and reconstruction of their common sources. Topics include divinities and their names; symbolic systems in social context; myths, folk narratives, belief systems; relations with other traditions; literary continuations of mythopoetic material. Corequisite: scheduled with course C260. P/NP or letter grading.

M168. Introductory Hittite. (4) Same as Ancient Near East M168.) Lecture, two hours; recitation, one hour. Recommended: preparation: knowledge of lan-guage with case system. Introduction to Hittite grammar by series of graded lessons covering mor-phology and syntax, followed by readings of selected texts from variety of genres in transliteration. P/NP or letter grading.

189. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible stu-dents. Honors content noted on transcript. P/NP or letter grading.

189HC. Honors Contracts. (1) Seminar, three hours. Limited to students in College Honors Program. De-signed as adjunct to upper-division lecture course. Indi-vidual study with lecture course instructor to explore topics in greater depth through supplemental read-ings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract re-quired. Honors content noted on transcript. Letter grading.

199. Special Studies. (2 to 8) Tutorial, to be arranged. P/NP or letter grading.

250A-250B. European Archaeology. (4–4) Seminar, three hours each. Students must be in good academic standing and en-rolled in minimum of 12 units (excluding this course), Individual contract required; consult Undergraduate Research Center. May be repeated for credit. P/NP grading.


250A-250B. European Archaeology. (4–4) Seminar, three hours. Students in ancient European archaeological materials and their relationship to Near East, Western Siberia, and Central Asia. May be repeated for credit. In Progress (250A) and S/U or letter (250B) grading.

C260. Indo-European Comparative Mythology and Poetics. (4) Seminar, three hours. Preparation: ability to read original sources in at least one ancient Indo-European language. Comparison of major Indo-European mythological and poetic traditions and recon-
Assistant Professors
Robert D. Montoya, PhD
Miriam Posner, PhD
Sarah T. Roberts, PhD
Shawn G. VanCoun, PhD

Lecturers
Esther S. Grassian, MLS
Candice A. Mack, MLS
Cynthia L. Mediavilla, PhD
Luiz H. Mendes, MLS
Eva Milnick, MLS
Linda K. Tadic, MLS
Jillian C. Wallis, PhD

Adjunct Assistant Professor
Susan M. Allen, PhD

Scope and Objectives
The Department of Information Studies has one of the top-ranked programs of its kind in the country and has developed an international reputation in the areas of information policy, information-seeking behavior, user interface development, archives, preservation, and cataloging. Whether students choose to pursue a master’s degree or a PhD, they graduate with a broad understanding of both theory and practice.

Students with master’s degrees go on to careers as librarians, archivists, and information professionals in a variety of organizational settings. The PhD focuses on the preparation of scholars in the field. For information about the department and programs, see the department website.

Graduate Study
Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Division website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Graduate Degrees
The Department of Information Studies offers the Master of Library and Information Science (MLIS) degree and the Doctor of Philosophy (PhD) degree in Information Studies.

One concurrent degree program (Library and Information Science MLS/Management MBA) and one articulated degree program (Library and Information Science MLS/Latin American Studies MA) are also offered.

Information Studies
Lower-Division Courses
10. Information and Power. (5) Lecture, five hours. Designed for undergraduates. Introduction to core concepts of information and power and relation between them in range of social, economic, political, cultural, technological, and institutional contexts. Topics include information markets and economies; power of cultural and media institutions; state interests in information; information, conflict, and warfare; information organization, classification, and access; power and information technology infrastructure; and intellectual freedom. Letter grading.

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

20. Digital Culture and Society. (3) Lecture, five hours. Designed for undergraduate students. Examination of social and cultural contexts of global spread of digital networks and systems. Exploration of ethical, infrastructural, and political questions raised at intersection of technologies and cultures. Topics include social media revolutions, indigenous and non-Western uses of technology, cross-cultural design, digital media literacies, and more. Letter grading.

30. Internet and Society. (6) Lecture, five hours. Designed for undergraduate students. Examination of information technology in society, including Internet, World Wide Web, search engines (e.g., Google, Yahoo, Lycos), retrieval systems, electronic publishing, and distribution of media, including newspapers, books, and music. Exploration of many of these technologies, social, cultural, and political context in which they exist, and how social relationships are changing. Letter grading.

89. Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to lower-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript, P/NP or letter grading.

97. Variable Topics in Information Studies. (4) Seminar, four hours. Designed for freshmen/sophomores, but open to all undergraduate students. Exploration of changing set of basic concepts and issues in study of information, information technology, and society and culture at introductory level. May be repeated for credit with consent of instructor. Letter grading.

99. Student Research Program. (1 to 2) Tutorial (sponsored research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Courses
139. Letterpress Laboratory. (1) Laboratory, one hour. Hands-on printing experience in letterpress shop designed to give students in information studies, design, or other disciplines understanding of printing process. Basic instruction provided, and students work on group project for duration of term. May be repeated twice. P/NP grading.

180. Special Topics in Information Studies. (4) Lecture, three hours; discussion, one hour. Designed for juniors/seniors. Selected topics or issues related to social, cultural, economic, or political aspects of information and information systems. Consult Schedule of Classes for topics and instructors. May be repeated once for credit with topic change. P/NP or letter grading.

188SA. Individual Studies for USIE Facilitators. (1) Tutorial, to be arranged. Enforced corequisite: Honors Collegium 101E. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to discuss selected USIE seminar topic, conduct preparatory research, and begin preparation of syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.

200. Information in Society. (4) Lecture, two hours; discussion, two hours. Examination of processes by which cultural knowledge and information are created, disseminated, organized, used, and preserved. Topics include history of communication technologies, evolution of literacy, development of information professions, and social issues related to information access. Letter grading.

201. Ethics, Diversity, and Change in Information Professions. (4) Lecture, two hours; discussion, two hours. Service learning course that serves as forum to discuss, learn, and understand ethical challenges of multicultural information society that shape societal, professional community, and individual views and impact professional practice, decision making, and public policy. Letter grading.

202. History of Books and Literacy Technologies. (4) Lecture, two hours; discussion, 90 minutes. Issues in history of books, writing, and literacy technologies. Investigation of invention of writing, diverse cultural concepts of literacy, earliest use of systematic notation systems in Mesopotamia, and current development of devices and practices that shape contemporary concepts of book of future. Discussion of historical development of technology (tables, scrolls, codices, illumination and illustration techniques, paper and mass production, photography, digital tools), in situ traditions and publishing industries, cultural issues and politics (publishing, censorship, colonialism, globalization), formats and styles (type design, graphic design, aesthetics), and some important episodes in book history, such as Western traditions, but not to exclusion of developments in Asia, Near East, Islamic empire, and elsewhere, and questions of cultural diffusion and diversity emerges out of faculty mentor. Culminating paper or project required. May be repeated for credit. Individual contract required. Letter grading.

Graduate Courses


206. Introduction to Economics of Information. (4) Seminar, three and one half hours. Introduction to key concepts, scholars, and studies in economics of information are presented, emphasizing calculation and measurement of information, information industries and markets, public goods theories of knowledge and information, externalities, and consequences of intellectual property regimes, information and economic development, information work and occupations, information and organizational processes, productivity paradox, and sectoral analyses of national and global information economies. Letter grading.


209. Perspectives on Information Societies. (4) Seminar, two hours. Perspectives on information societies from a feminist, digital, and participatory perspective. This course has theoretical perspectives on emergence of late-20th- and early-21st-century information societies from range of disciplines. Topics include nature of social change and development, theories of modernity and postmodernity, and social, economic, and cultural shifts associated with information technologies and rise of information as commodity. Presentation of work of key writers and scholars in areas of information society policy and issues. Letter grading.

210. Global Media and Information. (4) Lecture, three and one half hours. Question of what diversity and culture mean in era of distributed networks and mass media consumption. Is it possible to transcend borders? This involves problem of how to work with differing ways of knowing, with differing ontologies. It is now widely accepted that global cultures and communities differ in way they organize data, make knowledge, and make meaning of their worlds. How do we draw boundaries around culture and community and has become increasingly complicated, as culture becomes increasingly mixed and blended. Focus on development of local place and global imagination. How are political, economic, and cultural identities being shaped in global media culture? How does this shape nature of how power functions? How does this impact heritage, economy, politics, and identity? Letter grading.

211. Artifacts and Cultures. (4) Lecture, two hours; discussion, two hours. Exploration of social, cultural, and technical practices through which meanings, memories, ideas, and identity are generated. Concepts are recorded, reproduced, mediated, collected, and appropriated; they are sometimes forged, stolen, or subverted and are often shared, juxtaposed, exhibited, communicated, interpreted, re–mixed, or repurposed. Their formats may be oral and written, verbal and pictorial, aural and visual, and in– scriptive and performative. Artifacts are single–mode or multime– dium and can be economic, democratic, narrative, and visual. They combine text, image, and video. They carry local and global histories of production and consumption. Letter grading.

212. Values and Communities in Information Professions. (4) Lecture, two hours; discussion, two hours. Forum to discuss, understand, and critique value systems and power structures embedded in information and work in diverse societies. Exploration of important concepts of thinking about identities, in design, evaluation, and engagement with information institutions and technologies, ranging from archives and libraries to Internet. Aspects of information society that shape and are shaped by cultural, societal, professional, community, and individual values, including exploration of impact of such values on professional practice, decision making, and public policy. Letter grading.

213. Current Issues in Librarianship. (4) Lecture, two and one half hours; discussion, one hour. Overview of historical and evolving conceptual foundations of librarianship, including core associations, key practices, social context of library services, and current issues in library studies. S/U or letter grading.

214. Informatics: Principles and Practices. (4) Lecture, three and one half hours. Theories, principles, and professional practices of informatics, including social analysis of information systems, values and design, infrastructural dynamics, user experience, and prospective analysis. S/U or letter grading.

215. Information Services in Culturally Diverse Communities. (4) Lecture, four hours. Issues in provision of information services in multilingual and multicultural society. Understanding role of information institutions in promoting cultural diversity and preserving ethnic heritage. Letter grading.

228. Assessment, Measurement, and Evaluation of Information Organizations and Services. (4) Lecture, four hours. Introduction to assessment and evaluation as formal processes of inquiry with individual components. Demonstration of use of evidence gathered for planning, decision making, and accountability in information organizations. Review and implementation of various methods appropriate to design of assessment and evaluation. Letter grading.

236. Approaches to Materialities of Texts and Meanings. (4) Lecture, two hours; discussion, 90 minutes. Introduction to traditional and current thinking about materialities of texts, books, documents, and digital and print artifacts. Draws on conventional bibliographic and archival sources and introduces students to fundamentals of descriptive and analytic approaches, but also engages with theoretical positions derived from new theories in media archaeology, digital humanities, and legacy of structuralism, semiotics, and poststructuralism. Letter grading.

237. Records and Information Resources Management. (4) Lecture, three hours. Introduction to records and information resources management in corporate, government, and other organizational settings, including evaluation of organizational information flow, classification and filing systems, records retention scheduling, records protection and security, reprogramming and image management technology, and organizational support. Letter grading.


239. Approaches to Materialities of Texts and Meanings. (4) Lecture, two hours; discussion, 90 minutes. Introduction to traditional and current thinking about materialities of texts, books, documents, and digital and print artifacts. Draws on conventional bibliographic and archival sources and introduces students to fundamentals of descriptive and analytic approaches, but also engages with theoretical positions derived from new theories in media archaeology, digital humanities, and legacy of structuralism, semiotics, and poststructuralism. Letter grading.

240. Scholarly Communication and Publishing. (4) Lecture, three and one half hours. Designed for MLS students. Scholarly communication system is in disarray. It is no longer clear what it means to publish articles and books. Digital distribution is norm, whether peer-reviewed in journals or by blogs or social media. Scholarly communication is becoming more atomized in small units of research objects that can be combined in many ways. Open access publishing, now required by many funding agencies and universities, has altered relationships between authors, readers, publishers, and libraries. Survey of evolving landscape of scholarly communication, providing introduction to publishing, technology, and policy issues such as open access, mass digitization, institutional repositories, computable publications, and altmetrics. Letter grading.


260. Information in Society. (4) Lecture, two hours; discussion, two hours. Examination of processes by which cultural knowledge and information are created, disseminated, organized, used, and preserved. Topics include history of communication technologies, evolution of literacy, development of information professions, and social issues related to information access. Letter grading.

261. Artifacts and Cultures. (4) Lecture, two hours; discussion, two hours. Exploration of social, cultural, and technical practices through which meanings, memories, ideas, and identity are generated. Concepts are recorded, reproduced, mediated, collected, and appropriated; they are sometimes forged, stolen, or subverted and are often shared, juxtaposed, exhibited, communicated, interpreted, re–mixed, or repurposed. Their formats may be oral and written, verbal and pictorial, aural and visual, and in–scriptive and performative. Artifacts are single–mode or multime– dium and can be economic, democratic, narrative, and visual. They combine text, image, and video. They carry local and global histories of production and consumption. Letter grading.

262. Values and Communities in Information Professions. (4) Lecture, two hours; discussion, two hours. Forum to discuss, understand, and critique value systems and power structures embedded in information and work in diverse societies. Exploration of important concepts of thinking about identities, in design, evaluation, and engagement with information institutions and technologies, ranging from archives and libraries to Internet. Aspects of information society that shape and are shaped by cultural, societal, professional, community, and individual values, including exploration of impact of such values on professional practice, decision making, and public policy. Letter grading.

263. Approaches to Materialities of Texts and Meanings. (4) Lecture, two hours; discussion, 90 minutes. Introduction to traditional and current thinking about materialities of texts, books, documents, and digital and print artifacts. Draws on conventional bibliographic and archival sources and introduces students to fundamentals of descriptive and analytic approaches, but also engages with theoretical positions derived from new theories in media archaeology, digital humanities, and legacy of structuralism, semiotics, and poststructuralism. Letter grading.

M238. Environmental Protection of Collections for Museums, Libraries, and Archives. (4) Same as Conservation M223. Lecture, two hours; demonstration, two hours. Prerequisite: course 432. Review of environmental and biological agents of deterioration, including light, temperature, relative humidity, water, insects, and fungi. Emphasis on monitoring to identify agents and understanding of material sensitivities, along with protective measures for collections. Letter grading.

239. Letterpress Laboratory. (1) Laboratory, two hours. Hands-on printing experience in letterpress shop designed to give students in information studies, design, or other disciplines understanding of printing process. Basic instruction provided; and students work on group project for duration of term. S/U grading.

240. Management of Digital Records. (4) Lecture, three hours. Introduction to long-term management of digital assets, including architecture, information, communication, imaging, or research systems and records. Topics include electronic recordkeeping, enterprise and risk management, systems analysis and design, metadata development, data preservation, and technological standards and policy development. Letter grading.

241. Digital Preservation. (4) Lecture, three and one half hours. Nature of digital media and networking necessitates reconfiguration of traditional concepts such as authenticity, authorship, and originality; information systems and metadata that are specifically designed to manage preservation process; new ethical, rights, and collaborative frameworks; and economic, legal, and policy issues related to digital preservation over long term. Introduction to strategies, techniques, and standards, as well as continuing challenges related to preserving born-digital/born-networked/digitized materials (e.g., electronic records, digital archives, video games, scientific simulations, digital humanities environments, sound and moving image material), social media and personal digital archives, implications for digital preservation of new digital archives, video games, scientific simulations, digital humanities environments, sound and moving image material, social media and personal digital archives, implications for digital preservation of new technologies and their applications. Letter grading.

245. Information Access. (4) Lecture, two hours; discussion, one hour. Prerequisite: courses 200, 260. Provides fundamental knowledge and skills to information professionals to link users with information. Overview of structure of literature in different fields; information-seeking behavior of user groups; communication with users; development of search strategies using print and electronic sources. Letter grading.

246. Information-Seeking Behavior. (4) Lecture, three hours; discussion, one hour. Study of factors and influences, both individual and social, associated with human beings needing, using, and acting on information. Topics include information theory, human information processing, information flow among social and occupational groups, and research on information needs and information search behavior. In the last two hours, students in and off campus work with information professionals to link users with information.

250. Techniques and Issues in Information Access. (4) Lecture, four hours. Prerequisite: course 245. General reference materials (not specific to subject access), with advanced work in reference process and in cognitive and behavioral aspects of information seeking and reference librarians. Letter grading.

251. Seminar: Specialized Literatures. (4) Seminar, four hours. Prerequisite: course 245. Survey of major literatures of disciplines in two broad areas: (1) arts and humanities, (2) social sciences, (3) natural sciences and engineering. Students become familiar with knowledge structures; emphasis on reference sources and information sources for scholarly research. Letter grading.

M253. Medical Knowledge Representation. (4) Same as Bioengineering M228.) Seminar, four hours; outside study, eight hours. Designed for graduate students. Introduction to network communication, and information infrastructures in medical environment. Exposure to basic concepts related to networking at several levels: low-level (TCP/IP, remote), medium-level (network topologies), and high-level (distributed computing, Web-based service implementations). Introduction to medical communication protocols (HL7, DICOM) and current medical information systems (HIS, RIS, PACS). Advantages and networkingless health systems, peer-to-peer topologies, grid/cloud computing. Introduction to security and encryption in networked environments. Letter grading.

M255. Medical Decision Making. (4) Same as Bioengineering M227.) Lecture, four hours; outside study, eight hours. Designed for graduate students. Overview of issues related to medical decision making. Introduction to concept of evidence-based medicine and decision processes related to process of care and outcomes. Basic probability and statistics to understand research results and evaluations, and algorithmic methods for decision-making processes (Bayesian theorem, decision trees). Study design, hypothesis testing, and estimation. Focus on technical advances in medical decision support systems and expert systems, with review of classic and current research. Introduction to medical and decision-making software packages to familiarize students with current tools. Letter grading.


258. Legal Information Resources and Libraries. (4) Lecture, four hours. Introduction to information resources in law with emphasis on primary authority and indexes to legal research aids. Study of Law library services and management. Letter grading.


260. Description and Access. (4) Lecture, three and one half hours. Social, cultural, and technical practices—library, information, and personal—through which documents, records, and other forms of information are organized and represented. Design, development, and evaluation of techniques and tools, including data models, metadata schemata, search engines, and management systems in support of curatorship, stewardship, discovery, and use. Letter grading.

262A. Data Management and Practice. (4) Lecture, three and one half hours. Designed for MLS and PhD students. Survey of landscape of data practices and services, including data-intensive research methods; social, cultural, and economic issues between disciplines; management of data by research teams, data centers, libraries, and archives; practices of data sharing and reuse; and introduction to national and international policy and practice of data. Assessment of data and needs of one research community and group project to develop real data management plan in partnership with UCLA researchers in other academic departments. Letter grading.

262B. Data Curation and Policy. (4) Lecture, three and one half hours. Designed for MLS students. Continuation of course 262A to address topics of data curation and policy in more depth. Discussion of appraisal, archives and repositories, economics of data management, data citation and metrics, technologies for data access and curation, provenance, intellectual property, policies of funders and providers in data, and institutional challenges in curation and stewardship of research data. Assessment of data archiving and repositories and group project to curate actual data of UCLA researchers in other academic departments. Letter grading.

269. Seminar: Information Structures. (4) Seminar, four hours. Prerequisite: course 260, one other information structure course. Specialized studies in selected areas of descriptive and bibliographic cataloging, subject vocabularies and classifications, and metadata. May be repeated once. Letter grading.

270. Systems and Infrastructures. (4) Lecture, four hours. Social, cultural, and technical practices through which information and media infrastructures—networks, systems, technologies, algorithms, interfaces, standards, institutions, bureaucracies, markets—are designed, maintained, and exhibited in ways in which information infrastructures both shape and are shaped by governmental policy, institutional decision making, socioeconomic trends, labor movements, technical advances, and marketing of personal value systems, at levels ranging from local to global. S/U or letter grading.

271. Introduction to Computer Systems and Programming. (4) Lecture, four hours; laboratory, four hours; and one half hours. Introduction to computer programming and survey of foundational computer science topics, including boolean logic, computer architecture, operating systems, algorithms, networks, and databases. Focus on practical skills for managing and curating large-scale, archival metadata, such as searching, sorting, regular expressions, writing database queries, calling application program interfaces (API), and integrating metadata from serialization formats (XML, JSON, CSV, Excel). Emphasis on working with standard metadata encodings, such as MARC and EAD. Letter grading.

272. Human/Computer Interaction. (4) Lecture, four hours. Survey of human-computer interaction and interaction with readings from several disciplines. Extensive use of technology demonstrations and class discussions. Relevance of HCI to anyone involved in design or implementation of information technologies. Letter grading.

273. Communities, Information, and Civic Life. (4) Seminar, three and one half hours. Examination of community-based projects through direct collaboration with diverse communities in Los Angeles region. Consideration of major issues around well-being of communities in contemporary America, with some eye toward larger global dynamics from fields as wide-ranging as sociology, media studies, anthropology, and urban studies. Investigation of range of theoretical, methodological, and applied literatures to develop group-based projects. Collaboration in partnership with one community of student choice in Los Angeles area. Examination of community-based methods of interaction and fieldwork (participatory, ethnography, asset mapping, and action research-based) and propose various information services based on this analysis. Letter grading.

274. Database Management Systems. (4) Lecture, three hours; laboratory, two hours. Fundamentals of database systems, including physical design, and practicalities of database systems, including data models, retrieval mechanisms, evaluation methods, and storage, efficiency, and security considerations. Letter grading.

275. Community Media and Design. (4) Lecture, two hours; laboratory, two hours. Information professionals, scholars, activists, and information creators/designers/architects focus on questions of culture and community to engage students in understanding information resources as cultural objects. Role of cultural
heritage institutions within dynamics presented, but most fundamentally on how communities in partnership with information professionals can create, author, and represent information on their own and within their own terms. How new media can begin to serve as tool of empowerment rather than stratification. Study of impacts of technology on larger scales through readings and introductory sketches. Letter grading.


277. Information Retrieval Systems: User-Centered Designs. (4) Lecture, two hours; discussion, two hours. Requisites: courses 245, 260. Design implications of interaction between users and features of automated information systems and interfaces that are specific to information-seeking process. Emphasis on search strategy and subject access through use of thesauri and other vocabularies. Letter grading.

278. Information and Visualization. (4) Lecture, two hours; discussion, one and one half hours. Requisites: courses 245, 260. Mapping, while others are more diagrammatic in design. Basic organization of graphical user interfaces depends on function, structure, and assumptions about user experience, and other graphical features that embody models of information in daily use. How are ways in which organization of visualization presents arguments about knowledge? What historical and critical tools can be brought into useful dialogue with contemporary visualizations? Letter grading.

278A. Doctoral Seminar: Research Methodology for Information Studies. (4) Lecture, four hours. Understanding of nature, uses, and practice of research appropriate to information studies, identification of research design and materials of research. Social science quantitative and qualitative methods. Emphasis on inquiry methodology and empirical research. S/U or letter grading.


280. Development and Portfolio Design. (2 to 4) Lecture, two hours; discussion, two hours. Preparation: completion of information studies core courses. Drawing on literature from many fields, examine development of personal professional development, such as career planning, continuing education, mentoring, and reflective practice; students also engage in process of guided portfolio design for MLIS degree. S/U grading.

410. Management Theory and Practice for Information Professionals. (4) Lecture, two hours; discussion, two hours. Principles and practice of management in all types of organizations where information professionals work. Letter grading.

281. Historical Methodology of Information Studies. (4) Lecture, six hours. Introduction to topics such as library and information science, archival studies and American archival profession, as well as other fields interested in archives, records, and memory. S/U or letter grading.

282. Design as Research Method. (4) Seminar, three and one half hours. Requisites: course 230. Advanced application of design methods for discovery, exploration, and evaluation of user requirements, functionality, values, and system structure. S/U or letter grading.

286. Research Apprenticeship Course. (2 to 4) Seminar, two hours. Use of mentorship model of training graduate students in information studies, with focus on development of graduate student research topics. Assignment of common readings related to these topics is an opportunity to apply design of research methods for discovery, exploration, and evaluation of user requirements, functionality, values, and system structure. S/U or letter grading.

289. Seminar: Special Issues in Information Studies. (4) Seminar, three and one half hours. Identification, analysis, and application of critical intellectual, social, and technological issues facing the profession. Topics may include (but not limited to) expert systems, literacy, electronic networks, youth at risk, information literacy, historical bibliography, preservation of electronic media, etc. May be repeated with topic change. Letter grading.

290. Research Seminar: Information Studies. (1 to 2) Seminar, one to two hours. Designed for PhD students. Emphasis on recent contributions to theory, research, and methodology. May be repeated for credit. S/U grading.

291A. Doctoral Seminar: Theoretical Traditions in Information Studies. (4) Seminar, four hours. Nature of information systems and epistemological, ethical, and social, and technological issues facing the profession. Interdisciplinary context—subfields of information studies and cognate disciplines. Frameworks for theory construction, such as critical theory, discourse analysis, historical methods, semiotics, social epistemology. Letter grading.


296A. Doctoral Seminar: Research Methods and Design. (4) Seminar, four hours. Survey of quantitative, qualitative, and historical research designs. Ethical issues; conceptualization and measurement; indexes, scales, and sampling; experimental, survey, field, and evaluation research; data analysis. Letter grading.

298B-298C. Special Topics in Methodology of Information Studies. (4–4) Seminar, four hours. Enforced requisite for course 298B: course 298A. Topics include research design, data collection, data analysis, discourse analysis, historical methods, information visualization, network analysis—bibliometrics, information metrics, bibliometrics, social network analysis. Letter grading.

375. Teaching Apprentice Practicum. (1 to 4) Seminar, to be arranged. Preparation: apprentice personnel employment as teaching assistant, associate, or fellow. Teaching apprenticeship under active guidance and supervision of regular faculty member responsible for curriculum and instruction at UCLA. May be repeated for credit. S/U grading.

400. Professional Development and Portfolio Design. (2 to 4) Lecture, two hours; discussion, two hours. Preparation: completion of information studies core courses. Drawing on literature from many fields, explore development of personal professional development, such as career planning, continuing education, mentoring, and reflective practice; students also engage in process of guided portfolio design for MLIS degree. S/U grading.

422. College, University, and Research Libraries. (4) Lecture, four hours. Organization, administration, collections, facilities, finances, and problems of college and university libraries and their relationships within institutions of which they are part. Functions of research libraries and staffs of their staffs in serving scholars. Letter grading.


425. Library Services and Programs for Children. (4) Lecture, two hours; discussion, two hours. Theory and practice of service to children in public libraries. Overview of professional library service to children aged 14 and under; provides opportunities for students to gain experience in particular skills needed to provide that service. Letter grading.

426. Young Adult Literature. (4) Lecture, four hours. Overview of literature of interest to young adults (seventh grade and above). Discussion of special problems in working with young people and psychology of teenagers. S/U or letter grading.

427. Young Adult Services. (4) Seminar, six hours. Preparation: apprentice personnel employment as teaching assistant, associate, or fellow. Teaching apprenticeship under active guidance and supervision of regular faculty member responsible for curriculum and instruction at UCLA, Letter grading.


431. Archives, Records, and Memory. (4) Lecture, four hours. Overview of historical and evolving conceptual foundations, major professional institutions, key practices, and contemporary issues and concerns of archival studies and American archival profession, as well as other fields interested in archives, records, and memory. S/U or letter grading.


433. Community-Based Archiving. (4) Lecture, three and one half hours. Builds on student understanding of and experience working with communities on development of practical strategies for documenting their activities; managing, collecting, and preserving their records and other archival materials; and undertaking community-centric collaborative research. Students required to reflect critically on questions about definition, community memory and recordkeeping practices, motivations, positionality and politics, voice, ethics, advocacy, funding and long-term sustainability, ownership, access and use, technological implementation, and collaborations. Letter grading.

434. Archival Use and Users. (4) Lecture, three and one half hours. Requisite: course 431. Examination of who uses archives and why, with ultimate goal of creating ways to better understand and meet needs of their audiences as well as engage new audiences in archival use. While archivists have traditionally conceived of their users as academic researchers, more thorough investigation expands their conception of users to include genealogists, K-12 students and educators, families of victims of human rights abuse, community members, and members of general
public. Methods for studying users, ways to conduct outreach to target user groups, and ways in which archivists can engage general public. Letter grading.

438A. Seminar: Advanced Issues in Archival Science—Archival Appraisal. (4) Seminar, four hours. Requisite: course 431. Evaluation and examination of contribution of key figures in development of archival appraisal theory; identification and evaluation of distinct movements in archival appraisal; identification of cultural, political, sociological, and technological movements that can have impact on appraisal methodologies. Letter grading.

438B. Seminar: Advanced Issues in Archival Science—Archival Description and Access Systems. (4) Seminar, four hours. Requisite: course 431. Exploration of history of archival description and access systems in the U.S. and their development since World War II; data collection; access tools and implications of these issues in development of online archival access systems. Letter grading.

439. Seminar: Special Collections. (4) Seminar, two hours; discussion, 90 minutes. Students work with special collections materials on a focused theme or topic and have to think through research aspects of an exhibit or symposium or collection assessment and then create well-focused and curated agenda for presentation, exhibition, or preservation of materials. Letter grading.


448. Information Literacy Instruction: Theory and Technique. (4) Lecture, four hours. History, theory, methods, and materials of user education/bibliographic instruction in libraries and other information retrieval environments. Examination of variety of user education/bibliographic instruction theories and methodologies, including overview of planning and administration. Identification of problems in user education/bibliographic instruction. Applications of methods of teaching use of libraries and information resources. S/U or letter grading.

455. Government Information. (4) Lecture, four hours. Introduction to nature and scope of government information promulgated by federal government, as well as by state, municipal, international, and foreign governments. Problem-oriented approach. S/U or letter grading.

457. Health Sciences Librarianship. (4) Lecture, four hours. Health sciences information resources and services, development of health sciences information resources and services, health sciences environment and policies, information systems and technology. Letter grading.


464. Metadata. (4) Lecture, four hours. Introduction to variety of metadata provided for digitized and other electronic information resources. Introductory theory and practice designing and applying metadata. S/U or letter grading.

473. Information Technology and Libraries. (4) Lecture, four hours. Overview of major components of library automation: circulation control, acquisitions and serials, public access information systems, and data conversion. Relationships among various automation entities, including internal library automation, networks and vendors (such as bibliographic utilities, regional networks, and online services), and automation of parent organizations (universities, municipalities, corporations, and government agencies). Development in standards for information processing and new information technologies. Letter grading.

480. Introduction to Media Archiving and Preservation. (4) Seminar, four hours. Overview of history, conceptual foundations, policies, institutions, and professional methods that have shaped collections of audiovisual materials from early 20th century to present. Introduction to fundamental archival concepts and key practices, including collection development, appraisal, preservation, restoration, arrangement and description, and critical analysis of their specific application to audiovisual collections and materials. Discussion of classical and emergent models for media archive administration, including funding, programming, outreach, access, and re-use; changing role of technology in media creation, collection, and preservation; ethics and community standards; different roles of public, private, and national media archives; and cultural impact of historical and contemporary audiovisual media. Letter grading.

495. Teaching Assistant Training Seminar. (2) Seminar, two hours. Limited to departmental doctoral students. Preparation for teaching assistant appointments in departmental undergraduate courses. Principles of instructional design and evaluation, curriculum development, instructional technology use, and key teaching issues (diversity, students with disabilities, academic integrity, copyright). S/U grading.

497. Fieldwork in Libraries or Information Organizations. (4 or 8) Fieldwork, 12 or 24 hours depending on nature and complexity of experience or project. Faculty-directed field experience in approved library, archive, or other information setting. Fieldwork experiences may include opportunities in state, national, and international institutions. S/U grading.

498. Internship. (4) Discussion, to be arranged. Supervised professional training in a library or information center approved by internship coordinator. Minimum of 120 hours per term. May be repeated twice. S/U grading.

501. Cooperative Program. (2 to 8) Tutorial, to be arranged. Supervised professional training in a library or information center approved by internship coordinator. Minimum of 120 hours per term. May be repeated twice. S/U grading.

596. Directed Individual Study or Research. (2 to 8) Tutorial, to be arranged. Directed special studies in fields of bibliography, librarianship, and information science. Variable conference time depending on nature of study or complexity of research. S/U grading.

597. Directed Studies for PhD Qualifying Examinations. (2 to 12) Tutorial, to be arranged. S/U grading.


599. PhD Research and Writing. (2 to 12) Tutorial, to be arranged. S/U grading.
Scope and Objectives

The cornerstone of the Physiological Science curriculum is vertebrate physiology, with emphases on integrative functions. The research and educational programs of the Department of Integrative Biology and Physiology focus on integrative physiology at several levels of organization from molecules to living organisms, microscopic structures to macroscopic organization, and cellular properties to organism functions. Students receive comprehensive instruction in all areas of physiological science, while elective courses reflect faculty research expertise, including developmental neurobiology, gene regulation/neural development, cellular neurobiology, molecular neurobiology, neuromuscular physiology, neuroendocrine physiology, cardiac physiology, diet and degenerative disease, auditory and visual behavior, biomechanics of rehabilitative medicine, muscle cell biology, inflammatory cell biology, vascular biology, cardiac electrophysiology, neuromotor control, and social control of neuronal plasticity.

Applicants interested in pursuing graduate study may apply directly to the interdepartmental Molecular, Cellular, and Integrative Physiology PhD program or the interdepartmental Neuroscience PhD program.

Undergraduate Study

Physiological Science BS

Learning Outcomes

The Physiological Science major has the following learning outcomes:

- Demonstrated broad knowledge of the fundamentals of vertebrate anatomy and physiology
- Demonstrated ability to address scientific questions and solve problems quantitatively, learn to form hypotheses, design and perform experiments, analyze data, and interpret results
- Reading, understanding, and application of critical thinking to primary scientific literature
- Understanding of how to assess key questions and hypotheses
- Interpretation of results and conclusions
- Discrimination of quality through critique
- Appreciation for research by participating in one or more laboratory experiences
- Clear and fluent communication of scientific knowledge
- Effective written and verbal skills

Preparation for the Major

Life Sciences Core Curriculum

Required: Chemistry and Biochemistry 1A, 1B, 14A, 14B, 14BL, 14C, 14CL, and 14D, or 20A, 20B, 20L, 30A, 30AL, 30B, and 30BL; Life Sciences 7A, 7B, 7C, 23L, 30A, 30B, and 40 or Statistics 13, or Mathematics 3A, 3B, and 3C, or 31A, 31B, and 32A; Physics 1A, 1B, 1C, 4AL, and 4BL, or 5A, 5B, and 5C.

To enter the Physiological Science major, students must complete Chemistry and Biochemistry 1A, 1B, 14A, 14C, or 20A, 20B, and 30A; Life Sciences 7A, 7B, Mathematics 3A, 3B, and 3C, or 31A, 31B, and 32A; or Life Sciences 30A, 30B, and 40, or Statistics 13, and Physics 1A or 1B, with a minimum grade of C in each course and a grade-point average of 2.0 or better in all before fall quarter of their third year. Repetition of more than one of these nine preparation courses results in denial of admission to the major. After successful completion of the courses, students must contact the Undergraduate Advising Office to declare the major.

For all preparation courses, students must complete each course with a grade of C or better. Repetition of more than one preparation course results in dismissal from the major.

Transfer Students

Transfer applicants to the Physiological Science major with 90 or more quarter units must complete the following introductory courses prior to admission to UCLA: one year of general biology with laboratory for majors, preferably equivalent to Life Sciences 7A, 7B, and 7C, one year of general chemistry with laboratory for majors, and one semester of organic chemistry with laboratory. A second semester of organic chemistry or one year of calculus-based physics is strongly recommended but not required for admission.

Transfer credit for UCLA Extension coursework and for any departmental courses is subject to prior approval by the department; consult with the undergraduate counselor before enrolling in any courses for the major.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

The Major

Required: Physiological Science 107, 111A, 111B, 111L, Chemistry and Biochemistry 153A.

A total of five upper-division physiological science electives is required. Eight units of course 199 or four units each (8 units total) of courses 198A and 198B, for students in the departmental honors program, may be applied toward the elective requirement. One 200-level graduate course may be applied toward the elective requirement. One 200-level level graduate course may be applied toward the elective requirement with departmental approval. Courses 189HC, 191H, 192, 193, 195, 196, and graduate courses at the 300, 400, or 500 level may not be applied toward the elective requirement.

Each required and elective course must be taken for a letter grade, and a C average must be maintained in all upper-division courses taken for the major. A grade of C or better is required in Physiological Science 107 and 111A to enroll in course 111B. If students fail to meet these requirements, they may be dismissed from the major.

Honors Program

The honors program provides exceptional students with the opportunity for individual research culminating in an honors thesis. Requirements for admission include a 3.0 overall grade-point average (CGPA) and a 3.2 GPA in the Life Sciences core curriculum. After completion of all requirements and with the recommendation of the faculty advisor, the undergraduate affairs committee confers departmental honors at graduation.

Graduate Study

Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Division website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Graduate Degree

The Department of Integrative Biology and Physiology offers the Master of Science (MS) degree in Physiological Science.

Physiological Science

Lower-Division Courses

3. Introduction to Human Physiology. (6) Lecture, three hours; laboratory, two hours. Not open to Psychological Science majors. Courses 3 and 5 may be taken independently, concurrently, or in either sequence. Understanding of human body, its organization from molecular to cellular to tissues and organs, and how component parts function in integrated manner to permit life as we know it. P/NP or letter grading.

5. Issues in Human Physiology: Diet and Exercise. (6) Lecture, three hours; discussion, 90 minutes; laboratory, 90 minutes. Not open to Psychological Science majors. Basic introduction to principles of human biology, with special emphasis on roles that exercise and nutrition play in health, and prevention and management of such illnesses as hypertension, diabetes, and heart disease. P/NP or letter grading.


7. Science and Food: Physical and Molecular Origins of What We Eat. (6) Lecture, three hours; laboratory, two and one half hours. Preparation: high school chemistry, mathematics, physics. What makes lettuce crispy and some cuts of meat chewier than others? Exploration of origins of food texture and flavor, using concepts in physical sciences to explain macroscopic properties such as elasticity and phase behavior, as well as physiological role of food molecules in plants and animals we eat. Letter grading.

13. Introduction to Human Anatomy. (6) Lecture, four hours; laboratory, five hours. Not open to Physiological Science majors. Structural survey of human body, including skeletal, muscular, nervous, cutaneous, respiratory, digestive, and genitourinary systems. Laboratory includes examination of human cadaver specimens. Letter grading.

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

89. Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to lower-division lecture course. Explores the same topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor.
May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

98HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to lower-division lecture course to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for a maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

99. Introduction to Physiological Science. (2) Lecture, one hour; discussion, one hour. Limited to freshmen/sophomores majoring in current topics in physiological science by a team of departmental faculty members. P/NP grading.

99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in one of 12 units (excluding this course). Individual student contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

### Upper-Division Courses

**100. Experimental Statistics.** (4) Lecture, four hours. Introduction to statistics with focus on computer simulation instead of formulas. Bootstrap and Monte Carlo methods used to analyze physiological data. P/ NP or letter grading.

M106. Neurobiology of Bias and Discrimination. (4) (Same as Neuroscience M187 and Psychology M166.) Lecture, four hours. Limited to junior/senior neuroscience, physiological science, and psychology students. Exploration of aspects of mammalian brain function that generate preference, bias, and discrimination. Consideration of research at multiple levels of analysis that elucidate neural substrates of behavior. Discussion of societal implications of these research findings, including their relevance to public policies and criminal justice system. Letter grading.

107. Systems Anatomy. (5) Lecture, four hours; laboratory, three hours; tutorial, two hours. Requisites: Life Sciences 2 or 7C, and Physics 1A, 5A, or 6A. Students must receive a grade of C or better to proceed to next course in series. Systems anatomy focused on human anatomy. Topics include cardiorespiratory, reproductive, nervous, and skeletal-muscular systems, with introduction to biomechanical principles. Letter grading.


111A-111B. Foundations in Physiological Science. (6-6) Lecture, four hours; discussion, two hours. Letter grading. 111A. Requisites: course 107, Chemistry 14C or 30A, Life Sciences 1 2, 3, 4, 23L, Physics 1B or 5C, and Chemistry 153B. Students must receive grade of C or better to proceed to next course in series. Systems anatomy focused on human anatomy. Topics include cardiorespiratory, reproductive, nervous, and skeletal-muscular systems, with introduction to biomechanical principles. Letter grading.

111L. Physiological Science Laboratory. (3) Laboratory, four hours. Requisites: courses 111A and 111B, with grades of C or better. Required of Physiological Science majors. Designed to illustrate physiological principles studied in courses 111A, 111B. Letter grading.

120. Kidney: Understanding It from Development to Disease to Therapy. (4) Lecture, three hours. Enforced requisites: courses 111A, 111B. Review of knowledge of basic renal function, with emphasis on broader context of renal regulation and molecular mechanisms. Introduction to research methods typically employed in studies of kidney and exploration of state-of-art research on kidney repair and regeneration. Letter grading.

121. Disease Mechanisms and Therapies. (5) Lecture, three hours; discussion, one hour. Requisites: Chemistry 153A, and Life Sciences 2, 3, and 4 or 7A, 7B, and 7C. Designed for junior/senior Biochemistry and life sciences majors. Use of disease mechanisms as pedagogical tools to develop higher-order knowledge of basic scientific concepts. Integration of concepts from genetics, molecular and cell biology, physiology, and biochemistry to create molecular solutions to problem of inherited neuromuscular disease. Letter grading.

122. Biomedical Technology and Physiology. (4) Lecture, four hours. Requisites: courses 111A, 111B, and Life Sciences 2 or 7C, and Physics 1A, 1B, and 1C, or 5A, 5B, and 5C, or 6A, 6B, and 6C. Development in biotechnology and their impact on diagnosis and treatment. Examination of molecular and cellular techniques and designs that lend themselves to deciphering physiological states, and application of new technologies in clinical practice and biomedical research. Letter grading.

C123. Neurobiology of Sleep. (4) (Same as Neuroscience CM123.) Lecture, three hours; discussion, one hour. Requisites: courses M101A and M101B or 111A and 111B, or consent of instructor. Diverse approach into sleep and dreaming. Cellular and molecular mechanisms of falling asleep, discrete brain structures involved in control of sleep wakefulness, and homeostatic regulation of sleep need shaped by our evolutionary history, age, and gender. Latest insights into question of function of sleep, critical role sleep plays in memory formation and, close association between sleep and metabolism. Sleep disorders are considered to provide insights into mechanisms underlying sleep. For background on science of sleep and circadian rhythms, completion of course C126 is highly recommended. Concurrently scheduled with course CM223. Letter grading.

124. Molecular Biology of Aging. (4) Lecture, three hours. Requisites: Chemistry 153A, Life Sciences 1, 2, 3, 4, and 23L, or 7A, 7B, 7C, and 23L. Discoveries of new science of aging, examination of aging as plastic trait modulated by genes and physiological processes. Discussion of how these findings integrate with both nutritional modulation of lifespan and complex and profound relationship between underlying aging process and diseases of aging. Topics include dietary restriction, mitochondria, insulin/IGF-signaling, and link between tumor suppression and organismal aging. Letter grading.

125. Molecular Systems Biology. (5) Lecture, three hours; discussion, one hour. Requisites: Life Sciences 1, 2, 3, 4, and 23L, or 7A, 7B, 7C, and 23L. Quantitative description of molecular systems that underlie myriad phenotypes in living cells. Topics include various genomic fields and high-throughput technologies, network biology, and synthetic biology. Introductory lecture on molecular biology, emerging bioinformatic approaches, and systems biology. Students will interact with discussions of their applications in disease-related research. Review of recent literature to gain overall perspectives about new science of systems biology. Letter grading.

C126. Biological Clocks. (4) Lecture, three hours; discussion, one hour. Requisites: courses 111A and 111B, or M180A and M180B. Most organisms, including humans, exhibit daily rhythms in physiology and behavior. In many cases these rhythms are generated from within organisms and are called circadian rhythms. Biological basis of these daily rhythms or circadian oscillations. Exploration of molecular, cellular, and system-level organization of these timing systems. Temporal role of these variations in maintaining homeostatic mechanisms of body and impact on nervous system. Concurrently scheduled with course C227. Letter grading.


128. Me, Myself, and Microbes: The Microbiome in Health and Disease. (4) Lecture, four hours; discussion, nine minutes. Requisites: course 107 or Chemistry 153A, Life Sciences 2 or 3, or 7A, 7B, and 7C. Exploration of host-microbiome interactions in health and disease using dynamical models of physiology for microbial communities, interactions with immunity, metabolism, and microbiology. Letter grading.

C130. Sex Differences in Physiology and Disease. (4) Lecture, three hours. Requisites: course 111B, Life Sciences 7A, 7B, C. Inversion of biological origins or sex differences in physiology (mostly vertebrate), and susceptibility to disease, including history of development of concepts to define sex, and interface between biological factors and cultural environments. Topics include evolution of sex chromosomes, molecular and environmental determinations of gonadal type, dosage compensation, gonadal steroid hormone effects on tissues, physiology of reproduction as it applies to sex differences, interaction of genetic and environmental factors in differentiation of two sexes, defining sex and gender, gendered environments, and their influence on physiology and politics of financial support for research of sex and gender differences in disease. Concurrently scheduled with course C230. Letter grading.

136. Exercise and Cardiovascular Function. (5) Lecture, four hours; laboratory, two hours. Examination of art of making and evaluating basic models of physiological systems and of dynamical principles inherent in physiological systems. Letter grading.

138. Neuronal Systems and Modeling of Physiological Processes. (5) (Formerly numbered 135.) (Same as Neuroscience M135.) Lecture, four hours; laboratory, two hours. Examination of art of making and evaluating basic models of physiological systems and of dynamical principles inherent in physiological systems. Letter grading.

140. Hormones and Behavior in Humans and Other Animals. (4) (Same as Anthropology M128R and Society and Genetics M140.) Lecture, three hours; discussion, one hour. Examination of hormones, and physiology and genetics involved in hormonal processes and functions. Interactions among hormonal, environmental stimuli, and behavior. Sexual behavior, pregnancy, and lactation, parental behavior, development and emigration, stress, social behavior, dominance relationships, aggression, chemical communication and reproductive suppression. Critical primary literature on behavioral endocrinology about humans and other species. Consideration of spectrum of noninvasive to highly invasive endocrine sampling techniques and the ethical implications of these can be answered in laboratory and field, as well as ethics of hormonal studies and their implications for humans and other animals. Letter grading.

C144. Neural Control of Physiological Systems. (4) Lecture, four hours. Requisites: courses 111B or 111B1 or 111B2. Role of central nervous system in control of respiration, circulation, sexual function, and bladder control. Material for each section to be developed by combination of lecture and laboratory. Concurrently scheduled with course C244. Letter grading.
M145. Neural Mechanisms Controlling Movement. (5) (Same as Neuroscience M145.) Lecture, four hours. Requisite: course 111A or M180A or Neuroscience M101A. Examination of central nervous system organization required for production of complex movements such as locomotion, mastication, and swallowing. Letter grading.

146. Principles of Nervous System Development. (5) Lecture, three hours; discussion, 90 minutes. Requisites: courses 107 (or Neuroscience 102) and 111A (or M180A). Molecular, Cell, and Developmental Biology M175A, Neuroscience M101A, or Psychology M117A). Examination of construction of vertebrate nervous system. Topics include development of integrated system beginning with several embryonic cells and culminating as complex highly ordered system. Topics include neurnatization, regionalization, neurogenesis, migration, axonal outgrowth, and synapse formation. Letter grading.

147. Neurobiology of Learning and Memory. (5) Lecture, four hours; discussion, one hour. Requisite: course 111A or M180A. Changes in central nervous system that accompany learning, with emphasis on cellular mechanisms.


153. Dissection Anatomy. (5) Lecture, two hours; laboratory, six hours. Requisite: course 107. Prior to first meeting, students must complete Biodiversity and Pathogens training course through UCLA Environment, Health and Safety. Study and dissection of upper and lower extremities of human cadavers; dissection of thorax and abdomen limited to musculature and neurovascular supply. Letter grading.

154. Cellular Communication and Regulation of Physiological Processes. (4) Lecture, three hours. Limited to juniors/seniors. Signal transduction concepts, with focus on role of receptors, G proteins, and intracellular messengers such as cyclic AMP and calcium. Integration of these concepts with variety of physiological processes including stimulus-secretion coupling, vascular smooth muscle contraction, and role of growth factors in cell proliferation. Contemporary scientific research articles used as basis for material presented. Credit will not be granted for both this course and to present journal article for discussion. Letter grading.

155. Development and Structure of Musculoskel- tal System. (4) Requisite: course 111B. Development, histology, cell biology, and biochemistry of musculoskeletal system. Examination of development of muscle and connective tissue structure and function on each of these levels to understand organization and physiological behavior of the intact system.

156. Molecular Mechanisms and Therapies for Musculoskeletal Disease. (4) Lecture, three hours; cussion, one hour. Enforced requisites: course 111A (may be taken concurrently), Life Sciences 4 with grade of B or better. Causes and pathogenesis of Duchenne muscular dystrophy and some fundamental scientific findings using original scientific research. Exploration of therapies aimed at individual stages of pathogenic disease as method to develop critical expert-like thinking skills. Lectures based on experiments from primary scientific literature, and students expected to understand genetic and phenotypic animal models of muscular dystrophy, to design experiments, and to predict outcomes from research data. Letter grading.

156. Comparative Animal Physiology. (5) Lecture, three hours; discussion, one hour. Requisites: Life Sciences 1, 2, 3, and 23L, or 7A, 7B, 7C, and 23L. Physiological response and function at molecular, cellular, and whole organism levels of organization of animals to range of environmental conditions. Major topics include neural and muscular structure and function, hormones, gas exchange, energetics, and excretion. Emphasis on physiology of vertebrates and invertebrates to understand how animals solve physiological challenges presented by physical environment. Letter grading.

156. Animal Physiology. (6) Lecture, three hours; laboratory, five hours. Requisites: Chemistry 14B and 14L, or 20B and 30AL, 153A, Life Sciences 1, 2, 3, 23L, Physics 1C and 4BL, or 6C or 6CH. Not open for credit to students with credit for Ecology and Evolutionary Biology 117A or Comparative Biological Science majors. Introduction to physiological principles, with emphasis on organ systems and intact organisms. Letter grading.


M171. Variable Topics Research Seminars: Con- temporary Biology. (2) (Same as Neurobiology M171.) Seminar, two hours. Limited to undergraduate fellows in Integrated and Interdisciplinary Undergraduate Research Program. Presentations of scientific data from primary research articles and from students’ own research. May be repeated for credit. P/NP grading.

173. Anatomy and Physiology of Sense Organs. (4) Lecture, three hours; discussion, one hour. Requisites: courses 111A, or M180A and M180B, or Molecular, Cell, and Developmental Biology M175A and M175B. Structure and function of organs. Acquisition of quantitative and comparative approach to provide insight into evolution of sense organs in both invertebrates and vertebrates. Letter grading.

174. Cell Biophysics in Physiology and Disease. (5) Lecture, three hours; discussion, two hours. Requisites: Chemistry 153A, Life Sciences 2, 3, 4, and 23L, or 7A, 7B, 7C, and 23L, Physics 5A, 5B, and 5C, or 6A, 6B, and 6C. Search in information in biological research has traditionally focused on genes and biochemical pathways. While physical aspects of cell biology are critical in physiology and disease, they have received so much less attention in research. For example, we are just beginning to understand how physical forces alter gene expression and can signal transformation in physiological state of cells, such as in malignant transformation. Exploration of cell biophysics in health and disease from basic physical principles that underlie structure and organization of cytoskeleton to role of cell deformability in diseases such as cancer: Use of articles from primary literature regarding current research. Letter grading.

175. Why Fido Can’t Speak: Biological Evolution of Language. (5) Lecture, three hours; discussion, one hour. Requisite: course 111A or Neuroscience M101A. How humans possess a language. Discovery of genes that possess language. Exploration of whether other species possess potential building blocks for language. Topics range from examination of how bees and ants signal about resources to whether structured songs of birds, whales, and monkeys contain compositional meaning. Topics intersect with those in fields of anthropology, biopsychology, linguistics, molecular genetics, neuroscience, and psychology. Letter grading.

M176. Auditory Neuroscience of Speech Percep- tion and Vocal Communication. (4) (Same as Neuroscience M176.) Lecture, two and one hour; discussion, 90 minutes. Requisite: course 111A or Neuroscience M101A. Interdisciplinary approach to understanding how humans and other animals communicate emotion and meaning using sound. Topics include biological mechanisms of speech, sensory processing, neurophysiology, cognitive neuroscience, psychophysiology, and psycholinguistics. Emphasis on fundamental principles of neurophysiology, neuroanatomy, neuroimaging, psychology, and neurology. Letter grading.

177. Neuroethology. (5) Lecture, four hours; discussion, two hours. Requisite: course 111A or M180A. Physical properties of actual signals and physiological mechanisms underlying their generation. Topics include classical neuroethological models: acoustic and vibrational communication in vertebrates, sound localization in owls, electroreception and electromedi- cation in electric fish, and neurobiology of birdsong. Letter grading.

178. Quantitative Regulatory Biology and Signal Transduction. (4) Lecture, three hours. Requisites: Life Sciences 2 and 3, or 7A, 7B, and 7C, and 30A and 30B. Topics in signal transduction in vertebrates and invertebrates. Emphasis on signal transduction and reverse engineering to model signaling pathways and the dynamic properties of the pathways. Topics include classical neuroethological models: acoustic and vibrational communication in vertebrates, sound localization in owls, electroreception and electromedi- cation in electric fish, and neurobiology of birdsong. Letter grading.

M180A. Cellular and Systems Neurobiology. (5) Lecture, four hours; discussion, 90 minutes. Requisites: Chemistry 14C or 30A (14C may be taken concurrently), Life Sciences 2, 3, 4, and 23L, or 6C or 6CH. Not open for credit to students with credit for Physiological Science 111A. For Neuroscience and Physiological Science majors, grade of C– or better is required to proceed to Neuroscience M101B or Physiological Science 111B. Cellular neurophysiology, membrane potential, action potentials, and synaptic transmission. Sensory systems and motor systems; how similarities of neurons process complex information and control movement. P/NP or letter grading.

M180B. Molecular and Developmental Neuroscience. (5) Lecture, four hours; discussion, 90 minutes. Requisites: course 111A or M180A (or Molecular, Cell, and Developmental Biology M101A or Psychology M117A; Neuroscience majors must have grade of C– or better) or Psychology 115, Life Sciences 3 and 4 (3 may be taken concurrently), or 7C. Molecular biology of channels and receptors: focus on voltage dependent channels and neurotransmitter receptors. Molecular biology of supramolecular mechanisms: synaptic transmission, axonal transport, cytoskeleton, and muscle. Classical experiments and modern molecular approaches in developmental neurobiology. P/NP or letter grading.

M180C. Behavioral and Cognitive Neuroscience. (5) Lecture, three hours; discussion, one hour. Enforced requisites: course 111A or M180A (or Molecular, Cell, and Developmental Biology M101A or Psychology M117A; Neuroscience majors must have grade of C– or better) or Psychology 115, Life Sciences 3 and 4 (4 may be taken concurrently), or 7C. Molecular biology of channels and receptors: focus on voltage dependent channels and neurotransmitter receptors. Molecular biology of supramolecular mechanisms: synaptic transmission, axonal transport, cytoskeleton, and muscle. Classical experiments and modern molecular approaches in developmental neurobiology. P/NP or letter grading.

187A. Seeing Brain in Action. (2) Seminar, two hours. Enforced requisites: courses 111A and 111B (or Neuroscience M101A). Introduction to latest technical approaches and conceptual advances in one preeminent subfield of neuroscience—live func- tional imaging. Students provided with critiqued scienti- fic presentations as well as one exercise in scientific writing and peer review. Letter grading.

187B. From Cell to Circuit. (2) Seminar, two hours. Enforced requisites: courses 111A and 111B (or Neuroscience M101A and M101B). Introduction to
194A. Research Group Seminars: Physiological Science. (2) Seminar, two hours. Required of undergraduate students in research traineeships such as MARC and UC Leads programs. Discussion of research methods and current literature in field of or re- search for faculty members or students. May be re- peated for credit. Letter grading.

194B. Research Group Seminars: Physiological Science. (1) Seminar, two hours. Corequisite: course 198A or 198B or 198C or 199. Limited to juniors/se- niors. Laboratory group meetings to encourage student participation in re- search and to stimulate progress in specific research areas. Discussion of experimental methods and current literature in field of or research of faculty members or students. May be repeated for credit. P/NP grading.

195. Field Studies in Physiological Science. (4) Tu- torial, one hour; fieldwork, eight hours. Limited to se- niors. Supervised field studies in specific careers re- lated to physiological science. May not be repeated for credit and may not be applied toward elective re- quirements for major. Individual contract with superv- ising faculty member required. Letter grading.

196. Research Apprenticeship in Physiological Sci- ence. (2 to 4) Tutorial, three hours per week per unit. Limited to juniors/seniors. Entry-level research ap- prenticeship work with group meetings under guid- ance of faculty mentor. May be repeated for credit; consult department. Individual contract required. P/NP grading.

198A. Honors Research in Physiological Science. (4) Tutorial, 12 hours. Requisites: courses 111A, 111B, 193 (193 may be taken concurrently). Limited to junior/ senior physiological science honors program stu- dents. Directed independent research for depart- mental honors with faculty member, involving defini- tion of research topic and extensive reading and re- search in field of proposed honors thesis. May be repeated for credit. Individual contract required. In Progress grading; credit is given only on comple- tion of course 198B).

198B. Honors Research in Physiological Science. (4) Tutorial, 12 hours. Requisites: courses 193 (may be taken concurrently). 198A. Limited to junior/senior physiological science honors program students. Con- tinued reading and research that culminate in final honors thesis. May be repeated for credit. Individual contract required. Letter grading.

198C. Advanced Studies for Honors Research in Physiological Science. (4) Tutorial, 12 hours. Requir- site: course 198B. Corequisite: course 193. Limited to junior/senior physiological science honors program students. Directed independent research for departmental honors with faculty member, involving definition of research topic and extensive reading and research in field of proposed honors thesis. May be repeated for credit. Individual contract required. In Progress grading; credit is given only on comple- tion of course 198B).

241. Neural Plasticity and Repair. (4) Lecture, four hours. Theoretical and integrative basic neuroscience background. Progress in basic and clinical neuroscience provides new insight to understand mechanisms of cell repair and strategies to promote neural healing. Focus on physiological, anatomical, and analytical basis governing repair processes in brain and spinal cord and their clinical implications. Letter grading.

C244. Neural Control of Physiological Systems. (4) Lecture, four hours. Requisite: course 111B or M180B. Role of central nervous system in control of respiration, circulation, sexual function, and bladder control. Material for each section to be developed by combination of lecture and open discussion. Concurrently scheduled with course C144. Letter grading.

245. Neural Mechanisms Controlling Movement. (5) Lecture, four hours. Requisite: course 111A or M180A or Neuroscience M101A. Examination of central nervous system organization required for production of movements such as locomotion, respiration, mastication, and swallowing. Letter grading.

250A. Muscle Dynamics. (4) Lecture, four hours. Integrated study of structural and dynamic parameters of muscle-action, including topics in length-tension integration, and swallowing. Letter grading.


263. Neuronal Mechanisms Controlling Rhythmic Motor Movements. (4) Lecture, four hours. Requisite: course M145. Advanced topics on brainstem mechanisms responsible for controlling cyclic and stereotyped movements such as mastication and locomotion. Emphasis on cellular neurophysiology and interaction between neuronal networks. Introduction to primary literature and techniques used in these areas. Students expected to critically evaluate data and conclusions drawn. S/U or letter grading.

270A-270B. Modern Concepts in Physiology. (4–4) Lecture, two hours; discussion, two hours. Study and evaluation of primary research literature. Study of foundations of modern techniques in physiology research, analysis of research design. Letter grading.

270A. Highly recommended requisite or corequisite: course 111A. Foundation for experimental study of principles of muscular and neural physiology and cellular and systems neuroscience, including factors controlling membrane excitability, neuronal circuits, somatosensory regulation, special senses, cortical functions, and neural plasticity. 270B. Highly recommended requisite or corequisite: course 111B. Foundation for experimental study of principles of systems physiology, including endocrinology, transport physiology, and neural, cardiovascular, and pulmonary physiology.


289A-289B. Honing Your Skills as a Researcher in Integrative Biology (2–2) Seminar, one hour. Limited to graduate students in Physiological Science master’s program. Scientific method and analytical tools of research in physiology and biology; evaluation of significant research papers in physiological, scientific communication—written and oral presentations; scientific ethics; and professional development—writing curriculum vitae (CV) and cover letter. Letter grading. 289B. Requisite: course 289A.

M290. Seminar: Comparative Physiology. (2) (Same as Ecology and Evolutionary Biology M290.) Seminar, two and one half hours. Discussion of specific topics in comparative physiology of animals. Topics vary from year to year and range from system to system, from organism to organism, from biology, neuroethology, or behavioral physiology. S/U or letter grading.

291A-291B-291C. Seminars: Cardiovascular Function and Adaptation. (2 to 4 each) Seminar, two to four hours. Selected topics on cardiovascular function and adaptation. Students required to present two-half hour seminar. Letter grading.

292. Evolution and Development of Auditory System. (2 or 4) Seminar, two to four hours. Discussion of specific topics related to evolution, embryology, morphogenesis, cytodifferentiation, and onset of function of auditory system, with special attention to centrifugal pathways. Emphasis on primary literature sources as well as current methodological approaches. Two-hour seminar presentation required for 2 units; seminar paper and two-hour seminar presentation required for 4 units. S/U or letter grading.

293A-293B-293C. Seminars: Musculoskeletal Function and Adaptation. (2 to 4 each) Seminar, one hour. Requisites: courses 138, 260. Selected topics on muscular determinants of movement, metabolic aspects of exercise, and mechanics of connective tissue. Students required to present two-hour seminar. S/U or letter grading.

294. Recent Advances in Neurophysiology. (1) Seminar, one hour. Requisite: Life Sciences 2 or undergraduate degree in science. Critical examination and discussion of recent data and publications that focus on synaptic function. Student presentations, readings, and participation in discussions required. S/U grading.


296. Research Seminar: Physiological Science. (2) Review of literature, discussion of original research, and analysis of current topics in physiological science. May not be applied toward MS or PhD course requirements. May be repeated for credit. S/U grading.

297. Seminar: Muscle Cell Biology. (2 to 4) Seminar, two hours. Selected topics in muscle cell biology. Students required to present two-hour seminar. May be repeated for credit.

298. Seminar: Nervous System Development. (1 to 2) Seminar, two hours. Selected topics in developmental neurobiology, such as neuronal migration, axonal guidance, gene expression, and synaptogenesis. Weekly primary literature student presentations. One-hour seminar presentation on assigned weekly reading required of all students; students enrolled for 2 units must also complete written analysis of additional primary literature papers. May be repeated for credit. S/U or letter grading.

375. Teaching Apprentice Practicum. (1 to 4) Seminar, to be arranged. Preparation: apprenticeship personnel employment as teaching assistant, associate, or fellow. Teaching apprenticeship under active guidance and supervision of regular faculty member responsible for curriculum and instruction at UCLA. May be repeated for credit. S/U or letter grading.

495. In-Service Practicum for Teaching Assistants in Physiological Science. (2) Seminar, to be arranged. Required of all teaching assistants. Supervised practicum in teaching laboratory courses in physiological science; material preparation and use of teaching aids. May not be applied toward degree requirements. S/U grading.

501. Cooperative Program. (2 to 8) Preparation: consent of UCLA graduate adviser and graduate dean, and host campus instructor, department chair, and graduate dean. Used to record enrollment of UCLA students in courses taken under cooperative arrangements with USC. S/U grading.

506. Individual Studies for Graduate Students. (2 to 8) Tutorial, to be arranged. To enroll for letter grade, petition signed by faculty sponsor, graduate adviser, and graduate affairs committee chair must be submitted prior to end of second week of class. Eight units may be applied toward degree requirements for M.S. degree, provided that students enroll in two different 4-unit 596 courses in different laboratories under supervision of different mentors. Term paper required for letter grading. S/U or letter grading.

509. Preparation for MS Comprehensive Examination or PhD Qualifying Examinations. (2 to 16) Tutorial, to be arranged with faculty member serving as student's comprehensive examination chair or PhD committee chair. May not be applied toward MS or PhD course requirements. May be repeated as necessary. S/U grading.

509. Research for and Preparation of MS Thesis. (2 to 16) Tutorial, to be arranged with faculty member serving as student's thesis committee chair. May not be applied toward MS or PhD course requirements. May be repeated as necessary. S/U grading.

509. Research for and/or Preparation of PhD Dissertation. (2 to 16) Tutorial, to be arranged. May not be applied toward PhD course requirements. May be repeated as necessary. S/U grading.

International and Area Studies / 503

Interdepartmental Program
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(Department of Asian American Studies)
The International Institute offers a variety of area studies majors and minors through the International and Area Studies Interdepartmental Program (IDP). The overarching goal of each of these programs is to address the need for students to have a broad understanding of the international nature of the world and guide them through a course of study that allows them to apply that knowledge to a particular region of interest. The majors are structured so that area-specific content proceeds in tandem with instruction in the humanities and social sciences disciplines that provide the tools for analyzing the cultures, social structures, polities, and histories of the regional areas.

Emphasizing the contemporary world since 1750, the majors establish a common conceptual and thematic basis for study of regional areas. Students take a common core course that illuminates the international character of the contemporary world and introduces a set of contemporary issues and challenges that cross borders and regions. Thematic and conceptual courses equip students with a variety of disciplinary tools they can use to study a particular area or region. Studies culminate in a capstone seminar.

The IDP also offers a series of area studies minors that allow students to focus their interest in a particular region of the world.

### Undergraduate Study

Four majors are offered: African and Middle Eastern Studies BA, Asian Studies BA, European Studies BA, and Latin American Studies BA. Seven minors are also offered: African and Middle Eastern Studies, African Studies, East Asian Studies, European Studies, Latin American Studies, South Asian Studies, and Southeast Asian Studies.

Students considering a major or minor in the interdepartmental program should consult with the academic counselor as soon as possible in their UCLA career, but in no case later than the point at which they are about to begin taking upper-division courses. Students should select courses to fulfill major or minor requirements in consultation with the academic counselor.

The majors offered in international and area studies are designated capstone majors. Students majoring in African and Middle Eastern Studies, Asian Studies, European Studies, and Latin American Studies must complete a capstone seminar or travel-abroad program in which they engage in an in-depth analysis of a specific region or a thematic subject that spans regions. Through conceiving and executing a project, students demonstrate their working knowledge of scholarly discourse relative to a specialized topic. Student research, analytic, and writing skills are exhibited through their capstone work, along with their collaborative and oral communication skills.

### African and Middle Eastern Studies BA

**Capstone Major**

The African and Middle Eastern Studies major allows students to analyze the area or a subregion (e.g., Middle east, North Africa, Arab states, sub-Saharan Africa) from an interdisciplinary and modern perspective. The major seeks to ground students in broad international issues that they can then use to focus on particular concerns of that part of the world.

**Learning Outcomes**

The African and Middle Eastern Studies major has the following learning outcomes:

- In-depth analysis of a specific region or a thematic subject that spans regions
- Demonstrated critical understanding of issues relevant to a specific region or theme
- Demonstrated skills, including research, analysis, and writing
- Identification and analysis of appropriate sources, material evidence, and other forms of primary documents
- Demonstrated proficiency at collaborative engagement with peers through constructive feedback on written drafts and oral presentations
- Demonstrated proficiency at using peer feedback to enhance student’s own work
- Effective communication of complex ideas in a seminar setting
- Demonstrated effective oral and written communication of research findings
- Conception and execution of a project that identifies and engages with a specialized topic
- Working knowledge of scholarly discourse relative to a specialized topic

### Preparation for the Major

**Required:** (1) International and Area Studies 1, (2) one area studies course from Afrikanas 40, Art History 28, History 9D, 108, 97F, 97J, Middle Eastern Studies M50CW, or Portuguese 40A, (3) two international politics and markets courses from Economics 1, 2, Geography 4, 6, Political Science 50 (or 50R), Sociology 1, (4) two international societies and cultures courses from Anthropology 3, Comparative Literature 1D (or 2DW or 4DW), Ethnomusicology 5, 20S, Geography 3, History 2B, 22, World Arts and Cultures 20, 33, and (5) one area-related foreign language sequence through the intermediate level (e.g., Arabic 102C, Armenian 102C, 105C, Hebrew 102C, Iranian 102C, Turkic Languages 102C, 112C, 116C). The language requirement can also be fulfilled in part or in total by taking a placement examination given through the appropriate language department. Each course must be taken for a letter grade.

### Transfer Students

Transfer applicants to the African and Middle Eastern Studies premajors with 90 or more units must complete the following introductory courses prior to admission to UCLA: two courses from sociocultural anthropology, cultural geography, contemporary world history, and world literature and two courses from comparative politics, economic geography, macroeconomics, microeconomics, and introductory sociology. Transfer students must apply for the major by the end of fall quarter of their junior year.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

### The Major

The major consists of International and Area Studies 191 (capstone seminar) and 11 upper-division courses divided among area studies and international themes courses. To count as one 4-unit course, 2-unit courses must either be taken twice or two courses from the same category (if applicable) may be taken. Each course must be taken for a letter grade, with a minimum overall grade-point average of 2.0.


**International Themes:** (1) Two international politics and markets courses from Anthropology 143, Eco-
Asian and International Studies / 505

The Major
The major consists of International and Area Studies 191 (capstone seminar) and 11 upper-division courses divided among area studies and international themes courses. To count as one 4-unit course, 2-unit courses must either be taken twice or two courses from the same category (if applicable) may be taken. Each course must be taken for a letter grade, with a minimum overall grade-point average of 2.0.


Asian Studies BA
Capstone Major
The Asian Studies major allows students to analyze the area or a subregion (e.g., Central Asia, East Asia, South Asia, Southeast Asia) from an interdisciplinary and modern perspective. The major seeks to ground students in broad international issues that they can then use to focus on particular concerns of that part of the world.

Learning Outcomes
The Asian Studies major has the following learning outcomes:

- In-depth analysis of a specific region or a thematic subject that spans regions
- Demonstrated critical understanding of issues relevant to a specific region or theme
- Demonstrated skills, including research, analysis, and writing
- Identification and analysis of appropriate sources, material evidence, and other forms of primary documents
- Demonstrated proficiency at collaborative engagement with peers through constructive feedback on written drafts and oral presentations
- Demonstrated proficiency at using peer feedback to enhance student’s own work
- Effective communication of complex ideas in a seminar setting
- Demonstrated effective oral and written communication of research findings
- Conception and execution of a project that identifies and engages with a specialized topic
- Working knowledge of scholarly discourse relative to a specialized topic

Admission
To be eligible to declare the Asian Studies major, students must have completed all nonlanguage preparation for the major courses and the foreign language courses through at least level 3 (elementary level). Any remaining language courses may be completed after students have been accepted to the major. Each preparation for the major course must be taken for a letter grade, and students must have a UC grade-point average of 2.0 or better in those courses. In addition, students must have earned a grade of C or better in International and Area Studies 1.

Premajor
Incoming freshman and transfer students may be admitted as Asian Studies premajors on acceptance to UCLA. Premajor students must apply for major standing at the end of fall quarter of their junior year; they are not automatically accepted into the major.

Preparation for the Major
Required: (1) International and Area Studies 1, (2) one area studies course from Art History 29, 31, Asian 30, 70A, 70B, 70C, Chinese 50 (or 50W), M60 (or M6DW), Clusters 25A, History 9A, 9C, 9E, 11B (or 11B+), 97C, 97M, 97N, International and Area Studies 31, 33, Japanese 50, 70, Korean 50, M60, Southeast Asian 130, Southeast Asian M60, or 90, (3) two international politics and markets courses from Economics 1, 2, Geography 4, 6, Political Science 50 (or 50R), Sociology 1, (4) two international societies and cultures courses from Anthropology 3, Comparative Literature 1D (or 2DW or 4DW), Ethnomusicology 5, M25, Geography 3, History 2B, 22, World Arts and Cultures 20, 33, and (5) one area-related foreign language sequence through the intermediate level (e.g., Chinese 6 or 6A, Filippo 6, Hindi-Urdu 100C, Indonesian 6, Japanese 6, Thai 6, Vietnamese 6). The language requirement can also be fulfilled in part or in total by taking a placement examination given through the appropriate language department. Each course must be taken for a letter grade.

Transfer Students
Transfer applicants to the Asian Studies premajors with 90 or more units must complete the following introductory courses prior to admission to UCLA: two courses from sociocultural anthropology, cultural geography, contemporary world history, and world literature and two courses from comparative politics, economic geography, macroeconomics, microeconomics, and introductory sociology. Transfer students must apply for the major by the end of fall quarter of their junior year.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.
European Studies BA

Capstone Major

The European Studies major allows students to analyze the area or a subregion (e.g., Central and Eastern Europe, Mediterranean Europe, Scandinavia, Western Europe/European Union) from an interdisciplinary and modern perspective. The major seeks to ground students in broad international issues that they can then use to focus on particular concerns of that part of the world.

Learning Outcomes

The European Studies major has the following learning outcomes:

- In-depth analysis of a specific region or a thematic subject that spans regions
- Demonstrated critical understanding of issues relevant to a specific region or theme
- Demonstrated skills, including research, analysis, and writing
- Identification and analysis of appropriate sources, material evidence, and other forms of primary documents
- Demonstrated proficiency at collaborative engagement with peers through constructive feedback on written drafts and oral presentations
- Demonstrated proficiency at using peer feedback to enhance student’s own work
- Effective communication of complex ideas in a seminar setting
- Demonstrated effective oral and written communication of research findings
- Conception and execution of a project that identifies and engages with a specialized topic
- Working knowledge of scholarly discourse relative to a specialized topic

Admission

To be eligible to declare the European Studies major, students must have completed all nonlanguage preparation for the major courses and the foreign language courses through at least level 3 (elementary level). Any remaining language courses may be completed after students have been accepted to the major. Each preparation for the major course must be taken for a letter grade, and students must have a UC grade-point average of 2.0 or better in those courses. In addition, students must have earned a grade of C or better in International and Area Studies.

Premajor

Incoming freshman and transfer students may be admitted as European Studies premajors on acceptance to UCLA. Premajors students must apply for major standing at the end of fall quarter of their junior year; they are not automatically accepted into major standing at the end of fall quarter of their junior year.

Preparation for the Major

Required: (1) International and Area Studies 1, (2) one area studies course from Central and East European Studies 91, Comparative Literature 1C, 2CW, 4CW, Dutch 10, English 88C, French 12, 14 (or 14W), 41, 60, German 50B, 59, 61A, History 1C (or 1CH), 97C, International and Area Studies 40, Italian 428, 46, 50B, Portuguese 40A, Romanian 90, Russian 25 (or 25W), 30, 31, 32, 90B (or 90BW), Scandinavian 50 (or 50W), Slavic 90, Spanish 42, (3) two international politics and markets courses from Economics 1, 2, Geography 4, 6, Political Science 50 (or 50R), Sociology 1, (4) two international societies and cultures courses from Anthropology 3, Comparative Literature 1D (or 2DW or 4DW), Ethnomusicology 5, M25, Geography 3, History 2B, 22, World Arts and Cultures 20, 33, and (5) one area-related foreign language sequence through the intermediate level (e.g., Czech 102C, Dutch 103C, French 6, German 6, Hungarian 102C, Italian 6, Polish 102C, Portuguese 3, Romanian 102C, Russian 6, Scandinavian 29, 105B, 106B, 107B, Serbian/Croatian 102C, Spanish 5, Ukrainian 102C, Yiddish 102C). The language requirement can also be fulfilled in part or in total by taking a placement examination given through the appropriate language department. Each course must be taken for a letter grade.

Transfer Students

Transfer applicants to the European Studies premajor with 90 or more units must complete the following introductory courses prior to admission to UCLA: two courses from sociocultural anthropology, cultural geography, contemporary world history, and world literature and two courses from comparative politics, economic geography, macroeconomics, microeconomics, and introductory sociology. Transfer students must apply for the major by the end of fall quarter of their junior year. Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

The Major

The major consists of International and Area Studies 191 (capstone seminar) and 11 upper-division courses divided among area studies and international themes courses. To count as one 4-unit course, 2-unit courses must either be taken twice or two courses from the same category (if applicable) may be taken. Each course must be taken for a letter grade, with a minimum overall grade-point average of 2.0.


The area studies electives listed above (group I) focus on contemporary issues of that region after 1750. Students may substitute a maximum of three upper-division courses with focus on earlier historical aspects of the region or on diasporas with origins related to the region toward the area studies electives as long the distribution between humanities and arts and social sciences is maintained. They may be selected from either of the following lists: humanities and arts group 2: French 114A, 114B, 115, 116, 117, 118, 169, German 170, Italian 102A, 102B, 103A, 103B, 110, 113, 114B, 114A, 116A, 116B, 140, Russian C124C, C124D, C124G, C124N, C124P, C124T, Scandinavian 142A, 143C, 154 or social sciences group 2: History 121A, 121B, 121C, 122A, 122B, 122C, 125A, 126, Political Science 111C.

Latin American Studies BA

Capstone Major

The Latin American Studies major allows students to analyze the area or a subregion (e.g., Amazonia, Caribbean, Central America, South America, Southern Cone) from an interdisciplinary and modern perspective. The major seeks to ground students in broad international issues that they can then use to focus on particular concerns of that part of the world.

Learning Outcomes

The Latin American Studies major has the following learning outcomes:

- In-depth analysis of a specific region or a thematic subject that spans regions
- Demonstrated critical understanding of issues relevant to a specific region or theme
- Demonstrated skills, including research, analysis, and writing
- Identification and analysis of appropriate sources, material evidence, and other forms of primary documents
- Demonstrated proficiency at collaborative engagement with peers through constructive feedback on written drafts and oral presentations
- Demonstrated proficiency at using peer feedback to enhance student’s own work
- Effective communication of complex ideas in a seminar setting
- Demonstrated effective oral and written communication of research findings
- Conception and execution of a project that identifies and engages with a specialized topic
- Working knowledge of scholarly discourse relative to a specialized topic
• Conception and execution of a project that identifies and engages with a specialized topic
• Working knowledge of scholarly discourse relative to a specialized topic

Admission
To be eligible to declare the Latin American Studies major, students must have completed all nonlanguage preparation for the major courses and the foreign language courses through at least level 3 (elementary level). Any remaining language courses may be completed after students have been accepted to the major. Each preparation for the major course must be taken for a letter grade, and students must have a UC grade-point average of 2.0 or better in those courses. In addition, students must have earned a grade of C or better in International and Area Studies 1.

Preparation for the Major
Incoming freshman and transfer students may be admitted as Latin American Studies premajors on acceptance to UCLA. Premajor students must apply for major standing at the end of fall quarter of their junior year; they are not automatically accepted into the major.

Required: (1) International and Area Studies 1, (2) one area studies course from History 8A (or 8AH), 8B, 8C, 97E, International and Area Studies 50, Portuguese 40B, 46, Spanish 44, (3) two international politics and markets courses or courses from Economics 1, 2, Geography 4, 6, Political Science 50 (or SOR), Sociology 1, (4) two international societies and cultures courses or courses from Anthropology 3, Comparative Literature 1D (or 2DW or 4DW), Ethnomusicology 5, M25, Geography 3, History 2B, 22, World Arts and Cultures 20, 33, and (5) two area-related foreign language sequences through the intermediate level (e.g., Portuguese 3 or 11B, Spanish 5 or 7A, an indigenous language of Latin America such as Nahuatl, Quechua, or Zapotec, through that level). Any remaining language courses must be taken for a letter grade, and students must have a UC grade-point average of 2.0 or better in those courses. In addition, students must have earned a grade of C or better in International and Area Studies 1.

Transfer Students
Transfer applicants to the Latin American Studies premajor with 90 or more units must complete the following introductory courses prior to admission to UCLA: two courses from sociocultural anthropology, cultural geography, contemporary world history, and world literature and two courses from comparative politics, economic geography, macroeconomics, microeconomics, and introductory sociology. Transfer students must apply for the major by the end of fall quarter of their junior year.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

The Major
The major consists of International and Area Studies 191 (capstone seminar) and 11 upper-division courses divided among area studies and international themes courses. To count as one 4-unit course, 2-unit courses must either be taken twice or two courses from the same category (if applicable) may be taken. Each course must be taken for a letter grade, with a minimum overall grade-point average of 2.0.


The area studies electives listed above (group 1) focus on contemporary issues of that region after 1750. Students may substitute a maximum of three upper-division courses with focus on earlier historical aspects of the region or on diasporas with origins related to the region toward the area studies electives as long the distribution between humanities and arts and social sciences is maintained. They may be selected from either of the following lists: humanities and arts group 2: Art History CM139A, C139B, CM141, Chicana and Chicano Studies M105D, M105E, 109, 142, Ethnomusicology M116, Portuguese 143A or social sciences group 2: Anthropology 114P, 114Q, Chicana and Chicano Studies M119, M139B, 184, M187, History 157B.

Honors Program
The honors program is designed to offer highly motivated students pursuing one of the International and Area Studies majors (African and Middle Eastern Studies, Asian Studies, European Studies, Latin American Studies) the opportunity to design and conduct their own independent research under the guidance of a faculty adviser and consists of a three-term directed-study series of courses—International and Area Studies 198A, 198B, 198C—culminating in an honors thesis.

Admission
To enter the honors program, students must (1) have completed all preparation for the major requirements with a minimum 3.5 grade-point average in those courses, (2) have a 3.5 grade-point average in all upper-division coursework for the major, (3) obtain agreement from a faculty member to supervise their honors thesis, and (4) formally submit an application to the honors program. Application should normally be made during the junior year so as to be best plan for completion of the honors thesis during the senior year. Contact the academic counselor for more details about the application, thesis requirements, and guidelines regarding the selection of a faculty thesis adviser.

Requirements
Honors are awarded to students who (1) complete all requirements for the major with a cumulative grade-point average of 3.5 or better in upper-division courses required for the major, (2) successfully complete courses 198A, 198B, and 198C, and (3) produce an honors thesis (approximately 35 to 50 pages) determined to be of honors quality by a committee of two faculty members—the chair of International and Area Studies and the faculty adviser of the student.

Highest honors are awarded to students who (1) complete all requirements for the major with a cumulative grade-point average of 3.75 or better in upper-division courses required for the major, (2) successfully complete courses 198A, 198B, and 198C, and (3) produce an exceptional honors thesis (approximately 35 to 50 pages) determined to be of highest honors quality by a committee of two faculty members—the chair of International and Area Studies and the faculty adviser of the student.

Honors and highest honors are recorded on the final transcript and diploma after students successfully complete the program.

African and Middle Eastern Studies Minor
The African and Middle Eastern Studies minor is designed for students who wish to augment their major with concerted study of the history, culture, and society of the Africa and the Middle East from an interdisciplinary and modern perspective. To enter the minor, students must be in good academic standing (overall grade-point average of 2.0 or better) and have completed all lower-division minor courses with a GPA of 2.0 or better in those courses.

Required Lower-Division Courses (13 to 15 units): International and Area Studies 1 and two international societies and cultures courses from Anthropology 3, Comparative Literature 1D (or 2DW or 4DW), Economics 1, 2, Ethnomusicology 5, M25, Geography 3, 4, 6, History 2B, 22, Political Science 50 (or SOR), Sociology 1, World Arts and Cultures 20, 33. Students may substitute one area studies preparation course (from History 9D, 9F, Middle Eastern Studies M50CW, or Theater 4) toward the international societies and cultures preparation requirement.

Required Upper-Division Courses (20 to 21 units): Five area studies group 1 courses as follows: (1) two humanities and arts group 1 courses from Arabic M110, 120, C141, M151, Armenian C151, C152, C153, Art History C120, Comparative Literature M148, M162, Ethnomusicology 161N (must be taken twice to equal one 4-unit course), Hebrew M13, C140, Iranian 141, 142, Islamic Studies 151, Jewish Studies
The area studies electives listed above (group 1) focus on contemporary issues of that region after 1750. Students may substitute a maximum of one upper-division course with focus on earlier historical aspects of the region or on diasporas with origins related to the region toward the area studies additional elective category (item 3 above). The course may be selected from the following group 2 list: Ancient Near East M130, 150B, C165, Art History M110A, M110B, French 160, Geography 135, History M103A, M103B, 166A, 168A, or World Arts and Cultures C139.

One upper-division language course (advanced level) may be applied to item 3 above by petition to the chair of the program.

A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor. Each minor course must be taken for a letter grade, and students must have an overall grade-point average of 2.0 or better in the minor. Successful completion of the minor is indicated on the transcript and diploma.

The European Studies minor is designed for students who wish to augment their major with a concentrated study of the history, culture, and society of Europe from an interdisciplinary and modern perspective. To enter the minor, students must be in good academic standing (overall grade-point average of 2.0 or better) and have completed all lower-division minor courses with a GPA of 2.0 or better in those courses.

Required Lower-Division Courses (13 to 15 units): International and Area Studies 1 and two international societies and cultures courses from Anthropology 3, Comparative Literature 1D (or 2D or 4D), Economics 1, 2, Ethnomusicology 5, M25, Geography 3, 4, 6, History 2B, 22, Political Science 50 (or 50R), Sociology 1, World Arts and Cultures 20, 33. Students may substitute one area studies preparation course (from Afrikaans 40, Art History 28, Ethnomusicology 208, French 60, History 108, 97J, or Portuguese 40A) toward the international societies and cultures preparation requirement.

Required Upper-Division Courses (20 to 21 units): Five area studies group 1 courses as follows: (1) two humanities and arts group 1 courses from Arts 116P, M116Q, Geography 138, History 164B through 164E, 166B, 167A, 167B, 167C, 168B, Political Science 151A, 151B, 151C, and (3) one additional elective course selected from the group 1 lists above or from the group 2 list below.

Each minor course must be taken for a letter grade, and students must have an overall grade-point average of 2.0 or better in the minor. Successful completion of the minor is indicated on the transcript and diploma.

European Studies Minor

The European Studies minor is designed for students who wish to augment their major with a concentrated study of the history, culture, and society of Europe from an interdisciplinary and modern perspective. To enter the minor, students must be in good academic standing (overall grade-point average of 2.0 or better) and have completed all lower-division minor courses with a GPA of 2.0 or better in those courses.

Required Lower-Division Courses (13 to 15 units): International and Area Studies 1 and two international societies and cultures courses from Anthropology 3, Comparative Literature 1D (or 2D or 4D), Economics 1, 2, Ethnomusicology 5, M25, Geography 3, 4, 6, History 2B, 22, Political Science 50 (or 50R), Sociology 1, World Arts and Cultures 20, 33. Students may substitute one area studies preparation course (from Comparative Literature 1C, 2CW, 4CW, Dutch 10, English 88G, French 12, 14, 14W, 41, 60, German 50B, 57, 69, 6A through 6D, History 1C, 1CH, 97C, International and Area Studies 40, Italian 42B, 46, 50B, Portuguese 40A, Romanian 90, Russian 25, 25W, 30, 31, 32, 90B, 90WB, Scandinavian 50, 50W, Slavic 90, or Spanish 42) toward the international societies and cultures preparation requirement.

Required Upper-Division Courses (20 to 25 units): Five area studies group 1 courses as follows: (1) two humanities and arts group 1 courses from Arts 116P, M116Q, Geography 138, History 164B through 164E, 166B, 167A, 167B, 167C, 168B, Political Science 151A, 151B, 151C, and (3) one additional elective course selected from the group 1 lists above or from the group 2 list below.

The area studies electives listed above (group 1) focus on contemporary issues of that region after 1750. Students may substitute a maximum of one upper-division course with focus on earlier historical aspects of the region or on diasporas with origins related to the region toward the area studies additional elective category (item 3 above). The course may be selected from the following group 2 list: Ancient Near East M130, 150B, C165, Art History M110A, M110B, French 160, Geography 135, History M103A, M103B, 166A, 168A, or World Arts and Cultures C139.

One upper-division language course (advanced level) may be applied to item 3 above by petition to the chair of the program.

A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor. Each minor course must be taken for a letter grade, and students must have an overall grade-point average of 2.0 or better in the minor. Successful completion of the minor is indicated on the transcript and diploma.

East Asian Studies Minor

The East Asian Studies minor is designed for students who wish to augment their major with a concentrated study of the history, culture, and society of East Asia—China, Korea, and Japan—from an interdisciplinary and modern perspective.

To be admitted to the minor, students must be in good academic standing (overall grade-point average of 2.0 or better) and have completed all lower-division minor courses with a GPA of 2.0 or better in those courses.

Required Lower-Division Courses (13 to 15 units): International and Area Studies 1 and two international societies and cultures courses from Anthropology 3, Comparative Literature 1D (or 2D or 4D), Economics 1, 2, Ethnomusicology 5, M25, Geography 3, 4, 6, History 2B, 22, Political Science 50 (or 50R), Sociology 1, World Arts and Cultures 20, 33. Students may substitute one area studies preparation course (from Afrikaans 40, Art History 28, Ethnomusicology 208, French 60, History 108, 97J, or Portuguese 40A) toward the international societies and cultures preparation requirement.

Required Upper-Division Courses (20 to 21 units): Five area studies group 1 courses as follows: (1) two humanities and arts group 1 courses from Arts 116P, M116Q, Geography 138, History 164B through 164E, 166B, 167A, 167B, 167C, 168B, Political Science 151A, 151B, 151C, and (3) one additional elective course selected from the group 1 lists above or from the group 2 list below.

The area studies electives listed above (group 1) focus on contemporary issues of that region after 1750. Students may substitute a maximum of one upper-division course with focus on earlier historical aspects of the region or on diasporas with origins related to the region toward the area studies additional elective category (item 3 above). The course may be selected from the following group 2 list: Ancient Near East M130, 150B, C165, Art History M110A, M110B, French 160, Geography 135, History M103A, M103B, 166A, 168A, or World Arts and Cultures C139.

One upper-division language course (advanced level) may be applied to item 3 above by petition to the chair of the program.

A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor. Each minor course must be taken for a letter grade, and students must have an overall grade-point average of 2.0 or better in the minor. Successful completion of the minor is indicated on the transcript and diploma.

African Studies Minor

The African Studies minor is designed for students who wish to augment their major with a concerted study of the history, culture, and society of Africa from an interdisciplinary and modern perspective. To enter the minor, students must be in good academic standing (overall grade-point average of 2.0 or better) and have completed all lower-division minor courses with a GPA of 2.0 or better in those courses.

Required Lower-Division Courses (13 to 15 units): International and Area Studies 1 and two international societies and cultures courses from Anthropology 3, Comparative Literature 1D (or 2D or 4D), Economics 1, 2, Ethnomusicology 5, M25, Geography 3, 4, 6, History 2B, 22, Political Science 50 (or 50R), Sociology 1, World Arts and Cultures 20, 33. Students may substitute one area studies preparation course (from Afrikaans 40, Art History 28, Ethnomusicology 208, French 60, History 108, 97J, or Portuguese 40A) toward the international societies and cultures preparation requirement.

Required Upper-Division Courses (20 to 21 units): Five area studies group 1 courses as follows: (1) two humanities and arts group 1 courses from Arts 116P, M116Q, Geography 138, History 164B through 164E, 166B, 167A, 167B, 167C, 168B, Political Science 151A, 151B, 151C, and (3) one additional elective course selected from the group 1 lists above or from the group 2 list below.
Latin American Studies Minor

The Latin American Studies minor is designed for students who wish to augment their major with a concerted study of the history, culture, and society of Latin America from an interdisciplinary and modern perspective.

To enter the minor, students must be in good academic standing (overall grade-point average of 2.0 or better) and have completed all lower-division minor courses with a GPA of 2.0 or better in those courses.

Required Lower-Division Courses (13 to 15 units):
- International and Area Studies 1 and two international societies and cultures courses from Anthropology 3, Comparative Literature 1D (or 2DW or 4DW), Economics 1, 2, Ethnomusicology 5, M25, Geography 3, 4, 6, History 2B, 22, Political Science 50 (or SOR), Sociology 1, World Arts and Cultures 20, 33. Students may substitute one area studies preparation course (from Clusters 26A, History 9A, 8AH, 8B, 8C, 97E, International and Area Studies 50, Portuguese 40B, 46, or Spanish 44) toward the international societies and cultures preparation requirement.

Required Upper-Division Courses (20 to 25 units): Five area studies group 1 courses as follows: (1) two humanities and arts group 1 courses from Art History C142A, C142B, 144, Comparative Literature 177, English 135, Ethnomusicology M108A, 108B, 161K (must be taken twice to equal one 4-unit course), Film and Television 106C, Portuguese 130A, 130B, 141B, 142A, 142B, Spanish 120, World Arts and Cultures C139, two social sciences group 1 courses from African American Studies M154C, M154D, M178, Anthropology 161, 162, Chicana and Chicano Studies 111, 117, M125, M131, C141, 143, 151, 169, Community Health Sciences 132, Gender Studies 129, M144, M147C, Geography 135, 172A, 172C, History 159, 160A, 160B, 162A, 162B, 162C. Political Science 124C, 154A, 154B, Public Health M106, Sociology 186, 191J, and (3) one additional elective course selected from the group 1 lists above or from the group 2 list below.

The area studies electives listed above (group 1) focus on contemporary issues of that region after 1750. Students may substitute one of these upper-division courses with a focus on earlier historical aspects of the region or on diasporas with origins related to the region toward the area studies additional elective category (item 3 above). The course may be selected from the following group 2 list: French 114A, 114B, 115, 116, 117, 118, 169, German 170, History 121A, 121B, 121C, 122A, 122B, 122C, 125A, 126, Italian 102A, 102B, 103A, 103B, 110, 113, 114B, 116A, 116B, 140, Political Science 111C, Russian 124C, C124D, C124G, C124N, C124P, C124T, Scandinavian 142A, 143C, or 154.

One upper-division language course (advanced level) may be applied to item 3 above by petition to the chair of the program.

A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor.

Each minor course must be taken for a letter grade, and students must have an overall grade-point average of 2.0 or better in the minor. Successful completion of the minor is indicated on the transcript and diploma.

Southeast Asian Studies Minor

The Southeast Asian Studies minor is designed for students who wish to augment their major with a concerted study of the history, culture, and society of Southeast Asia—Brunei, Cambodia, East Timor, Indonesia, Laos, Malaysia, Myanmar (Burma), Philippines, Singapore, Thailand, and Vietnam—from an interdisciplinary and modern perspective.

To enter the minor, students must be in good academic standing (overall grade-point average of 2.0 or better) and have completed all lower-division minor courses with a GPA of 2.0 or better in those courses.

Required Lower-Division Courses (13 to 15 units): International and Area Studies 1 and two international societies and cultures courses from Anthropology 3, Comparative Literature 1D (or 2DW or 4DW), Economics 1, 2, Ethnomusicology 5, M25, Geography 3, 4, 6, History 2B, 22, Political Science 50 (or SOR), Sociology 1, World Arts and Cultures 20, 33. Students may substitute one area studies preparation course (from Art History 31, History 9E, 97M, International and Area Studies 31, Southeast Asian M60, or 90) toward the international societies and cultures preparation requirement.

Required Upper-Division Courses (20 to 21 units):
- Five area studies group 1 courses as follows: (1) two humanities and arts group 1 courses from Art History C154C, C154D, Asian 151, 162, 163, Comparative Literature C178, Ethnomusicology M146, 147, South Asian 150, 155, (2) two social sciences group 1 courses from Asian American Studies M172C, Gender Studies M164A, History 174B, 174C, 175A, 175C, and (3) one additional elective course selected from the group 1 list above or from the group 2 list below.

The area studies electives listed above (group 1) focus on contemporary issues of that region after 1750. Students may substitute a maximum of one upper-division course with a focus on earlier historical aspects of the region or on diasporas with origins related to the region toward the area studies additional elective category (item 3 above). The course may be selected from the following group 2 list: Anthropology 116F, Art History 154A, 154B, Asian 164, Asian American Studies M172A, 172B, History 174A, South Asian CM160, or 185.

One upper-language course (advanced level) may be applied to item 3 above by petition to the chair of the program.

A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor.

Each minor course must be taken for a letter grade, and students must have an overall grade-point average of 2.0 or better in the minor. Successful completion of the minor is indicated on the transcript and diploma.
Study Abroad

All majors and minors are highly encouraged to study abroad. Students can travel to all areas through a variety of programs with various lengths (summer or during the academic year).

Students may partially fulfill the area studies elective requirement by participating in an International Institute Summer Travel Study program consisting of two courses in and on a particular region of the world. Contact the academic counselor for more information on available programs.

More information about study abroad programs is available through the UCLA International Education Office by e-mail, in person at 1332 Murphy Hall, or by phone at 310-825-4995.

International and Area Studies

Lower-Division Courses

1. Introduction to International and Area Studies. (5) Lecture, three hours; discussion, one hour. Introduction to international and area studies from interdisciplinary framework, covering themes related to international politics and markets, as well as international societies and cultures, to illuminate and clarify profoundly international character of world we live in and to introduce set of contemporary issues and challenges that cross borders and affect every region of world. P/NP or letter grading.

2. Elementary Nahuatl. (4–4–4) (Same as Chicana and Chicano Studies M411A-M411B-M411C.) Lecture, five hours. Course M411 is requisite to M412, which is requisite to M417. Introduction to Nahuatl, one of major languages of West Africa, which is spoken widely throughout southwest Nigeria, Benin, and Togo. Coverage of basic Yoruba grammar, with equal emphasis on reading, writing, conversation, and comprehension. P/NP or letter grading.

3. Introduction to East Asia. (5) Lecture, three hours; discussion, one hour (when scheduled). Interdisciplinary course designed as introduction to modern East Asia. P/NP or letter grading.

4. International and Area Studies. (4) Lecture, three hours; discussion, one hour (when scheduled). Interdisciplinary course designed as introduction to modern Southeast Asia. P/NP or letter grading.

5. Introduction to Latin America. (5) Lecture, three hours; discussion, one hour (when scheduled). Interdisciplinary course designed as introduction to modern Latin America. P/NP or letter grading.

6. Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Enrolled as adjunct to lower-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be repeated for credit with topic change. P/NP or letter grading.

7. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to lower-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be repeated for credit with topic change. P/NP or letter grading.

8. Special Courses in International and Area Studies. (4) Seminar, three hours. Program-sponsored experimental or temporary courses, such as those taught by resident or visiting faculty members. May be repeated for credit with topic change. Letter grading.

9. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be repeated for credit with topic change. P/NP or letter grading.

Upper-Division Courses

10. Field Studies in International and Area Studies. (4) Seminar, three hours. Exploration of culture, economy, history, and politics of important locations around world. Has included courses offered for students participating in UCLA Travel Study Program. Field trips included to gain first-hand experience. May be repeated with topic and/or location change. Offered in summer only. P/NP or letter grading.

11. Art of Citizen Diplomacy. (2) Seminar, two hours. Examination of theory, tools, and practice of decentralized leadership by highlighting student leadership. Provides students with practical tools in local civic responsibility, and conflict resolution in order to tackle global issues such as climate change, gender equality, income equality, and human rights. Class activities include understanding how small communities can build bridges between cultures. Letter grading.

12. Introduction to Experimental Learning Abroad. (2) Seminar, two hours. Intended for students planning to participate in an international program during upcoming summer. Practical tools in effective listening, intercultural understanding, understanding multiple narratives, sharpening leadership emphasize on reading, writing, conversation, and comprehension. P/NP or letter grading.

13. Engaging Global Cultures: Reflecting on Fieldwork. (2) Seminar, two hours. Academic venue for students who have attended study abroad programs to reflect on and share their experiences in order to enhance benefits of program in which they participated. Practical tools in active listening and applying knowledge acquired during travel. Students analyze complex layers of intercultural communication, world affairs, and conflict. Post-study abroad follow-up activities, including presentations on cross cultural and in community, other on-campus education activities, and writing of journal article. Letter grading.

14. Field Studies in International and Area Studies. (4) Lecture, three hours; discussion, one hour (when scheduled). Examination of one or more topics related to international and area studies. May be repeated for credit with topic change. P/NP or letter grading.

15. Selected Topics in International and Area Studies. (4) Lecture, three hours; discussion, one hour (when scheduled). Examination of one or more topics related to international and area studies. May be repeated for credit with topic change. P/NP or letter grading.

16. Special Courses in International and Area Studies. (4) Seminar, three hours. Program-sponsored experimental or temporary courses, such as those taught by resident or visiting faculty members. May be repeated for credit with topic change. Letter grading.

17. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be repeated for credit with topic change. P/NP or letter grading.

18. Special Courses in International and Area Studies. (4) Seminar, three hours. Program-sponsored experimental or temporary courses, such as those taught by resident or visiting faculty members. May be repeated for credit with topic change. Letter grading.

19. Variable Topics Senior Research Seminars: International and Area Studies. (4) Seminar, three hours. Exploration of culture, economy, history, and politics of important locations around world. Has included courses offered for students participating in UCLA Travel Study Program. Field trips included to gain first-hand experience. May be repeated with topic and/or location change. Offered in summer only. P/NP or letter grading.
INTERNATIONAL DEVELOPMENT STUDIES

International Development Studies BA

Capstone Major

Learning Outcomes

The International Development Studies major has the following learning outcomes:

- Demonstrated specific skills and expertise, including original research, data analysis, clear and cogent writing, and general knowledge/critique of majors issues in the field

Scope and Objectives

Through an interdisciplinary lens, the International Development Studies major offers students the opportunity to study, analyze, and critically assess the social, political, and economic forces that, throughout history, have shaped inequality in the modern world. The central objective of the program is to engage students with debates around the widening patterns of disparities of wealth, power, privilege, and access to social justice that occur both within and between the countries of the global north and global south. The curriculum introduces students to key theoretical debates around development and to detailed case studies of successful and failed interventions; and provides methodological training. Core and elective courses illuminate the extent to which realities that affect people often arise owing to economic class, gender, race, ethnicity, religion, migrant status and other identities, and investigate the impact of policy solutions and forms of citizen engagement on communities and the environment. Students are trained to both think critically about these issues and explore ways to engage with development work at home and abroad through experiential learning, internships, immersive study abroad programs, independent faculty-guided research, and collaborative group projects.

Admission

Admission to the International Development Studies major is by application only. To be eligible to apply, students must have first completed all nonlanguage preparation courses and the foreign language courses through at least level 3 (elementary level). Any remaining language courses may be completed after students have been accepted to the major. Each preparation for the major course must be taken for a letter grade, and students must have a UC grade-point average of 2.0 or better in those courses. The application period is one per year, and students must apply no later than the end of fall quarter of their junior year.

Meeting the above minimums does not guarantee admission to the program. Admission is on a competitive basis, using the above qualifications as minimum standards for consideration.

Premajor

Incoming freshman and transfer students may be admitted as International Development Studies premajors on acceptance to UCLA. Premajor students must apply for major standing at the end of fall quarter of their junior year; they are not automatically accepted into the major.

Preparation for the Major

Required: (1) International Development Studies 1; (2) one course from Economics 1, 2, Geography 4, Public Affairs 30, or 40; (3) one methods course from Economics 41, Education 35, History 9W, Political Science 6, 6F, Public Affairs 60, Sociology 20, Statistics 10, or 12; (4) three social sciences/area studies courses, each from a different category, selected from (a) Anthropology 3, (b) Gender Studies 10, (c) Geography 3, 5, 6, (d) Global Studies 1, International and Area Studies 1, 3, 33, 50, (e) History 8A, 8B, 8C, 9A, 9D, 9E, 108, 108W, 118, 128, 12C, 22, (f) Political Science 20, 50, (g) Sociology 1, (h) Comparative Literature 4DW, Spanish 44; and (5) demonstrated proficiency in one modern foreign language equivalent to level 6 at UCLA. Each course must be taken for a letter grade.

Transfer Students

Transfer applicants to the International Development Studies premajor with 90 or more units must complete the following introductory courses prior to admission to UCLA: two introductory macroeconomics, microeconomics, and/or economic geography courses; one statistics course; three courses, each from a separate category, selected from sociocultural anthropology, cultural or economic geography, cultural area studies, world history, compara-
tive politics, and introductory sociology; and demonstrated proficiency equivalent to level 3 at UCLA in one modern foreign language. Transfer students must apply for the major by the end of fall quarter of their junior year.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

The Major
Each course must be taken for a letter grade. Students must earn a grade of C or better in International Development Studies 110, M120, 130, and 140; no more than one of these three courses may be repeated. All three core courses must be taken prior to the capstone senior seminar 191 course.

Required: (1) Three core courses selected from International Development Studies 110, M120, 130, and 140; (2) capstone seminar course: International Development Studies 191; (3) one research methodology course from Anthropology 138P, Asian American Studies 103, CI42A, CI42B, Chicana and Chicano Studies M119, M122, 123, Economics 103, Political Science 170A, Public Affairs 115, 116, Sociology 113, Statistics 112, Urban Planning M122; (4) three social and critical theory courses, each from a different department, from Anthropology 130, 140, 143, 144, 147, Economics 111, 112, 134, Environment M125, M133, M161, Gender Studies 102, 103, Geography M125, M127, 130, 140, 141, 148, 150, 151, 158, International Development Studies 110 or M120 or 130 or 140 (if not taken under item 1), M150, Political Science 122A, M122B, 124A, 167D, 168, Public Affairs 110, Sociology 101, 102, M115, 122, 123, 182, 183, 191D, Urban Planning M110, 121, M160, CM16B; (5) two regional courses, either from the same or separate developing regions of the world (East Asia and East Central Asia, Eastern Europe and West Central Asia, Latin America and Caribbean Basin, Middle East and North Africa, South and Southeast Asia and Pacific Islands, Sub-Saharan Africa) and one disciplinary elective listed below:


Horns Program
Majors who have completed international Development Studies 110, M120, and 130 and who have a 3.5 grade-point average in all courses offered for the major are eligible to formally apply for the honors program. In addition to completing all courses required for the major, students must take courses 198A, 198B, and 198C, in which they research, write, and present an honors thesis. To receive honors at graduation, students must have at least a 3.5 GPA in courses applied toward the major (including 198A, 198B, 198C) and an overall GPA of 3.0.

Highest honors are awarded to students who complete the major (including courses 198A, 198B, 198C) with a 3.75 GPA and who produce an exceptional thesis.

Study Abroad
International Development Studies majors are highly encouraged to study abroad in developing areas of the world. Students can do so through a variety of programs with various lengths (summer or during the academic year). More information about study abroad programs is available through the UCLA International Education Office. Contact the office by e-mail, in person at 1332 Murphy Hall, or by phone at 310-625-4995.

International Development Studies

Lower-Division Courses

1. Introduction to International Development Studies. (5) Lecture, three hours; discussion, one hour. Exploration of apes and contemporary context of socioeconomic inequities between Global South and Global North. Focus on cultural, political, and economic realities of developing world, which includes countries of Asia, eastern Europe, Africa, Middle East, and Latin America. P/NP or letter grading.

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP or letter grading.

89. Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to lower-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

90HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to lower-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

90. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Courses

110. Culture, Power, and Development. (4) Lecture, three hours; discussion, one hour (when scheduled). Prerequisite: course 1. Broad introduction to theoretical traditions in development studies, with focus on dynamics of culture, power, markets, states and social movements, with selected developing nations and comparative case analysis across Global South and North. Letter grading.

M120. Political Economy of Development. (4) (Same as Political Science M167C.) Lecture, three or four hours; discussion, one hour (when scheduled). Prerequisite: course 1. Political economy approach to puzzle of why some countries are rich and others are poor and why, among latter, some have been able to achieve rapid rates of economic growth others have not. Explanation and review of logic behind most important arguments that have been advanced to account for differences across countries in rates and levels of economic development. Letter grading.

130. Theory and History in International Development. (4) Lecture, three hours; discussion, one hour (when scheduled). Prerequisite: course 1. Social scientific survey of debates over policies contributing to economic development and underdevelopment. Topics include measurement and statistics, social and industrial policies, inequality, poverty, and historical differences for development paths across Europe, Asia, Africa, and Latin America. Letter grading.

140. Decolonizing Political Economy: Colonialism and Development. (4) Lecture, three hours; discussion, one hour (when scheduled). Prerequisite: course 1. Introduction to approaches and intellectual traditions of critical development studies. Violence of colonization and struggle for decolonization were two of defining processes of 20th century. Consideration of how development as global good can be reconciled with its origins in colonialism, and how development became hegemonic way of imagining decolonization. Particular focus on voices of critique and special emphasis to models of development that emerged from Africa, Middle East, and South Asia. Discussion of relationship between rival notions of development and competing ideas of international relations. Letter grading.

M150. Political Economy of Climate Change. (4) Same as Political Science M152. Lecture, three hours; discussion, one hour (when scheduled). Prerequisite: course 1. Exploration of how governments at international, national, and regional levels are addressing—or not addressing—extraordinary challenge of climate change. Use of combination of readings, lectures, and discussions to better understand causes, consequences, and policies to address this important political problem of our time—-not just in US, but in other major countries as well. Concentration on challenge of mitigating, rather than adapting to, climate change, and concentration on energy use, rather than agriculture, forestry, and land use. Letter grading.
160. Selected Topics in International Development Studies. (4) Lecture, three hours; discussion, one hour (when scheduled). Examination of one or more topics related to international development. May be repeated for credit with topic change, P/NP or letter grading.

188. Special Courses in International Development Studies. (4) Seminar, three hours. Program-sponsored experimental or temporary courses on selected contemporary topics in international development taught by a distinguished instructor or affiliated faculty members. May be repeated for credit with topic change, P/ NP or letter grading.

189. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as an upper-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be repeated for credit with topic change, P/ NP or letter grading.

190. Undergraduate Practicum in International Development Studies. (2) Seminar, two hours; practicum, to be arranged. Limited to juniors/seniors. Training and supervised practicum for advanced undergraduate students to serve as undergraduate course assistants in international development studies courses. Students assist in preparation and presentation of materials and development of innovative programs with guidance of faculty members. Consult academic counselor for further information. May not be repeated toward major requirements. May be repeated for credit. P/ NP grading.


192. Undergraduate Practicum in International Development Studies. (2) Seminar, two hours; practicum, to be arranged. Limited to juniors/seniors. Training and supervised practicum for advanced undergraduate students to serve as undergraduate course assistants in international development studies courses. Students assist in preparation and presentation of materials and development of innovative programs with guidance of faculty members. Consult academic counselor for further information. May not be repeated toward major requirements. May be repeated for credit. P/NP grading.

193. Colloquia and Speaker Series. (1) Seminar, two hours. Introduction to current scholarship in field of international development studies or of topics related to guest speaker series. May be repeated for credit. P/NP grading.

194. Research Group Seminar. (1) Seminar, two hours. Designed to encourage participation and stimulate progress in specific research areas for undergraduate students who are part of departmental research. Students learn about research methods and current literature in field of international development studies or of research of faculty members or students. May be repeated for credit. P/NP grading.

195. Community or Corporate Internship in International Development Studies. (4) Tutorial, to be arranged; fieldwork, 10 to 12 hours. Limited to juniors/seniors. Supervised internship in corporate, community, government, or nonprofit setting coordinated by International Development Studies. Additional supervision to be provided by internship site supervisor. Students meet with adviser and provide final reports of their experience. May be repeated for credit. Individual contract required; consult Undergraduate Study coordinator. Letter grading.

198A-188B. Honors Research in International Development Studies. (4–4–4) Tutorial, to be arranged; fieldwork, 10 to 12 hours. Limited to senior international Development Studies majors. May be repeated for credit. Individual contract required. 198A. Research, discussion, and planning of honors thesis under direct supervision of faculty member. Letter grading. 188B. Enforced requisite: course 198A. Research, discussion, and planning of honors thesis under direct supervision of faculty member. In Progress grading. 198C. Enforced requisite: course 198B. Final drafting and submission of honors thesis under direct supervision of faculty member. Letter grading.

199. Directed Research in International Development Studies. (4) Tutorial, to be arranged. Limited to junior/senior International Development Studies majors. Supervised intensive directed research program in which students conduct interdisciplinary research under guidance of faculty mentor. Culumnizing paper required. May be applied toward major via petition. May not be repeated. Individual contract required. Letter grading.

Graduate Course

375. Teaching Apprentice Practicum. (1 to 4) Seminar, to be arranged. Preparation: apprentice personnel employment as teaching assistant, associate, or fellow. Teaching apprenticeship under active guidance and supervision of regular faculty member responsible for curriculum and instruction at UCLA. May be repeated for credit. S/U grading.

INTERNATIONAL MIGRATION STUDIES

Interdisciplinary Minor
College of Letters and Science
10389B Bunche Hall
Box 95148
Los Angeles, CA 90095-1487

International Migration Studies
Roger Waldinger, PhD, Chair
Faculty Committee
Leisy J. Abrego, PhD (Chicana and Chicano Studies)
Rubén Hernández-León, PhD (Sociology)
Hiroshi Motomura, JD (Law)
Marjorie Faulstich Orellana, PhD (Education)
Roger Waldinger, PhD (Sociology)

Scope and Objectives

The minor in International Migration Studies orients students toward comparative, historical, and international dimensions, providing structured exposure to the relevant scholarship.

International migration is a global phenomenon—comprising broad and deep linkages within and between the developed and developing worlds. As the issues surrounding global migration processes cross manifold intellectual boundaries, understanding demands insights and methods from a broad array of disciplines. Standard models in economics or demography offer powerful explanations of why people migrate and how migration might have an effect on wages and employment in both sending and receiving societies. However, migration is ultimately about the lived experience of people—those moving and those they encounter. Understanding migrants’ emergent identities and the problems of belonging and acceptance that migration generates requires attention, both to the micro level, as well as to the specific historical and cultural contexts surrounding both migration flows and societal responses. The minor in International Migration Studies aims to build an appreciation of international migration and its dilemmas as it draws on the insights generated from a broad array of disciplines and methodological approaches needed for grappling with a vast social and intellectual phenomenon.

Undergraduate Study

International Migration Studies Minor

Required Upper-Division Courses (28–32 units): (1) one core course: Sociology 151 or 152; (2) four elective courses, from at least two departments, selected from Asian American Studies M130C, M166A, 167, Chicana and Chicano Studies 120, M124, M126, 164SL, C179, Economics 103, 151, English 134, German 175, History M5A, 146B, 146C, Political Science M43C, M181B, Psychology 129C, 133G, Slavic CM114, Sociology 116, 154, 156, Urban Planning 141; (3) two courses, International Migration Studies 155 and 199, to include an advanced theory course, and a thesis tutorial culminating in a thesis. Students who take both core courses may apply the second course toward the elective requirement. This minor culminates in a thesis. A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor. Each minor course must be taken for a letter grade of C− or better. Successful completion of the minor is indicated on the transcript and diploma.

International Migration Studies

Lower-Division Courses

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Courses


193. Colloquia and Speaker Series. (2) Seminar, two hours. Introduction to current scholarship in field of international migration studies. Attendance at selected presentations with required response papers. May be repeated for credit. P/NP grading.

ISLAMIC STUDIES
See Near Eastern Languages and Cultures

ITALIAN
College of Letters and Science
212 Royce Hall
Box 951535
Los Angeles, CA 90095-1535

Italian
310-825-1940
Dominic R. Thomas, PhD, Chair

Professors
John A. Agnew, PhD
Massimo Ciavolella, PhD (Franklin D. Murphy
Professor of Italian Renaissance Studies)
Thomas J. Harrison, PhD
Lucia Re, PhD, Dottore in Lettere
Stefania Tutino, PhD

Professors Emeriti
Luigi Ballerini, Dottore in Lettere
Franco Betti, PhD
Marga Cottino-Jones, PhD, Dottore in Lettere
Edward F. Tuttle, PhD

Associate Professors
Andrea Moudarres, PhD
Peter J. Stacey, PhD

Senior Lecturer SOE
Elissa A. Tognozzi, PhD

Lecturer
Hoang T. M. Truong, PhD

Scope and Objectives
Italian art and letters provide an invaluable key to understanding many facets of European civilization. Examined in its own right or studied comparatively, Italian culture offers unmatched rewards. The Department of Italian faculty members view transmitting the Italian language as inseparable from transmission of the culture, so students consider in depth virtually all aspects of Italian civilization. After their linguistic initiation, ideally including a year abroad, students may pursue advanced studies in the department exclusively and through a wide range of interdisciplinary programs.

Bachelor of Arts degrees are offered in Italian and in Italian and Special Fields. Graduate study leads to the Master of Arts degree in Italian (with specialization in literature and language) and to the PhD (literature specialization).

Undergraduate Study
The Italian and Italian and Special Fields majors are designated capstone majors. Students are required to conceptualize, design, and complete an interdisciplinary research project or thesis. Through the capstone experience, students demonstrate their mastery of an area of Italian culture, as well as their skills in identifying and analyzing primary sources, integrating what they have learned in the course of their major studies, and presenting their work to peers under the guidance of a faculty mentor who facilitates discussion and peer review.

Italian and Special Fields BA
Capstone Major
Students with special interests or professional goals may select the Italian and Special Fields major, with coursework divided between Italian and a collateral field. Study programs fulfilling requirements for the major have been developed with the departments and programs listed below.

Majors who select courses taught in English must do additional work from the original Italian texts in consultation with the course instructor.

Transfer Students
Transfer applicants to the Italian and Special Fields major with 90 or more units must complete the following introductory courses prior to admission to UCLA: two years of Italian and related courses in civilization, culture, history, linguistics, literature, and closely related languages.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

Learning Outcomes
The Italian and Special Fields major has the following learning outcomes:

• Demonstrated mastery of an area of Italian culture, defined as Italian language, literature, traditions, geography, contemporary Italian life, and contributions of Italians to the world
• Working knowledge of scholarly discourse relating to specialized topics
• Demonstrated critical thinking
• Conception and execution of a project in Italian that identifies and engages with a specialized topic
• Information literacy by identifying and analyzing appropriate primary sources
• Demonstrated good written and oral communication skills, evidenced by a research project and presentation of work to peers under guidance of a designated faculty mentor

Preparation for the Major
Required: Italian 1, 2, 3, 4, 5, 6, and one course from 42A, 42B, 42C, 46, 50A, or 50B.

Transfer Students
Transfer applicants to the Italian major with 90 or more units must complete the following introductory courses prior to admission to UCLA: two years of Italian and one Italian civilization or culture course.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

The Major
Required: Ten upper-division Italian courses, including 100, 199B (senior capstone course), one medieval to 18th century course from 113 through 116B, one Enlightenment to contemporary course from 120 through 125, and six elective courses from 103A through 191. With consent of the undergraduate adviser, students may substitute up to one each of Italian 195 and 199A and an upper-division elective course from outside the department.

Majors who select courses taught in English must do additional work from the original Italian texts in consultation with the course instructor.

Anthropology Field
Preparation for the Major
Required: Italian 1, 2, 3, 4, 5, 6, and one course from 42A, 42B, 42C, 46, 50A, 50B; Anthropology 2 or 3, and 4.

The Major
Required: Italian 100, 199B (senior capstone course), and three courses from 103A through 191 selected in consultation with the undergraduate adviser; five courses from Anthropology 100, 111, 130, 136A, 136B, 137P, 137Q, 138P, 140, 143, M145P, M145Q, 147, M150, 151 selected in consultation with the undergraduate adviser.

Art History Field
Preparation for the Major
Required: Italian 1, 2, 3, 4, 5, 6, and one course from 42A, 42B, 42C, 46, 50A, 50B; Art History 20 or 21, 22, 23.
The Major
Required: Italian 100, 199B (senior capstone course), and three courses from 103A through 191 selected in consultation with the undergraduate adviser; five courses from Italian / 515, Philosophy 1 through 169 selected in consultation with the undergraduate adviser.

Gender Studies Field
Preparation for the Major
Required: Italian 1, 2, 3, 4, 5, 6, and one course from 42A, 42B, 42C, 46, 50A, 50B; Gender Studies 10.

History Field
Preparation for the Major
Required: Italian 1, 2, 3, 4, 5, 6, and one course from 42A, 42B, 42C, 46, 50A, 50B; Philosophy 1 through 169 selected in consultation with the undergraduate adviser.

History Field
Preparation for the Major
Required: Italian 1, 2, 3, 4, 5, 6, and one course from 42A, 42B, 42C, 46; one course from History 1A, 1B, 1C, 20, 21, 22.

History Field
Preparation for the Major
Required: Italian 1, 2, 3, 4, 5, 6, and three courses from History 100 through 188 selected in consultation with the undergraduate adviser.

Linguistics Field
Preparation for the Major
Required: Italian 1, 2, 3, 4, 5, 6, Linguistics 20, and three terms of a second foreign language other than Italian.

The Major
Required: Italian 100, 199B (senior capstone course), and three courses from 103A through 191 selected in consultation with the undergraduate adviser; five courses from History 100 through 188 selected in consultation with the undergraduate adviser.

Music History Field
Preparation for the Major
Required: Italian 1, 2, 3, 4, 5, 6, two courses from Music History M10A, M10B, M10C.

The Major
Required: Italian 100, 199B (senior capstone course), and three courses from 103A through 191 selected in consultation with the undergraduate adviser; five courses from Music History M10A through M191E selected in consultation with the undergraduate adviser.

Philosophy Field
Preparation for the Major
Required: Italian 1, 2, 3, 4, 5, 6, and one course from 42A, 42B, 42C, 46, 50A, 50B; one course from Philosophy 1 through 31.
Study in Italy

Students are encouraged to spend up to one year in Italy either to (1) honor with an educational abroad program or (2) study in an Italian university. They are also urged to take advantage of summer language workshops and study programs, including UCLA programs in Italy and Los Angeles. For additional information, contact the Education Abroad Program, 1332 Murphy Hall; or the Summer Sessions office, 1331 Murphy Hall.

Honors Program

Admission

The honors program provides exceptional students an opportunity for advanced research and study, under the guidance of a faculty member, that leads to the completion of an honors thesis. Majors in Italian and in Italian and Special Fields with an overall grade-point average of 3.25 and a 3.5 GPA or better in Italian courses are eligible to participate in the honors program. Applications should be made during the last term of the junior year or early in the senior year. Contact the department adviser for more information.

Requirements

To qualify for graduation with honors, Italian majors must complete all requirements for the major and Italian 198 in the last term of the senior year in which they write a 15- to 20-page thesis in Italian on a subject expanding on one or more of the upper-division courses they have taken. The thesis is written under the guidance of a departmental faculty member.

To qualify for graduation with honors, Italian and Special Fields majors must complete all requirements for the major and Italian 198 in which they write a 15- to 20-page thesis in Italian that combines their two disciplines of study. The thesis is written under the guidance of a departmental faculty member.

Successful completion of the honors program is indicated on the transcript and diploma.

Italian Minor

To enter the Italian minor, students must have an overall grade-point average of 2.0 or better.

Required Lower-Division Courses (12 units): Italian 5, 6, and one course from 42A, 42B, 46, 50A, 50B.

Required Upper-Division Courses (20 units): Italian 100 and four additional Italian courses. Three of the four courses must be taught in Italian.

A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor.

Each minor course must be taken for a letter grade, and students must have an overall grade-point average of 2.0 or better in the minor. Successful completion of the minor is indicated on the transcript and diploma.

Graduate Study

Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Division website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Graduate Degrees

The Department of Italian offers Master of Arts (MA), Candidate in Philosophy (CPhil), and Doctor of Philosophy (PhD) degrees in Italian.

Italian

Lower-Division Courses

1. Elementary Italian—Beginning. (4) Lecture. five hours. P/NP or letter grading.
19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.
42A. Italy through Ages in English: Saints and Sinners in Early Modern Italy. (5) Lecture, four hours; discussion, one hour. Examination of issues of cultural hegemony, political struggle, religious freedom, and religious conflict through Italy’s early modern literary and artistic production. Texts may include Dante’s Divine Comedy, Boccaccio’s Decameron, Saint Catherine’s letters, Machiavelli’s The Prince, and Galileo’s scientific writings. Artworks may include those of Raphael and Michelangelo, as well as Bernini’s sculptures. P/NP or letter grading.
42B. Italy through Ages in English: Modern and Contemporary Italy. (5) Lecture, four hours; discussion, one hour. Cultural and political developments from 18th century to present. Topics include Beccaria and opposition to death penalty and absolutism; Garibaldi; Italian Risorgimento, national liberation, and unification; Lombroso and criminology in new Italy; Mussolini and Fascism; Gramsci and Communism; Italian Catholicism; Berlusconi and media; migration and today’s multicultural Italy. Assigned works include relevant literature and memoirs, music, and film, futurist and fascist art, and organized crime fiction and film. P/NP or letter grading.
42C. Italy through Ages in English: Food and Literature in Italy. (5) Lecture. four hours; discussion. one hour. Profile of Italian history and culture through analysis of gastronomic and literary texts. Special emphasis on late Middle Ages, Renaissance, and Risorgimento. P/NP or letter grading.
46. Italian Cinema and Culture in English. (5) Lecture/screenings, five hours; discussion, one hour. Special topics in Italian culture as reflected and reinforced by the nation’s prime artform, stressing aesthetics and ideology of films, contemporary Italian history, and politics. Rotating topics include sex and politics, comedy, integration, family networks, and neorealism. P/NP or letter grading.
50A-50B. Masterpieces of Italian Literature in English. (5–5) Lecture. four hours; discussion, one hour. P/NP or letter grading. 50A. Middle Ages to Baroque. Leading philosophical, religious, and sociopolitical issues in Europe, examined in authors such as St. Francis, Dante, Boccaccio, Petrarch, Lorenzo de’ Medici, Machiavelli, Castiglione, Ariosto, and Tasso. 50B. Enlightenment to Postmodernity. Comparative study of major literary texts and their adaptations into different forms of public spectacle, including theater, opera, and film. Works by Goldoni, Gozzi, Mascagni, Verga, Puccini, Pirandello, Calvino, Ortese, Zavattini, de Sica, and Taviani Brothers. Emphasis on development of ideas of spectacle.
77. Encounters between Christianity, Islam, and New Worlds in Age of Discovery. (5) Lecture, four hours; discussion, one hour. Examination of cultural, religious, and racial differences in early modern world of Italy, America, Africa, and Ottoman Empire. Materials include films, artworks, Dante’s Divine Comedy, Qur’an, Arab chronicles of Crusades, travel logs and letters of Christopher Columbus, Italian Renaissance epic poems, and anticolonial polemics. P/NP or letter grading.
89. Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to lower-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.
89HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to lower-division lecture course. Independent study with lecture course instructor. Exploration of topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.
99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per unit. Entry-level for sophomore or junior. Enrolled students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Graduate Research Center. May be repeated. P/NP grading.

Upper-Division Courses

100. Composition and Style. (4) Lecture, three hours. Enforced requisite: course 6. Taught in Italian. Development of writing techniques and proficiency in composition and style, with emphasis on editing for grammar and style, P/NP or letter grading.
102A-102B-102C. Italian Cultural Experience in English. (4–4–4) Lecture, three hours. Study of cultural development of Italy: P/NP or letter grading. 102A. Roots of Western civilization social, cultural, and artistic achievements of communal society: Marco Polo, Dante, Boccaccio, Giotto, rise of Italian merchant class. 102B. Renaissance discovery of human genius; crucial period between Machiavelli and Galileo, leading Italy and Europe to scientific revolution. 102C. Birth of Italian nation from wars of independence to foundation of modern republic, delineated through literature and cinema in historical context.
103A. Introduction to Classic Italian Literary and Cultural Studies. (4) Lecture, three hours. Enforced requisite: course 100. Taught in Italian. Selected classic works of Italian literature, theater, art, and culture from medieval era to Renaissance and Baroque. Emphasis on critical methods and skills for analyzing and interpreting wide range of Italian texts and cultural formations in their historical context and in comparison to contemporary and transnational views. Representative authors may include Saint Francis of Assisi, Dante, Petrarch, Boccaccio, Saint Catherine of Siena,
103B. Introduction to Modern Italian Literary and Cultural Studies. (4) Lecture, three hours. Enforced requisites: course 100. Taught in Italian. Study of modern works of Italian literature, theater, art, and culture from Enlightenment to present. Emphasis on critical methods and skills for analyzing and interpreting wide range of Italian texts and cultural formations in their historical context and in comparison to contempor- ary and transnational views. Representative authors may include Vico, Goldoni, Alfieri, Boccaccia, Ros- salba Carriera, Pirandello, Aleramo, Marinetti, Boccioni, Modigliani, De Chirico, Calvino, Ortese, Pasolini, Franca Rame, and Dario Fo. P/NP or letter grading.

110. Dante in English. (4) Lecture, three hours. Close study of Dante’s first vernacular work, particularly his extraordinary masterpiece, Divine Comedy, the archetypal medieval journey through the afterworld. P/NP or letter grading.

113. Dante’s La Divina Commedia. (4) Lecture, three hours. Enforced requisites: course 100. Taught in Italian. Study of medieval philosophy, religion, and politics in La Divina Commedia, greatest literary achievement of the age. P/NP or letter grading.

114B. Middle Ages: Medieval Humor, Morality, and Sociality. (4) Lecture, three hours. Novely of Boc- cssi’s witty and comic masterpiece, Decameron, analyzed within context of moral and social codes of culture. Time of P/NP or letter grading.


120. Modern and Contemporary Literature. (4) Lecture, three hours. Analysis of novels, short fiction, po- etry, and drama in connection with modern and con- temporary thought, politics, and culture. Authors may include D’Annunzio, Aleramo, Pirandello, Ugo Foscolo, Montale, Pasolini, Ortese, Morante, Ginzburg, Calvino, Fo, Eco, Pasolini. P/NP or letter grading.

121. Literature and Film. (4) Lecture, three hours. Comparative study of specific literary works and their adaptation into film and of different techniques in two media and forms of expression. Texts include literary works, plays, and screenplays, works on literary and film theory, P/NP or letter grading.

122. Italian Theater. (4) Lecture, three hours. Study of works for stage from Renaissance to present, in- cluding examples of opera and questions pertaining to tically of his masterpiece, Divine Comedy, the archety- pical medieval journey through the afterworld. P/NP or letter grading.

125. Italian Operas. (4) Lecture, three hours. Enforced requisites: course 10. Taught in Italian. Introduction to traditional Italian opera as means of appreciating cul- ture of Italy, art form of opera, and study of Italian lan- guage at advanced level through reading of libretti. Six masterworks of Italian opera tradition—Il Barbiere di Siviglia, La Bohème, Pagliacci, Otello, Tosca, and La Traviata—offer culturally authentic contexts to learn about operas, their characters, plots, settings, and themes. Exploration of various historical, political, and cultural issues raised in each opera. P/NP or letter grading.


140. Italian Novella from Boccaccio to Basile in Translation. (4) Lecture, three hours. Analysis of de- velopment of Italian novella in its structural, historical context, and folk material. Special emphasis on how Italian novella influenced other European literatures. P/NP or letter grading.

150. Modern Fiction in Translation. (4) Lecture, three hours. Select issues in 20th-century thought traced in writers of international fame, with focus on con- cepts and styles of several prose works such as Umberto Eco’s The Name of the Rose, Pasolini’s The Ragazzi, Pirandello’s The Late Mattia Pascal, and Calvino’s The Cosmicomics. P/NP or letter grading.

152. Italy between Europe and Africa. (4) Lecture, three hours. Knowledge of Early Italian history and culture of time. P/NP or letter grading.

158. Women, Gender, and Sexuality in Italian Cul- ture. (4) (Same as Gender Studies M158.) Lecture, three hours. Knowledge of women’s roles, images of femininity and masculinity, patriarchy, myths of Madonna and Latin lover, condition of women in Italian society through history, politics, liter- ature, film, and other media. Italian majors required to read texts in Italian. P/NP or letter grading.

189. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth through supplemental read- ings, papers, or other activities. May be repeated for credit. Individual honor contract required. Honors content noted on transcript. Letter grading.

189HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. De- signed as adjunct to upper-division lecture course. In- dividual study with lecture course instructor to explore topics in greater depth through supplemental read- ings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract re- quired. Honors content noted on transcript. Letter grading.

191. Variable Topics Research Seminars: Italian Studies. (4) Seminar, three hours. Research seminar with focus on themes and issues outside uniquely Italian literature and culture. Limited to 10 students. Enforced requisites: course 110, 115, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible stu- dents. Honors content noted on transcript. P/NP or letter grading.


199A. Directed Research in Italian. (2–4) Tutorial, to be arranged. Limited to juniors/senior. Supervised individual research or investigation under guidance of faculty mentor. Culminating paper or project required. May be repeated for credit. Individual contract re- quired. P/NP or letter grading.

199B. Directed Capstone Research in Italian and Italian and Special Fields. (4) Tutorial, to be ar- ranged. Requires: courses 100 and at least four re- quired courses for the major. Limited to senior Italian and Italian and Special Fields majors. Supervised indi- vidual research under guidance of faculty mentor. Capstone tutorial in which interdisciplinary paper (20 to 25 pages) is to be written in either Italian or English that requires students to synthesize their knowledge of Italian or Italian and one special field of study. Indi- vidual contract required. Letter grading.

Graduate Courses

201. Bibliography and Methods of Research. (4) Lecture, three hours. P/NP or letter grading.

205. Studies in Criticism and Theory. (4) Seminar, three hours. History, theory, and practice of criticism. Presentation, discussion, and application of funda- mental currents in aesthetics and criticism from Plato and Aristotle to present. Areas that require students to synthesize their knowledge of Italian or Italian and one special field of study. Indi- vidual contract required. Letter grading.

210. Studies in Early Italian Literature. (4) Lecture, three hours. Topics include origins of Italian language and study of early texts. Readings include early po- etry of Central and Northern Italy, and Dolce Stil Novo. S/U or letter grading.

214A-214F. Studies in Medieval Literature. (4 each) Lecture, three hours. S/U or letter grading. 214A. La Divina Commedia. 214B. Dante’s Other Works, 214C. Petrarch’s Canzoniere. 214D. Boccaccio’s Decam- erone. 214E. Boccaccio’s Other Works. 214F. Variable Topics. Variable-content seminar on themes and is- sues of medieval literature, with coverage of works of authors such as St. Francis of Assisi or Jacopone de Todi.


216A-216E. Studies in the Renaissance. (4 each) Lecture, three hours. S/U or letter grading. 216A. Ma- rchialle and Renaissance Political Thought. 216B. Ari- osto and Renaissance Epic. 216C. Tasso. 216D. Re- naissance Theater. 216E. Variable Topics. Variable- content seminar on themes and issues of 16th-cen- tury literature, with coverage of authors such as Vasari, Leonardo, or Benvenuto.


218A-218D. Studies in 18th-Century Literature. (4 each) Lecture, three hours. S/U or letter grading. 218A. Vico. 218B. Alfieri. 218C. Goldoni. (4) Lecture, three hours. S/U or letter grading. 218D. Variable Topics. Variable-content seminar on themes and issues of 18th-century literature, with coverage of au- thors such as Goldoni and La Scuola Siciliana.


220. Studies in Turn-of-the-Century Literature. (4) Lecture, three hours. Topics include Verdi and Ver- razzoli, political poetry, Gabriele D’Annunzio, and poetry of Carducci and Pascoli. S/U or letter grading.

221A-221E. Studies in 20th-Century Literature. (4 each) Lecture, three hours. S/U or letter grading. 221A. Variable Topics. Variable-content seminar on themes and issues of 20th-century literature, with cov- erage of authors such as D’Annunzio, Verzà, Marinetti, and Pirandello. 221B. Contempoty Poetry. Analysis
of legacy of two major figures in Italian poetry from World War II—Ungaretti and Montale. Thorough examination of movements and individual poets active in the 1960s and 1970s. 221C. 20th-Century Narrative to World War II: Assessment of turn-of-the-century narrative patterns (D’Annunzio) and analysis of radical innovations brought about by such towering figures as Pirandello, Svevo, Bernari, Marinetti, etc. 221D. 20th-Century Narrative since World War II: In-depth examination of some major works that have made contemporary Italian literature famous throughout the world, with special emphasis on study of formalistic modes adopted by the neo-avant-garde. 221E. Pirandello and Contemporary Theater. Thorough reading of theatrical texts, accompanied by analysis of how the plays have been realized on stage by important directors such as Streher, Ronconi, and the playwrights themselves. Emphasis on ritualistic implications of the theatrical performance.

222A-222B. Comparative Romance Historical Grammar. (4–4) Lecture, three hours. Each course may be taken independently for credit. S/U or letter grading. 222A. Phonology. Principal sound changes from late Latin to main Romance dialects. 222B. Morphology and Syntax. Prime morpho-syntactic changes of formalistic modes adopted by the neo-avant-garde. Throughout the world, with special emphasis on study from late Latin to main Romance dialects.

223. Structures of Modern Italian. (4) Lecture, three hours. Descriptive analysis of basic features of standard Italian from synchronic, typologic vantage. Topical emphasis may vary annually, but core progression departs from phonology (e.g., syllable types, prosodic patterns, phrasal phonetics), moves through morphologic constituents, passing to sentence sequences (coordination, ellipses, etc.) S/U or letter grading.

224. Italo–Romance Dialectology. (4) Lecture, three hours. Differentiation of late spoken Latin into myriad varieties spoken in Italy. Attention to discrete language types (e.g., Sardinian, Ladino, Friulan, and Franco-Provençal). Consideration of present-day sociolinguistic pressures. S/U or letter grading.

225. Cultural History of Italian Language. (4) Lecture, three hours. Historical survey of development of Italian language from medieval times to unification of country in 1861. Questione della lingua, general acceptance of Florentine speech, and its evolution into national language. S/U or letter grading.

230A-230B. Folk Tradition in Italian Literature. (4–4) Lecture, two hours. S/U or letter grading. M241. Seminar: Political Geography of Italy. (4) (Same as Geography M292.) Seminar, three hours; reading period, two hours. Themes in political geography with particular emphasis on Italy. May be repeated for credit. S/U or letter grading.

250A-250D. Seminars: Dante. (4 each) Seminar, three hours. S/U or letter grading.

518  / Labor Studies

Labor Studies is an interdisciplinary field of scholarship that encompasses historical and contemporary study of the sociocultural economic, legal policy, and political forces that shape the lives of working people, labor markets, employment practices, and social movements seeking greater economic equity for workers and their communities. Labor studies also embraces the insights of critical race, ethnic, working class, and gender studies in order to understand work and social movements as a multidimensional site of study. Labor studies students gain a strong background in social scientific analysis and applied research, and have many opportunities for civic engagement. The program is intended for students who wish to gain an in-depth understanding of the broad array of issues related to labor, work, and social movements. Students are strongly encouraged to meet with a faculty and student coordinator to create a pathway to graduation and to create a curriculum guide that consists of either a coherent integration of courses according to a thematic or topical investigation or, alternatively, a comprehensive survey of the main issues involved in the study of labor and social change.

Graduates with a bachelor’s degree in Labor Studies are prepared for careers in nonprofit advocacy, public service, and labor and social movements broadly defined. With ample opportunities to develop and apply a variety of research modalities through coursework, students are also prepared to succeed in graduate and professional school programs in a wide variety of fields.

**Undergraduate Study**

Labor Studies is interdisciplinary by its nature, drawing on a variety of fields for instructors and researchers. Labor Studies majors and minors become part of an existing interdisciplinary research community with strong ties to researchers and teachers in the social sciences and professional schools. The Labor Studies major is a designated capstone major. Undergraduate students fulfill a research-intensive capstone course or service learning experience in their senior year.

**Labor Studies BA**

**Capstone Major**

The Labor Studies major offers an interdisciplinary approach to the study of inequality at work and in the community. The program prepares undergraduates for a wide range of careers including but not limited to labor relations; human resource management; human rights, labor and community organizing; business; law; domestic and international government work; nonprofit management; organizational leadership; economic forecasting; education; social work; and social welfare. To be admitted to
the Labor Studies major, students must have a minimum grade point average of 2.5 and must have completed all non-language Labor Studies preparation for the major courses. Students must complete an application process, and file a petition to be admitted for the major at the program’s office.

Learning Outcomes
The Labor Studies major has the following learning outcomes:

• Demonstrated familiarity and competence in a range of interdisciplinary methodologies and approaches
• Demonstrated knowledge of the field of labor studies acquired through coursework
• Demonstrated familiarity with dynamics of social movements through study and/or experience
• Demonstrated ability to conceive and execute an original research project, either individually or in a research group
• Demonstrated ability to communicate research findings to academic and nonacademic audiences

Admission
To be admitted to the Labor Studies major, students must have a minimum grade point average of 2.5 and must have completed all non-language Labor Studies preparation for the major courses. Students must complete an application process, and file a petition to be admitted for the major at the program’s office.

Preparation for the Major
Required: Labor Studies 10 and two lower-division courses selected from African American Studies 1, M5, Asian American Studies 10, 20, 40, 50, Chicana and Chicano Studies 10B, Gender Studies 10, Geography 4, History 28, 88, 12A, 12B, 12C, Honors Collegium 82, Political Science 60, Public Policy 10A, 10B, Sociology M5, 51, Spanish 44, or Labor Studies M1A, M1B, M1CW.

Transfer Students
Transfer applicants to the Labor Studies major with 90 or more units must complete as many of the following introductory courses as possible prior to admission to UCLA: one interdisciplinary labor history or one social structure and contemporary conditions course related to labor and/or social movements.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

The Major
Required Core Course (4 units): Labor Studies 101.

Students may petition, prior to enrollment in the course, apply other topical upper-division courses with substantial labor-related content.

Capstone Research and/or Community-Engaged/Internship Experience (8 units): During their senior year, students must complete research-intensive capstone courses, community-engaged/internship experiences, or a combination of both, selected from Labor Studies 191A, 194A, 194B, 195A, 195B, or an approved internship through the Center for Community Learning.

Each major course must be taken for a letter grade, and students must have an overall grade-point average of 2.0 or better.

Labor Studies Minor
The Labor Studies minor augments study in a traditional field. Students are required to complete both a departmental major and this minor. The faculty adviser certifies completion of the program.

To enter the minor, students must be in good academic standing, have a 2.5 grade-point average or better, have completed 45 units, and file a petition and meet with the faculty adviser and minor coordinator in 9244 Bunche Hall, 310-206-0812. Students are encouraged to meet early with the academic adviser to declare the minor and design a coherent program of coursework.

Required Core Course (4 units): Labor Studies 101.


Students may petition, prior to enrollment in the course, apply other topical lower-division courses with substantial labor-related content.

Labor Studies Lower-Division Courses
M1A-M1B-M1CW. Work, Labor, and Social Justice in the United States (Formerly numbered Labor and Workplace Studies M1A-M1B-M1CW) (Same as Clusters M24A-M24B-M24CW). Course M1A is enforced requisite to M1B, which is enforced requisite to M1CW. Limited to first-year freshmen. Letter grading. M1A-M1B. Lecture, three hours; discussion, two hours. Exploration of the people and role of labor movement as force for social justice. M1CW. Special Topics. Seminar, three hours. Enforced requisite: course M1B. Topics include labor law/history, gender, race, and workplace. Satisfies Writing II requirement.

10. Introduction to Labor and Workplace Studies. (Formerly numbered Labor and Workplace Studies 10.) Lecture, three hours; discussion, one hour. Aspects of past labor movement and contemporary labor movement; impact of this transformation on working people, and role of labor movement as force for social justice.

19. Flat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics. May be repeated for credit.

89HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to lower-division lecture course. Individual honors contract required.


101. Introduction to Labor and Social Movements in Los Angeles. (4) Seminar, three hours. Designed for honors students. Honors content noted on transcript. P/NP or letter grading.

Upper-Division Courses
101. Introduction to Labor and Social Movements in Los Angeles. (4) Seminar, three hours. Designed for honors students. Honors content noted on transcript. P/NP or letter grading.

109. Honors Seminars. (1) Seminar, two hours. Limited to 20 students. Designed as adjunct to lower-division lecture course. Individual honors contract required.

89HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to lower-division lecture course. Individual honors contract required.


89HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to lower-division lecture course. Individual honors contract required.


Upper-Division Courses
101. Introduction to Labor and Social Movements in Los Angeles. (4) Seminar, three hours. Designed for honors students. Honors content noted on transcript. P/NP or letter grading.

109. Honors Seminars. (1) Seminar, two hours. Limited to 20 students. Designed as adjunct to lower-division lecture course. Individual honors contract required.

M125. Chicano/Latino Community Formation: Critical Perspectives and Oral Histories. (4) (Formerly numbered Labor and Workplace Studies M125.) (Same as Chicana and Chicano Studies M119.) Lecture, four hours. Analysis of historical formation and development of Chicano/Latino communities in 20th-century, with focus on labor, immigration, economic structures, electoral politics, and international dimensions. Letter grading.

M125. U.S./Mexico relations. (4) (Formerly numbered Labor and Workplace Studies M125.) (Same as Chicana and Chicano Studies M125.) Lecture, four hours. Examination of complex dynamics in relationship between advanced industrial economies and developing countries. P/NP or letter grading.

126. Farm Worker Transnational Struggle. (4) (Formerly numbered Labor and Workplace Studies M126.) Lecture, three hours; discussion, one hour. Focus on historical and contemporary issues farm workers face in restructured economy, and class, racial, and gender dynamics that shape their work experiences and economic and political opportunities in society at large. Study also covers gender, race, and class conflicts in workplace and during collective struggles for equality in transnational settings. Emphasizes role of political and cultural legacy of farm workers’ struggle in U.S. and its long-lasting impact on labor movement and immigrant workers’ and social justice movements. Special focus on organizing of United Farm Workers and Farm Laborers Organizing Committee, and their relationship to AFL-CIO, other unions, and their influence on Chicano Movement. Letter grading.

M127. Farmworker Movements, Social Justice, and United Farm Workers Legacy. (4) (Formerly numbered Labor and Workplace Studies M127.) (Same as Chicana and Chicano Studies M127.) Lecture, four hours. Designed for juniors/seniors. Historical and political context and practical understanding of farm workers’ experiences across U.S.-Mexico border, and of legacy of United Farm Workers and other farm worker unions. P/NP or letter grading.

M128. Race, Gender, and U.S. Labor. (4) (Formerly numbered Labor and Workplace Studies M128.) (Same as Chicana and Chicano Studies M128.) Lecture, four hours. Designed for juniors/seniors. Introduction to historical and political context for understanding ideological nature of manner in which media culture produces ideas to perceive various dominant and dominated and/or colonized groups of people. Ways in which women, gay, lesbian, bisexual, transgendered, racial, and ethnic marginalized peoples, class relations, and other subaltern or subordinated groups are presented and often misrepresented in media. Investigation and employment of practical applications of communications and feminist theories for understanding ideological nature of stereotype and narrative representations in popular media, genre, media and gender, feminism, and critical discourse analysis. Letter grading.

M134SL. Engaging Immigrants and Their Families. (5) (Formerly numbered Labor and Workplace Studies M134SL.) (Same as Chicana and Chicano Studies M134SL.) Seminar, two hours; discussion, two hours; field placement, two hours. Seminar and fieldwork, two hours. Examination of immigrant landscape in Los Angeles—truly transnational and multiracial, with diverse roots from Mexico, Central and South America, and developing countries. P/NP or letter grading.

M136. Working Families and Educational Inequalities in Urban Schools. (4) (Formerly numbered Labor and Workplace Studies M136.) Seminar, three hours; fieldwork, five hours. Examination of complex relationships among working-class and poor communities and inequalities in American urban schools. Interdisciplinary frameworks that address issues of race, ethnicity, and immigration, schools viewed as sites where inequalities are produced and resisted. Review of history of exclusionary treatment and divergent conceptual frames that educational researchers have used to understand notion of inequality, access to quality public education, and how race, ethnicity, and class affect school experiences for working-class and poor communities. Look inside school policies and service learning opportunity to examine systems, structures, and everyday practices that sustain and reproduce inequality and policies that intend to remedy racial, ethnic, and gender inequalities in schooling practices. Opportunity to investigate issues of working-class families and inequalities as they relate to students’ own communities and experiences. P/NP or letter grading.

M144. Women’s Movement in Latin America. (4) (Formerly numbered Labor and Workplace Studies M144.) (Same as Chicana and Chicano Studies M144 and Gender Studies M144.) Lecture, four hours. Course on women’s movements and feminism in Latin America and Caribbean to examine diverse social movements and locations from which women have launched political and gender struggles. Discussion of forms of feminism and women’s consciousness that have emerged out of indigenous rights movements, environmental struggles, labor movements, Christian-based communities, peasant and rural organizing, and new social movements that have emerged from race, sexuality, feminism, and human rights. Through comparative study of women’s movements in diversity of political systems as well as national and transnational arenas, students gain understanding of historical contexts and political conditions that give rise to women’s resistance, as well as major debates in field of study. P/NP or letter grading.

M149. Media: Gender, Race, Class, and Sexuality. (4) (Formerly numbered Labor and Workplace Studies M149.) (Same as Communication M149 and Gender Studies M149.) Lecture, four hours; activity, one hour. Limited to junior/senior Communication and Gender Studies majors and Limited to junior/senior Communication and Gender Studies majors and Limited to senior Communication and Gender Studies majors. Lecture, four hours. Introduction to theory and practice of cultural studies. Letter grading.

152. Work, Social Justice, and Arts. (4) (Formerly numbered Labor and Workplace Studies M152.) Lecture, three hours; field visit. Analysis of how art (in cartoons, poster art, murals, photography, film, visual art, theater, performance, dance, and music) has been influential in popular movements for economic, racial, social justice by artistic and cultural movements. Focus on understanding of manner in which media culture produces ideas to perceive various dominant and dominated and/or colonized groups of people. Ways in which women, gay, lesbian, bisexual, transgendered, racial, and ethnic marginalized peoples, class relations, and other subaltern or subordinated groups are presented and often misrepresented in media. Investigation and employment of practical applications of communications and feminist theories for understanding ideological nature of stereotyping and narrative representations in popular media, genre, media and gender, feminism, and critical discourse analysis. Letter grading.

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on themes of work, labor, and art. Exploration of spectrums of art forms (dance, music, sculpture, theater, visual art, film, museum curation) that have been produced and reproduced as reflections of work, labor, and social justice struggles in U.S. P/NP or letter grading.

M153. Stories of Struggle: Work, Class, and Narrative in Contemporary America. (4) (Formerly numbered Labor and Workplace Studies 153.) Lecture, three hours. Overview of contemporary working narratives. Investigation of how working-class Americans from diverse backgrounds have narrated their struggles with poverty, education, work, parenthood, bodily suffering, and how readers learn from these struggles as students, writers, and activists. Emphasis on 21st-century narratives. Analysis of variety of genres, including poetry, lyrics, short stories, journalism and reportage, novels, memoir, and autobiography, for how they portray working class people and what they offer working class movement culture. Consideration of class as intersectional category of experience along with race, gender, and sexuality. Students create narratives about their work, and contribute to body of working class literature through memoir, fiction, poetry, or journalism. P/NP or letter grading.

M165. Sociology of Race and Labor. (4) (Formerly numbered Labor and Workplace Studies 165.) (Same as Asian American Studies M166 and Sociology M165.) Lecture, three hours; discussion, one hour. Using combination of cases, statistical data, and social science theories. Emphasis on relationships between race/ethnicity, employment, and U.S. labor movement. Analysis of underlying racial divisions in workforce and how they evolved historically. Consideration of how circumstances under which workers and unions have excluded people of color from jobs and unions, as well as circumstances under which workers and unions have organized people of color into unions and how these circumstances have changed over time. Overview of history of immigration and immigration rights movement, and their relationship to democratic governance. P/NP or letter grading.

M166A. Immigrant Rights, Labor, and Higher Education. (4) (Formerly numbered Labor and Workplace Studies 166A.) (Same as Asian American Studies M166A and Chicana and Chicano Studies M165A.) Lecture, three hours; discussion, one hour. New immigrant rights movement, with particular attention to labor and higher education. Overview of history of immigrant rights movement and examination of development of coalition efforts between labor movement and immigrant rights movement nationally and locally. Special consideration of immigrant student organizing and education, challenges facing undocumented immigrant students, and legislative and policy issues that have emerged. Students conduct oral histories, family histories, and analysis of immigration and immigration rights, write poetry and spoken word about immigrant experience, and work to collectively develop student publication on immigrant students in higher education. P/NP or letter grading.

M166B. Research on Immigration Rights, Labor, and Higher Education. (4) (Formerly numbered Labor and Workplace Studies 166B.) (Same as Asian American Studies M166B and Chicana and Chicano Studies M156B.) Seminar, two hours. Requisite: course M166A. Expansion of research conducted by students in course M166A involving oral histories, research and/or higher education, and evaluation of legislation and legal issues impacting undocumented students. Letter grading.

M166C. Research on Immigrant Students and Higher Education. (4) (Formerly numbered Labor and Workplace Studies 166C.) (Same as Asian American Studies M166C and Chicana and Chicano Studies M156C.) Seminar, three hours. Enforced requisites: courses M166A, M166B. Expansion of research conducted by students in courses M166A and M166B involving oral histories, research on immigration/labor/higher education, and evaluation of legislation and legal issues impacting undocumented students. Design of a class project, where students work on showcasing all material collected throughout year. Letter grading.

M167. Worker Center Movement: Next Wave Organizing for Justice for Immigrant Workers. (4) (Formerly numbered Labor and Workplace Studies M167.) (Same as African American Studies M167, Asian American Studies M163, and Chicana and Chicano Studies M163.) Development of theoretical and practical understanding of worker center movement, with focus on historical factors that have led to emergence and growth of worker centers. Role of workers organizing multilocal and multiracial campaigns for workplace and economic justice. Transnational cross-border solidarity issues and rights of undocumented workers. P/NP or letter grading.


M170. Improving Worker Health: Social Movements, Policy Debates, and Public Health. (4) (Formerly numbered Labor and Workplace Studies 170.) (Same as Community Health Sciences CM170.) Lecture, three hours; discussion, one hour. Exploration of intersection between work, health, and environment, analysis of social causes of health disparities, investigation of historical trends and social movements, interpretation of current policy debates, and development of innovative interventions. P/NP or letter grading.

M171. Labor and Economic Development. (4) (Formerly numbered Labor and Workplace Studies 171.) Lecture, three hours. Exploration of economic development and identification of ways that labor and labor unions interact and directly and indirectly shape economic development in how they set wages and work conditions, and could play, in promoting and supporting economic development for all. Letter grading.

M173. Nonviolence and Social Movements. (4) (Formerly numbered Labor and Workplace Studies 173.) (Same as African American Studies M173 and Chicana and Chicano Studies M173.) Lecture, three hours; discussion, one hour. Overview of nonviolence and its impact on social movements both historically and in its present context in contemporary society, featuring lectures, conversations, films, readings, and guest speakers. Exploration of some historic contributions of civil rights struggles and role of nonviolent action throughout recent U.S. history. Examination of particular lessons of nonviolent movements as they demonstrate how specific pattern of development of neoliberalism in U.S. has undermined democratic governance and productions of new demands for change. P/NP or letter grading.

M176. Visual Communication and Social Advocacy. (4) (Formerly numbered Labor and Workplace Studies 176.) Seminar, three hours; fieldwork, two hours. Examination of intersection of visual communication and social advocacy. Focus on understanding visual meaning and use of modern mass media. Letter grading.

M177. Spirituality, Mindfulness, Self-Care, and Social Justice. (4) (Formerly numbered Labor and Workplace Studies 177.) Seminar, three hours. Exploration of role of spirituality and mindfulness practice in labor and immigrant rights movements. Focus on teachings of St. Francis of Assisi, Mahatma Gandhi, Martin Luther King, Thich Nhat Hanh and Malcolm X. Uses specific case studies and workshop experiences. Includes videos and guest lectures by scholars and activists who integrate their spirituality into their work. P/NP or letter grading.

M179A. Neoliberalism, Social Justice, and Community Organizing. (4) (Formerly numbered Labor and Workplace Studies 179A.) Lecture, three hours. Study of intersections of neoliberalism and democracy, and rise of social justice movements primarily in U.S. This offers in-depth, theoretically rigorous, and empirically based understanding of dynamics that have produced specific form of crisis that envelopes contemporary politics. Focus on understanding how prevailing dominant development and current structures of neoliberalism as both ideological frame and form of governance. Examination of some of main works on democratic theory and their relationship to issue of social justice that demonstrate how specific pattern of development of neoliberalism in U.S. since 1980 has undermined democratic governance and produced conditions that have opened levels of inequality. Examination of emergence of grassroots politics that have organized around issues that challenge or contest neoliberal development and attempt to establish principles of democratic inclusion through their struggles for social change. P/NP or letter grading.

M179B. Doing Democracy: Social Movements, Grassroots Politics, and Community Organizing. (4) (Formerly numbered Labor and Workplace Studies 179B.) Lecture, three hours. Focus on community organizing and social movements as mechanisms that have been adopted by marginalized or excluded sectors of society and groups of society to promote their interests and express their needs. Identification of fundamental characteristics of effective and responsive democratic regime. Summarization of critiques that discuss means by which those elements are being undermined in current period. Focus on those efforts to promote social justice as basis for inclusive and responsive form of popular sovereignty through politics of social movements and community organizing. Study of various forms of social movements and different models of and approaches to community organizing and their relationship to democratic governance. P/NP or letter grading.

M180. Southern California Regional Economy. (4) (Formerly numbered Labor and Workplace Studies 180.) (Same as Urban Planning CM137.) Lecture, three hours. Introduction to regional economy, with emphasis on Los Angeles. Key economic sectors, labor market composition, and review of conflicting portrayals depicting dynamics of region. Two all-day bus tours of key economic regions and guest lectures by regional experts included. Letter grading.
182A. Oral History and Collective Memory: Research Methods and Applications of 21st-Century Narratives. (Formerly numbered Labor and Workplace Studies 182A.) Lecture, three hours. Part I of two-part series on oral history, immigrant narratives, and public engagement. Introduction to field of oral history and hands-on experience in interviewing, processing, technology, and public engagement. Readings and discussion of literature about oral history theory and methods, and examination of how scholars use oral history interviews to develop historical narratives about working class communities. Students learn foundational skills for designing and executing oral history research projects and undertake independent fieldwork that allows them to apply methods and approaches studied in class. Emphasis on innovative uses of oral history interviews that bring narratives to wide public audience. No prior knowledge or experience with interviewing and processing required. P/NP or letter grading.

182B. Oral History and Collective Memory: Research Methods and Applications of 21st-Century Immigrant Narratives. (Formerly numbered Labor and Workplace Studies 182B.) Lecture, three hours. Part II of two-part series on oral history, immigrant narratives, and public engagement. Introduction to field of oral history and hands-on experience in interviewing, processing, technology, and public engagement. Readings and discussion of literature about oral history theory and methods. Emphasis on innovative uses of oral history interviews that bring narratives to wide public audience. No prior knowledge or experience with interviewing and processing required. P/NP or letter grading.

187. Special Courses in Labor and Workplace Studies. (4) (Formerly numbered Labor and Workplace Studies 187.) Lecture, three hours; discussion, one hour. Program-sponsored experimental or temporary courses, such as those taught by visiting faculty members. May be repeated for credit. P/NP or letter grading.

188. Special Courses in Labor and Workplace Studies. (4) (Formerly numbered Labor and Workplace Studies 188.) Seminar, four hours. Program-sponsored experimental or temporary courses, such as those taught by visiting faculty members. May be repeated for credit. P/NP or letter grading.

189. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

189HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to upper-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

190A. Introduction to Community-Engaged Research. (4) (Formerly numbered Labor and Workplace Studies M190A.) Seminar, three hours. Enroll by consent of instructor. Special emphasis given to understanding research that has supported different labor movements. P/NP or letter grading.

190B. Community-Engaged Research in Practice: Community Scholars. (4) (Same as Community Engagement and Social Change M190B.) Seminar, three hours. Enroll by consent of instructor. Designed for students participating in Astin Community Scholars Program. Introduction of principles of community-engaged research. Exploration of intentions behind doing research with community residents and organizations, our responsibilities when conducting research in historically disenfranchised communities, and relationships between socially-just research outcomes and methodologies. P/NP or letter grading.

190C. Community-Engaged Research in Practice: Community Scholars. (4) (Same as Community Engagement and Social Change M190C.) Seminar, three hours. Requisites: courses M190A, M190B. Enrollment by consent of instructor. Designed for students participating in Astin Community Scholars Program. Students learn from faculty, community stakeholders, and key community and labor organizations across Los Angeles on six-month, dynamic participatory research project. Focus on current topic affecting Angelenos and their communities, and how our research may include production of policy reports, popular education materials, and/or book publication by UCLA Labor Center and collaborative partners. Primary focus on engaging policy makers and other change agents. P/NP or letter grading.

190D. Internship in Supervised Setting, Community Engagement and Social Change. (2 to 5) (Formerly numbered Labor and Workplace Studies 375.) Internship in supervised setting with community agency, labor union, or other organization concerned with work and employment issues. Placements to be arranged by instructor and provide periodic written reports on their experience. May be repeated for credit. Individual contract with supervising faculty member required. P/NP or letter grading.

195A. Community or Corporate Internships in Labor and Workplace Studies. (4) (Formerly numbered Labor and Workplace Studies 195A.) Tutorial, one hour; fieldwork, 15 hours. Enroll by consent of instructor. Offered in summer only. P/NP or letter grading.

195B. Community or Corporate Internships in Labor and Workplace Studies. (2 to 5) (Formerly numbered Labor and Workplace Studies 195B.) Tutorial, one hour; fieldwork, 15 hours. Enroll by consent of instructor. Offered in summer only. P/NP or letter grading.

199. Directed Research in Labor and Workplace Studies. (2 to 4) (Formerly numbered Labor and Workplace Studies 199.) Tutorial, one hour. Limited to juniors/seniors. Supervised individual research or writing project with focus on independent research project. May be repeated for credit. Individual contract with supervising faculty member required. P/NP or letter grading.
Latin American Studies
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José Luiz Passos, PhD (Spanish and Portuguese)
Fernando Pérez-Montesinos, PhD (History)
Bonnie Taub, PhD (Community Health Sciences)
Kevin B. Terraciano, PhD (History)

Scope and Objectives
UCLA has been in the forefront of U.S. universities with significant teaching and research interests in Latin American studies for more than 50 years. More than 100 faculty members from 22 departments and professional schools regularly offer a broad range of courses with an emphasis on Latin America. These course offerings in the humanities, social sciences, fine arts, and professional fields provide students with a unique opportunity to focus on Latin America, a region of growing importance.

The Latin American Studies program offers the Master of Arts degree. Students pursue specialized coursework and interests, culminating in an interdisciplinary research study. Cooperative degree programs with the UCLA schools of education and information studies, management, public health, and public affairs provide the opportunity to combine the MA in Latin American Studies with a master’s degree in a professional field.

Information on the undergraduate program in this discipline, which offers a major and a minor in Latin American Studies, can be found in the International and Area Studies section.

Graduate Study
Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Division website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Graduate Degrees
The Latin American Studies Program offers the Master of Arts (MA) degree in Latin American Studies.

Three articulated degree programs (Latin American Studies MA/Education MEd, Latin American Studies MA/Library and Information Science MLIS, and Latin American Studies MA/Public Health MPH) and two concurrent degree programs (Latin American Studies MA/Management MBA and Latin American Studies MA/Urban Planning MURP) are also offered.

Latin American Studies
Graduate Courses
205. Latin Americanist Scholarship. (4) Lecture, three hours. Panoramic introduction to methods and issues in various disciplines that study Latin America, with guest lecturers from various fields. (Latin American Studies core course.)
250B. Interdisciplinary Seminar: Latin American Studies. (4) Seminar, three hours. Problem-oriented seminar on critical areas stressed in University’s cooperative programs in Latin America.
250C. Interdisciplinary Topics in Latin American Studies. (4) Reading knowledge of Spanish or Portuguese normally required. Seminar devoted to selected topics of an interdisciplinary nature.
M262. HIV/AIDS and Culture in Latin America. (4) (Same as Community Health Sciences M260.) Seminar, three hours. Exploration of cultural, political, and public health context for people living with and at risk for HIV/AIDS and their families in Latin America. Public health aspects, including epidemiology, commodity concerns and community interventions, medical anthropological study of experience of those impacted, and grass-roots responses, as well as political/economic context addressing poverty and structural violence. Letter grading.
M264. Latin America: Traditional Medicine, Shamanism, and Folk Illness. (4) (Same as Anthropology M233S and Community Health Sciences M264.) Lecture, three hours. Recommended preparation: Community Health Sciences 132, bilingual English/Spanish skills. Examination of role of traditional medicine and shamanism in Latin America and exploration of how indigenous and mestizo groups diagnose and treat folk illness and Western-defined diseases with variety of health-seeking methods. Examination of art, music, folk illness and Western-defined diseases with variety of health-seeking methods. Letter grading.
M268A-M268B. Seminars: Recent Latin American History. (4) (Same as History M268A-M268B.) Seminar, three hours. Course M268A is prerequisite to M268B. Reading knowledge of Spanish and Portuguese normally required. Seminar devoted to selected topics of interdisciplinary nature. In Progress (M268A) and letter (M268B) grading.
291A-291B. Variable Topics in Latin American Studies. (4–4) Seminar, three hours. Selected topics on Latin America. May be repeated for credit with topic change. S/U or letter grading.
501. Cooperative Program. (2 to 8) Preparation: consent of UCLA graduate adviser and graduate dean, and host campus instructor, department chair, and graduate dean. Used to record enrollment of UCLA students in courses taken under cooperative arrangements with USC. S/U grading.
596. Directed Individual Study or Research. (2 to 8) Tutorial, to be arranged. May be repeated, but only 4 units may be applied toward the minimum graduate course requirement. S/U or letter grading.
597. Preparation for MA Comprehensive Examination. (4) Tutorial, to be arranged. Ordinarily taken only during term in which student is being examined. S/U grading.
598. Research for and Preparation of MA Thesis. (4) Tutorial, to be arranged. Only 4 units may be applied toward minimum graduate course requirement. S/U grading.

Law
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LaToya J. Baldwin Clark, JD, MA, PhD, Acting
Asli U. Bâli, JD, MPhil, MPH, PhD
Mario Biagioli, MFA, MA, PhD
LaToya J. Baldwin Clark, JD, MA, PhD
Taimie L. Bryant, JD, MA, PhD
Daniel J. Bussell, JD
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Ann E. Carlson, JD (Shirley and Ralph Shapiro Professor of Environmental Law)
Jennifer M. Chacón, JD
Beth A. Colgan, JD
Kimberle W. Crenshaw, JD, LLM (Promise Institute Professor of Human Rights)
Scott L. Cummings, JD (Robert Henigson Endowed Professor of Legal Ethics)
Joshua F. Dienstag, MA, PhD
Sharon Dolovich, JD, PhD
Ingrid V. Eagly, JD
Kristen E. Eichensehr, JD, MPhil, Acting
Blake E.B. Emerson, JD, MA, MPhil, PhD, Acting
Stephen A. Gardbaum, JD, CPE, MSc, PhD (Stephen Yezell Endowed Professor of Law)
Robert D. Goldstein, JD, MEd
Laura E. Gómez, JD, MA, PhD
Mark F. Grady, JD
Mark D. Greenberg, JD, DPhil
Cheryl L. Harris, JD (Rosalind and Arthur Gilbert Foundation Endowed Professor of Civil Rights and Civil Liberties)
Barbara Herman, MA, PhD (Gloria and Paul Griffin Professor of Philosophy)
Jill R. Horwitz, JD, MA, PhD
Leslie N. Johns, MA, MS, PhD

Latin American Studies / 523
The School of Law offers the Juris Doctor (JD), Doctor of Juridical Science (SJD), Master of Laws (LLM), and Master of Legal Studies (MLS) degrees.


The undergraduate courses offered by the School of Law are designed for undergraduate students only. For information about the legal curriculum of the School of Law, see the school website.

Law, Undergraduate Lower-Division Courses

19. Fiat Lux Freshman Seminars. (1 Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Courses

156. American Political Thought Seminar. (3 Seminar, 13 hours. Examination of American political thought from founding to writings of Abraham Lincoln. Readings include Locke's Second Treatise of Government, Declaration of Independence, Federalist numbers 10 and 51, and numerous writings and speeches of Lincoln, including extensive portions of Lincoln-Douglas debates. Emphasis on class discussion. Letter grading.

161. Consumer Bankruptcy Policy Seminar. (3 Seminar. 13 hours. Examination of consumer bankruptcy policy with one architect of 1978 Bankruptcy Code. Discussion of debt payment in ancient Babylon where spouses and siblings could be sold into slavery for nonpayment of relative's debt. Examination of bankruptcy in U.S. history and analysis of heart of consumer bankruptcy policy, such as when debtors should be released from debts, what property debtors should keep, and how debtors can put together repayment plans. P/NP or letter grading.


163B. International Human Rights Colloquium. (1 Lecture, one hour. Requisite: course 163A. Continuation of course 163A. P/NP or letter grading.
170. Race and Racism in California Legal History, 1846 to Present. (4) Lecture, 14 hours. Limited to freshmen/sophomores. Exploration of California legal history, with focus on issues of race and racism, beginning with mid-19th-century transition from Mexican Alta California to statehood. Topics include state measures affecting California Indians in 19th century, African Americans in California’s 19th-century history, measures used to curtail Chinese immigration, and the construction of ideas of race and nationhood in California. Topics include the role of race in shaping California’s legal landscape, including the construction of identity and citizenship, and the impact of race on legal decisions and outcomes. Limited to juniors/seniors. Offered in summer only. Lecture and discussion. P/NP or letter grading.

171. Topics in American Constitutional History. (4) Lecture, three hours. Introduction to major themes, events, and case studies in American constitutional history. U.S. Supreme Court decisions and other sources of constitutional meaning, including popular movements and expressions of constitutional principle from actors in other branches of government and in society. Emphasis on constitutional history and ideological context for particular constitutional controversies at various points in American history, with more formal analysis of particular decisions and competing methods of constitutional interpretation considered. Topics include origins of judicial review, debates over meaning of federalism in early republic, slavery and constitutionalism, Reconstruction Amendments, laissez-faire constitutionalism, citizenship and empire, origins of civil liberties, New Deal constitutionalism, and pre-history of Brown versus Board of Education. P/NP or letter grading.

175. Seminar: Individual Rights Protected by U.S. Constitution. (10) Lecture, two hours. Limited to juniors/seniors. Broad introduction to and examination of individual rights protected under Bill of Rights and 14th Amendment to U.S. Constitution, including freedom of speech and press, religious freedom, right to privacy (including procreative rights) and due process of law, constitutional protection against discrimination based on race and gender, and basic criminal procedure protections. Emphasis on primary sources. Prerequisite: course 115. Corequisite: course 116. Letter grading.

180. Special Topics in Law. (4) Lecture, four hours. Topics of special interest to undergraduate students. Specified subjects vary each term depending on particular interest of instructors or students. May be repeated for credit. P/NP or letter grading.

182. Law and Popular Culture. (4) Lecture, four hours. Focus on interface between two important subjects—law and popular culture. Students view series films or television shows related to law, lawyers, and legal system. Discussion of pop culture treatment of subjects such as adversary system, good and bad lawyers, female lawyers, lawyers from lesbian, gay, bisexual, and transgender community, minority lawyers, work life of lawyers, legal education, ethical issues, lawyers as criminal and civil justice, drawing on film theory and filmmaking techniques to deepen understanding of interrelationship between law and popular culture. Illumination of ways in which pop culture products both reflect and change social views about law and lawyers. Offered in summer only. P/NP or letter grading.

183. Law and Order. (2) Lecture, two hours. Introduction to basic principles of criminal law. How to read and interpret judicial cases and provisions of penal code to learn how American criminal justice system works. Discussions structured to simulate experience of typical law school classroom. P/NP or letter grading.

184. Introduction to Legal Education. (4) Lecture, four hours. Preliminary introduction to legal pedagogy and overview of American legal system. Analysis of appellate and U.S. Supreme Court cases and legislative materials to develop foundational law school skills and become familiar with principles of both scholarly and practice-oriented legal analysis. Topics include introduction to case analysis, reading cases, exploring precedents, evidence, separation of powers, and statutory interpretation. P/NP or letter grading.

185. Corporate Mock Trial. (4) Lecture, four hours. Introduction to basic principles of business law, such as how law applies to various business entities, duties and liabilities of corporate officers and directors, and shareholder derivative suits. American legal system and how litigation progresses from filing of complaints through trial. Students participate in mock trial at end of course. P/NP or letter grading.

186. Law and Order. (4) Lecture, four hours. Introduction to basic principles of criminal law. How to read and interpret judicial cases and provisions of penal code to learn how American criminal justice system works. Discussions structured to simulate experience of typical law school classroom. P/NP or letter grading.

187A. Legal History Colloquium. (3) Seminar, two hours. Corequisites: course 193. Reading of scholarly papers prepared by school faculty members and other scholars in fields of legal history, economics, and political science. Preparation of critiques and discussion of issues in seminar setting with author of papers. P/NP or letter grading.

187B. Politics and International Law Colloquium. (3) Seminar, two hours. Corequisite: course 193. Limited to College Honors students. Lectures on alternative theoretical approaches (including realism, institutionalism, and constructivism) to understand relationship between politics and international law. Weekly presentations or papers by 10 leading law and political science scholars from the U.S. and abroad. Reading of scholarly papers, preparation of critiques, and discussion of issues in seminar setting with authors of papers. P/NP or letter grading.

187C. Advanced Topics Research Seminars: Law—California Legal History. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

188. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

189. Variable Topics Research Seminars: Law—California Legal History. (4) Seminar, two hours. Corequisite: course 170. Research project, selected in consultation with faculty member and using original and secondary materials, to be conducted, followed by major presentation of student work to class and writing of major research paper. Letter grading.

190. Journal Club Seminars: Law. (1) Seminar, one hour; discussion, two hours. Corequisite: course 187A. Adjunct course limited to undergraduate students taking law colloquium. Intensive review and follow-up of scholarly papers presented in colloquium series. Reading of legal cases and supplemental material to provide legal framework for each scholarly paper presented in colloquium. Supervised by faculty member in charge of colloquium series. May be repeated for credit. P/NP grading.

191. Directed Research in Law. (1 to 6) Research, one hour; discussion, two hours. Limited to juniors/seniors. Supervised individual research under guidance of faculty mentor. Culminating scholarly paper required. May be repeated for credit. Individual contract required. P/NP or letter grading.

Scope and Objectives

Although the initial focus in lesbian, gay, bisexual, transgender, and queer studies is usually on minority sexualities and transgenderism, it is impossible to study them in any meaningful way without raising questions about gender, race, ethnicity, economics/class, globalism, and the construction of scientific knowledge. Thus lesbian, gay, bisexual, transgender, and queer studies, which may at first seem to concern the private practices of a small number of people, inevitably leads to the much larger study of sexuality and culture. The Lesbian, Gay, Bisexual, Transgender, and Queer Studies program represents an important vantage point from which to investigate the social construction of sexual identity, social control of behavior, changing definitions of the family, and the place of sexual and gender expression in the public and private spheres. Because of the kinds of questions asked, lesbian, gay, bisexual, transgender, and queer studies is the...
site of some of the most exciting work being done today on the relationship between sexuality and culture.

The minor in Lesbian, Gay, Bisexual, Transgender, and Queer Studies offers students the opportunity to study sexuality from a variety of cultural and disciplinary perspectives meant to engage students in some of the most cutting-edge research in lesbian, gay, bisexual, transgender, and queer studies. In addition, seniors in the minor are expected to do a capstone internship in an international, national, or community organization, thereby acquiring invaluable firsthand knowledge, experience, and data. After completing the minor, students should be familiar with the theoretical tools that different disciplines employ to study sexuality. They should be acquainted with some of the many different ways sexuality has been organized in the past and is organized in different cultures in the present and should have an enhanced understanding and appreciation both of the sexual diversity of the world in which they live and of the complex ways in which sexuality intersects with other categories of identity and practice.

Undergraduate Study

Lesbian, Gay, Bisexual, Transgender, and Queer Studies Minor

To enter the Lesbian, Gay, Bisexual, Transgender, and Queer Studies minor, students must have an overall grade-point average of 2.0 or better.

Required Upper-Division Courses (28 units): Lesbian, Gay, Bisexual, Transgender, and Queer Studies M114, 180SL, and five additional courses (including at least one 181 course and one 183 course) to be selected from Asian American Studies 187C, Education 147, Gender Studies 187, Lesbian, Gay, Bisexual, Transgender, and Queer Studies M101A through M101D, M107B, M115, M116, M125, M126, M133, M136, M137, M141, M142, M147A, M167, M171, M181, M183, M184, M191D, M191E, Psychology 129E, Scandinavian 174B, Sociology M162.

Students may petition to apply a non-listed course to the minor if they can show that lesbian, gay, bisexual, transgender, or queer issues represent a significant part (at least 30 percent) of the course content. Students are strongly urged to keep in close contact with the student affairs officer who can help them plan their course of study.

A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor.

Each minor course must be taken for a letter grade, and students must be able to maintain a grade-point average of 2.0 or better in the minor. Successful completion of the minor is indicated on the transcript and diploma.

Lesbian, Gay, Bisexual, Transgender, and Queer Studies

Lower-Division Courses

19. Fiat Lux Freshman Seminars. (1 Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

98. Honors Seminars. (1 Seminar, three hours. Limited to 20 students. Designed as adjunct to lower-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

98HC. Honors Contracts. (1 Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to lower-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be required for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Courses

M101A. Premodern Queer Literatures and Cultures. (5) (Same as English M101A and Gender Studies M105A) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisite: English Composition 3. Survey of discrete period of queer literature from beginning to circa 1850. Works by such writers as Sappho, Plato, Marlowe, Shakespeare, and Thomas Gray may be included. May be repeated for credit with topic or instructor change. P/NP or letter grading.

M101B. Queer Literatures and Cultures, 1850 to 1970. (5) (Same as English M101B and Gender Studies M105B) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisite: English Composition 3. Survey of discrete period of queer literature and culture from circa 1850 to 1970. Works by such authors as Walt Whitman, Radclyffe Hall, Gertrude Stein, Virginia Woolf, Langston Hughes, Tennessee Williams, Henry Blake Fuller, and James Baldwin may be included. May be repeated for credit with topic or instructor change. P/NP or letter grading.

M101C. Queer Literatures and Cultures after 1970. (5) (Same as English M101C and Gender Studies M105C) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisite: English Composition 3. Examination of cultural production, specifically literature, produced by queers after Stonewall rebellion in New York in 1969, widely regarded as origins or beginning of modern lesbian and gay rights movement in U.S. Writings and films by such authors as Andrew Holleran, Leslie Feinberg, Achy Obejas, Essex Hemphill, Audre Lorde, Cheryl Dune, and Alison Bechdel may be included. May be repeated for credit with topic or instructor change. P/NP or letter grading.

M101D. Studies in Queer Literatures and Cultures. (5) (Same as English M101D and Gender Studies M105D) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisite: English Composition 3. Variable specialized studies course in queer literatures and cultures. Topics focus on particular problem or issue in terms of its relationship to queer cultures and writings. May be repeated for credit with topic or instructor change. P/NP or letter grading.

M107B. Studies in Gender and Sexuality. (5) (Same as English M107B and Gender Studies M107B) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisite: English Composition 3. Examination of literary and cultural production through lens of gender and sexuality. Depending on instructor, emphasis may be historical, regional, national, comparative, thematic and interdisciplinary, vectors of identity and representation such as race and ethnicity. May be repeated for credit with topic or instructor change. P/NP or letter grading.

M114. Introduction to Lesbian, Gay, Bisexual, Transgender, and Queer Studies. (5) (Same as Gender Studies M114) Lecture, three hours; discussion, one hour. Introduction to history, politics, culture, and scientific study of lesbians, gay men, bisexuals, transgendered, and queer people; examination of sexuality and gender as categories for investigation; interdisciplinary theories and research on minority sexualities and genders. P/NP or letter grading.

M115. Topics in Study of Sexual and Gender Orientation. (4) (Same as Gender Studies M115) Lecture/discussion, three hours. Requisite: course M114 or Gender Studies 10. Studies in arts, humanities, social sciences, and/or life sciences on aspects of sexual orientation, gender identity, and lesbian, gay, and/or bisexual issues; variable topics may include cultural representations, historical and political change, life and health experiences, and queer or transgender theories; multietnic and cross-cultural emphases. May be repeated for credit. Letter grading.


M118. Queering American History. (4) (Same as Gender Studies M118) Lecture, four hours. Enforced requisite: one prior lesbian, gay, bisexual, transgender, and queer studies course. History of sexual and gender identities in U.S. Topics include changing norms, romantic friendships, medical discourse, liberation politics, post-Stonewall culture, AIDS, transgender movement, queer theory, and politics. P/NP or letter grading.

M125. Exploring Intersections of Ability and Sexuality. (4) (Same as Disability Studies M125) Lecture, three hours. Exploration of identity as means of understanding cultural formations, dominant/ nondominant power dynamics, and systems of visual representation. Intersectional approach to explore how ability and sexuality intersect, overlap, and change notions of identity. Use of scholarly texts from disability studies, lesbian, gay, bisexual, and transgender studies, popular culture, performance, and film to investigate factors that shape ability and sexuality as basis for identity. May be repeated for credit with topic or instructor change. P/NP or letter grading.

M126. Feminist and Queer Theory. (5) (Same as English M126 and Gender Studies M126) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisite: English Composition 3. Recommended course from English 120, 121, Feminist and Queer Studies 102, 103, or 104. Investigation of key concepts and debates in study of gender, sexuality, and kinship, with focus on their interrelated significance for making and unmaking culture. Readings inter disciplinary, with possible emphasis on impact of changing ideas of gender and sexuality on specific historical cultures. May be repeated for credit with topic or instructor change. P/NP or letter grading.

M132. Border Consciousness. (4) (Same as Chicana and Chicano Studies M132) Lecture, three hours; discussion, one hour (when scheduled). Investigation through history, popular culture, and mass media of bilingual and bicultural identities produced by geographical and cultural space between Mexico and U.S. Special attention to border consciousness as site of conflict and resistance. Letter grading.
M133, Chicana Lesbian Literature. (4) (Same as Chicana and Chicano Studies M133 and Gender Studies M133.) Lecture, four hours. Examination of intersection of radical First and Third World feminist politics, lesbian sexuality and its relationship to Chicana identity, presentation of Chicana lesbianism in Chicana literature, meaning of familia in Chicana lesbian lives, and impact of Chicana lesbian theory on Chicana/Chicano studies. Letter grading.

M136, Censored! Art and Activism Trail. (4) (Same as Chicana and Chicano Studies M136.) Lecture, four hours. Examination of censorship in visual arts, particularly art of queer Chicana/Chicano and Latina/Latino artists such as Barbara Lépiz, Xavier Hernández, and Dolores. Other centered artists include feminist artist Yolanda López, queer artists Robert Mapplethorpe and David Wojnarowicz, painter Christ Ofili, photographers Sally Mann and Andres Serrano, printmaker Enrique Chagoya, muralist Noni Olaibi, writer Salman Rushdie, and four performance artists—Karen Finley, Tim Miller, John Fleck, and Holly Hughes—whose work was vetoed by chair of National Endowment for Arts (NEA) in 1990 after they had successfully passed through NEA’s peer review process and who came to be known as NEA Four. P/NP or letter grading.

M137, Lesbian, Gay, Bisexual, Transgender, and Queer Politics and Music. (5) (Same as Chicana and Chicano Studies M137.) Lecture, four hours; discussion, one hour. Survey of English-language popular music in 20th century, with focus on lesbians, gay men, and members of other minority communities as performers, and audience members. Letter grading.

M141, African American Women’s History. (4) (Same as African American Studies M141.) Lecture, four hours. Historical examination of black women’s experiences in U.S. from antebellum era to present. By situating black women’s experiences within major historical transitions in American history, exploration of key themes, including gender formation, sexuality, labor and occupation, gender and sexual violence, reproduction, and role of law. How have intersecting forms of oppression impacted black women’s historical lives? How is difference constructed through interrelated and overlapping ideologies of race and gender? How do historians uncover black women’s historical lives and what are challenges to such discoveries? Examination of black women’s individual and collective struggles for freedom from racism, sexism, and heteropatriarchy, as well as black women’s participation in and challenge to social movements, including suffrage, women’s liberation, civil rights movement. Investigation of black women’s intellectual history, including their cultural productions. Letter grading.

M142, Race, Gender, and Punishment. (4) (Same as African American Studies M142.) Seminar, four hours. Interdisciplinary examination of historical and contemporary development of modern prison industrial complex in U.S., with attention to impact of prison industrial complex on immigrants, including undocumented residents, homeless populations, women, African Americans, and transgender nonconforming and lesbian, gay, bisexual, and transgender communities. Why does U.S. have largest prison population in world? What historical conditions and ideologies gave rise to this massive explosion in U.S. prisoner population? What policies have fueled mass imprisonment? Who is behind bars? What effect do mass incarceration and gender and sexuality violence, reproduction, and role of law. How have intersecting forms of oppression impacted black women’s historical experiences? How is difference constructed through interrelated and overlapping ideologies of race and gender? How do historians uncover black women’s historical lives and what are challenges to such discoveries? Examination of black women’s individual and collective struggles for freedom from racism, sexism, and heteropatriarchy, as well as black women’s participation in and challenge to social movements, including suffrage, women’s liberation, civil rights movement. Investigation of black women’s intellectual history, including their cultural productions. Letter grading.

M147A, Psychology of Lesbian Experience. (4) (Same as Gender Studies M147A and Psychology M147A.) Lecture, two hours; discussion, one hour. Requisite: course M141 or Gender Studies 10 or Psychology 10A/B/C. Individual and collective struggles for freedom from racism, sexism, and gender-based community organizations. Students meet on regular basis with instructor and provide periodic reports of their experience. May be repeated for credit. Individual contract with supervising faculty member required. P/NP or letter grading.

M148, Lesbian, Gay, Bisexual, and Transgender Institutions and Organizations. (4) (Same as Chicana and Chicano Studies M148.) Lecture, three hours; fieldwork, five hours. Preparation: one prior les- bian, gay, bisexual, and transgender studies course. Service-learning course that offers opportunity for students to work in lesbian, gay, bisexual, and transgender-related community organizations, to reflect on political, economic, and social context of creation and reception, and wide-ranging interpretive study. No extensive training in literary, musical, visual, or media analysis is required; conceptual and analytical skills to be used are provided. P/NP or letter grading.

M150SL, Queer Activism and Engagement. (4) (Same as Chicana and Chicano Studies M150.) Lecture, three hours; fieldwork, five hours. Benefits stu- dents pursuing minor in Lesbian, Gay, Bisexual, Trans- gender, and Queer (LGBTQ) Studies, those passionate about social justice, or those who want to learn new skills about community engagement. Offers opportunity to work in LGBTQ-related community or- ganizations, to reflect on political and theoretical is- sues involved in such work and such organizations, and to draw ideas from these experiences to prepare students for future work in such organizations, and to draw ideas from various courses they have already taken and test them in settings outside UCLA. P/NP or letter grading.

M167, Contested Sexualities. (4) (Same as Gender Studies M167.) Lecture, three hours; discussion, one hour. Sociology, anthropology, and political science. P/NP or letter grading.

M170, Queer Cultures after Stonewall: Sexual Disi- dence, Performance, and Community in 1970s. (5) Lectures, one hour. Gender studies students are encouraged to test their ideas and theories in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract re- quired. Honors content noted on transcript. Letter grading.

M191D, Topics in Queer Literatures and Cultures. (5) (Same as English M191D and Gender Studies M191D.) Seminar, three or four hours. Enforced requisite: English Composition 3. Consult Schedule of Classes for author, period, genre, or subject to be studied in specific term. May be repeated for credit with topic or instructor change. P/NP or letter grading.

M191E, Topics in Gender and Sexuality. (5) (Same as English M191E and Gender Studies M191E.) Sem- inar, three or four hours. Enforced requisite: English Composition 3. Consult Schedule of Classes for au- thor, period, genre, or subject to be studied in specific term. May be repeated for credit with topic or in- structor change. P/NP or letter grading.

194, Research Group or Internship Seminars: Les- bian, Gay, Bisexual, and Transgender Studies. (2 to 4) Seminar, two hours. Preparation: completion of four courses toward minor. Requisite: course M114. Core- quisite: course 195. Designed for seniors who are doing internship in lesbian, gay, bisexual, or transgender organization. Discussion of organization theo- retical and political issues in context of internship and relation of those issues to ideas explored in minor courses already taken. May be repeated for credit. P/ NP grading.

195, Community or Corporate Internships in Lesbi- an, Gay, Bisexual, and Transgender Studies. (4) Tu- torial, one hour. Preparation: completion of four courses toward minor. Requisite: course M114. Core- quisite: course 194. Limited to seniors. Internship in supervised setting in lesbian, gay, bisexual, or trans- gender community organization. Students meet on regular basis with instructor and provide periodic re- ports of their experience. May be repeated for credit. Individual contract with supervising faculty member required. P/NP or letter grading.

197, Individual Studies in Lesbian, Gay, Bisexual, and Transgender Studies. (2 to 4) Tutorial, one hour. Requisite: course M114. Limited to seniors/juniors. Di- rected program of independent study or research on specific topic within lesbian, gay, bisexual, and trans- gender studies, with scheduled meetings to be ar- ranged between faculty member and student. Tangible evidence of mastery of subject matter required. May be repeated for credit. Individual contract required. P/NP or letter grading.

Scope and Objectives

Students who wish to study life sciences have a choice of eight majors, all of which lead to a Bache- lor of Science degree: Biology; Ecology, Behavior, and Evolution; and Marine Biology (Ecology and Evolutionary Biology Department); Microbiology, Immunology, and Molecular Genetics (Microbiol- ogy, Immunology, and Molecular Genetics Depart- ment); Molecular, Cell, and Developmental Biology (Molecular, Cell, and Developmental Biology De- partment); Neuroscience (Neuroscience Interde- partmental Program); Physiological Science (Inte-
Life Sciences

Lower-Division Courses

1. Evolution, Ecology, and Biodiversity. (5) Lecture, three hours; laboratory, two hours; one field trip. Introduction to principles and mechanisms of evolution by natural selection; population, behavioral, and community ecology; and biodiversity, including major taxa and their evolutionary, ecological, and physiological relationships. P/NP or letter grading.

2. Cells, Tissues, and Organs. (4) Lecture, three hours; discussion, 75 minutes. Enforced requisite: Chemistry 14A or 20A. Introduction to basic principles of cell structure, organization of cells into tissues and organs, and principles of organ systems. Letter grading.

3. Introduction to Molecular Biology. (4) Lecture, three hours; discussion, 75 minutes. Requisites: course 2 (enforced), Chemistry 14C or 30A (may be taken concurrently). Corequisite: course 23L (students must take 23L concurrently with course 3 if they do not plan to take course 13L). Principles of biochemistry and molecular biology. Letter grading.

3A. Introduction to Molecular Biology Laboratory. (1) Laboratory; three hours; discussion, one hour. Enforced corequisite: course 3. Introductory wet-laboratory designed to prepare students for upper-division laboratory courses for all life sciences departments. Use of wet-laboratory/bioinformatics methods and techniques applicable in variety of biological fields, molecular biology, microbiology, genomic biology, bioinformatics, and psychology. Students conduct inquiry-based laboratory experiments and learn basic wet-laboratory skills to guide them to refine their skills to write their own laboratory reports and to work in groups as team. Letter grading.

3H. Introduction to Molecular Biology (Honors). (5) Lecture, two and one half hours; discussion, 90 minutes; movie section, two and one half hours. Enforced requisites: course 2, and Chemistry 14C or 30A. Honors course parallel to course 3, but at a more advanced level. Letter grading.


7A. Cell and Molecular Biology. (5) Lecture, three hours; discussion, 75 minutes. Introduction to basic principles of cell structure and cell biology, biochemistry, and molecular biology. P/NP or letter grading.

7B. Genetics, Evolution, and Ecology. (5) Lecture, three hours; laboratory, 110 minutes. Enforced requisite: course 7A. Principles of Mendelian inheritance and population genetics. Introduction to principles and mechanisms of evolution by natural selection, population, behavioral, and community ecology, and biodiversity, including major taxa and their evolutionary, ecological, and physiological relationships. Letter grading.

7C. Physiology and Human Biology. (5) Lecture, three hours; discussion, 75 minutes. Enforced requisite: course 7B. Organization of cells into tissues and organs and principles of physiology of organ systems. Introduction to human genetics and genomics. Letter grading.

15. Life: Concepts and Issues. (5) Lecture, three hours; discussion, two hours. Introduction to important concepts and issues in the field for non-life sciences majors. Topics include chemistry of life, genetics, physiology, evolution, and ecology—all explored in lecture and debates, with a writing component. P/NP or letter grading.

Life Sciences Core Curriculum

Required: Chemistry and Biochemistry 14A, 14B, 14BL, 14C, and 14D, or 20A, 20B, 20L, 30A, 30AL, and 30B; Life Sciences 30A, 30B, and 40 or 40 Statistics 13, or Mathematics 3A, 3B, and 3C, or 31A, 31B, and 32A; Physics 1A, 1B, 4AL, and 4BL, or 5A, 5B, and 5C.

Students must also complete one of two Life Sciences sequences—either Life Sciences 1, 2, 3, 4, and 23L, or 7A, 7B, 7C, 23L, and 107. They may not substitute courses in either sequence.

Each core curriculum course must be passed with a grade of C– or better, and all courses must be completed with an overall grade-point average of 2.0 or better. Students receiving a grade of D or F in two core curriculum courses, either in separate courses or repetitions of the same course, are subject to dismissal from the major.

Transfer Students

Transfer applicants with 90 or more units must complete the following introductory courses prior to admission to UCLA: one year of general biology with laboratory for majors, preferably equivalent to Life Sciences 1 and 2, or 7A, 7B, and 7C, one year of calculus, one year of general chemistry with laboratory for majors, and one semester of organic chemistry with laboratory. A second semester of organic chemistry or one year of calculus-based physics is strongly recommended but not required for admission.
19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. Biological examples used throughout to gain appreciation of relevance of mathematics to biology. Letter grading.

20. Quantitative Concepts for Life Sciences. (5) Lecture, three hours; discussion, two hours. Preparation: three years of high school mathematics (to algebra II), some basic familiarity with computers. Introduction to variety of quantitative concepts that are relevant to biology. Designed to enhance quantitative skills that are essential for success in life sciences, chemistry, mathematics, and physics courses that make up core curriculum for life sciences majors at UCLA. Biological examples used throughout to heighten appreciation of relevance of mathematics to biology. Letter grading.

23L. Introduction to Laboratory and Scientific Methodology. (3) Lecture, one hour; laboratory, three hours. Preparation: 7A or 7B. Recommended to be taken concurrently with course 7C. Introductory life sciences laboratory designed for undergraduate students. Opportunity to conduct wet-laboratory and cutting-edge research, include experimentation, laboratory experiments, and scientific writing. Students work in teams of three conducting experiments in areas of physiology, metabolism, cell biology, molecular biology, genotyping, and bioinformatics. Letter grading.

30A. Mathematics for Life Scientists. (5) Lecture, three hours; laboratory, one hour. Preparation: three years of high school mathematics (to algebra II), some basic familiarity with computers. Mathematical modeling and dynamic systems in biological systems. Fundamental concepts of single-variable calculus and development of single- and multi-variable differential equations as models of dynamical processes in ecology, physiology, and other subjects in which quantities change with time. Use of free computer program Sage for problem solving, plotting, and dynamical simulation in laboratory. Letter grading.

30B. Mathematics for Life Scientists. (5) Lecture, three hours; laboratory, two hours. Enforced requisite: course 30A. Introduction to concept of matrices and linear transformations to equip students with some basic tools to understand dynamical systems. Introduction to nonlinear systems. Examples from ecological, physiological, chemical, and other systems. Letter grading.

M32. Essential Calculus for Mathematical Biologists. (4) (Same as Computational and Systems Biology M22 and Mathematics AW1) Lecture, three hours; discussion, one hour. Requisites: courses 30A, 30B. Not open to students with credit for Mathematics 31A, 31B, 32A, or 32B. Designed for life sciences students. Methods and results of single and multivariable calculus essential for quantitative training in biology. Limits, differentiation (single and several variables), optimization, integration and methods of integration, Taylor polynomials, and applications to approximation of data. Taylor and other power series, vector valued functions, gradients, and Lagrange multipliers. P/NP or letter grading.

40. Statistics for Biological Systems. (5) Lecture, three hours; laboratory, two hours. Enforced requisite: course 30A. Designed for life sciences students. Introduction to statistics with emphasis on computer simulation of data. Hands-on experience for traditional and multi-based approach. Simulations allow for deeper understanding of statistical concepts, and are applicable to wider class of distributions and estimators. Students learn simple programming language to carry out statistical simulations and apply them to classical problems of elementary statistics. Letter grading.

89. Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to lower-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

98H. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to lower-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 2 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

97. Variable Topics in Life Sciences. (1 to 4) Seminar, two to four hours. Preparation: Two or more courses. Individual or development in life sciences. Consult Schedule of Classes for topics and instructors. May be repeated once for credit with consent of instructor. P/NP or letter grading.

98XA. PEERS Collaborative Learning Workshops for Life Sciences Majors. (1) Seminar, three hours. Corequisite: associated undergraduate lecture course in life sciences. Limited to program students. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. Letter grading.

101. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. Letter grading.

101A. Introduction to Collaborative Learning Theory and Practice. (1) Seminar, one hour. Requirements: one course from 1, 2, 3, 4, 7A, 7B, 7C, 20, 23L, 30A, 30B, 40, 107, 110. Training seminar for undergraduate students who are selected for learning assistant (LAs) program. Exploration of current topics in pedagogy and education research focused on methods of teaching and their practical application in small-group settings. Students practice communication skills with frequent assessment of and feedback on progress. Letter grading.

102B. Methods and Application of Collaborative Learning Theory in Life Sciences. (3) Seminar, one hour; clinic, six hours. Requisites: course 102A (may be taken concurrently) and at least one term of prior experience in same course in which collaborative learning theory is practiced and refined under supervision of instructors. With instructor guidance, students apply pedagogical principles based on current education research, assist with development of innovative instructional materials, and receive frequent feedback on their progress. May be repeated three times for a maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

102C. Methods and Application of Collaborative Learning Theory in Life Sciences. (4) Seminar, three hours; discussion, nine hours. Requisites: concurrent course 102A (may be taken concurrently) and at least one term of prior experience in same course in which collaborative learning theory is practiced and refined under supervision of instructors. With instructor guidance, students apply pedagogical principles based on current education research, assist with development of innovative instructional materials, and receive frequent feedback on their progress. May be repeated three times for a maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

102D. Methods and Application of Collaborative Learning Theory in Life Sciences. (4) Seminar, three hours; discussion, nine hours. Requisite: course 102A (may be taken concurrently). Letter grading.

102E. Methods and Application of Collaborative Learning Theory in Life Sciences. (4) Seminar, three hours; discussion, nine hours. Requisite: course 102A (may be taken concurrently). Letter grading.
Linguistics

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Scope and Objectives

The goal of the Department of Linguistics is the enrichment of knowledge about the nature, grammar, and history of human language. Linguistics is a theoretical discipline, akin to philosophy, anthropology, and cognitive psychology. It is important for prospective students to understand that studying linguistics is not a matter of learning to speak many languages. Linguistics courses draw examples from the grammars of a wide variety of languages, and the more languages linguists know about in depth (as distinct from possessing fluency in the use of them), the more likely they are to discover universal properties. It is also possible to pursue these universal aspects of human language through the intensive in-depth study of a single language. This accounts for the high proportion of examples from English and familiar European languages found in linguistics courses and research publications.

The core areas of linguistic theory are phonology (with its roots in phonetics), morphology, syntax, and semantics. A grammar is a system of rules that characterize the phonology, morphology, syntax, and semantics of a natural language. The properties of grammars are the central focus of linguistic theory.

Because language is central to all humanistic disciplines, as well as to several social sciences areas, it is studied from many points of view. Linguistics itself cannot be said to recognize a single optimal approach to the subject. Hence, the courses provide a variety of approaches that reflect the diversity of the field.

The Linguistics Department has consistently been ranked among the very best linguistics departments in the country. It offers programs leading to the Bachelor of Arts, Master of Arts, and PhD degrees.

Undergraduate Study

The majors described below are of three types: (1) a major that concentrates entirely on general linguistics; (2) several majors that combine the basic courses of the general program with a language concentration or other related fields, and (3) a major in Applied Linguistics. The combined majors in conjunction with instructional certification programs are especially appropriate for students who have non-university teaching careers as goals.

A 2.0 grade-point average in linguistics courses is required for all Linguistics Department majors.

Linguistics BA

Linguistics is the study of languages as a general phenomenon. It aims to help answer broad questions concerning the nature of human cognition and communication. Students will learn about language universals as well as the ways in which languages differ from one another in terms of their sound patterns, syntax, and the way they encode meaning. They will also learn about the linguistic theories explaining and constraining linguistic knowledge, informed in part by experimental investigations of child language acquisition and adult language processing. Successful graduates will receive a cognitive science education with a focus on language; they will develop skills in data analysis, analytical reasoning, and experimental methods.

Learning Outcomes

The Linguistics major has the following learning outcomes:

• Ability to apply critical thinking skills through linguistic data analysis in phonetics, phonology, syntax, and at least one other subfield
• Understanding of advanced theoretical concepts and/or analytical techniques in at least one subfield
• Ability to write technical material in linguistics, including language description and theory-based analysis
• Ability to access scholarly literature on language structure and use it in research

Graduate Courses

375. Teaching Apprentice Practicum. (1 to 4) Seminar, to be arranged. Preparation: apprentice personnel employment as teaching assistant, associate, or fellow. Teaching apprenticeship under active guidance and supervision of regular faculty member responsible for curriculum and instruction at UCLA. May be repeated for credit. S/U grading.

495. Preparation for College-Level Teaching in Life Sciences. (2) Seminar, two hours. Corequisite: course 375.

The Linguistics major has the following learning outcomes:

• Ability to apply critical thinking skills through linguistic data analysis in phonetics, phonology, syntax, and at least one other subfield
• Understanding of advanced theoretical concepts and/or analytical techniques in at least one subfield
• Ability to write technical material in linguistics, including language description and theory-based analysis
• Ability to access scholarly literature on language structure and use it in research
Preparation for the Major

Required: Linguistics 20; two of the following: Philosophy 31, Psychology 10 (or 100A), one cultural anthropology course; completion of the equivalent of the sixth term of one foreign language and the third term of a second foreign language.

Students who complete an advanced language course are considered to have completed the equivalent of whatever courses are requisite to that one (e.g., if students complete French 100, they have automatically satisfied the requirement of the sixth term of work in one language). Students are required to complete at least the equivalent of the third term in a language other than those in the Romance, Slavic, or Germanic families. This requirement may be satisfied either as part of or in addition to the language requirement described in the preceding paragraph.

Transfer Students

Transfer applicants to the Linguistics major with 90 or more units must complete as many of the following introductory courses as possible prior to admission to UCLA: one introduction to linguistics course, two courses from symbolic logic, introductory psychology or psychological statistics, or cultural anthropology, and two years of one foreign language and one year of a second foreign language (at least one year must be in a language other than those in the Romance, Slavic, or Germanic families).

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

The Major

Required: Eleven upper-division or graduate courses, including Linguistics 103, 120A, 120B, two courses from 110, 120C, and 130 (or 132), and two courses from 165A, 165B, 165C (students may substitute courses 200A, 200B, and 200C for 165A, 165B, and 165C respectively if they receive grades of A in 120A, 120B, and 120C respectively and have consent of instructor). Courses 165A, 165B, and 165C, or 200A, 200B, and 200C, are recommended for students planning linguistics graduate work. The remaining four courses are electives, three of which must be linguistics courses (no more than one course from 197, 198A, and 199, and 199 may be applied toward the major). The other course may be in linguistics or in another field as follows: Classics 180, English 113A, 113B, Philosophy C127A, C127B, 172, Psychology 120A, 133C, or an upper-division course in a foreign language beyond the sixth term. Nonlinguistics courses not on the list may be used as electives only in consultation with an adviser.

Linguistics 198A and 198B, or 199, are recommended for students planning to pursue graduate work in linguistics, since they provide an opportunity to engage in independent research and to write a paper that can be submitted to graduate admissions committees. To enroll in the courses, students must consult with the department senior essay and honors counselor.

Applied Linguistics BA

The Applied Linguistics major investigates linguistic issues relevant to the everyday world, shedding light on the nature of language and language use. Students will learn linguistic theory, the study of the structure of human language generally. With its focus on service learning, students will also learn linguistic practice, engaging in the community, schools, and work places of our geographic setting. Successful graduates will be well acquainted with language use from a variety of perspectives and experiences, and will be able to apply this knowledge to a wide variety of practices including language teaching, speech pathology, and translation and interpretation.

Learning Outcomes

The Applied Linguistics major has the following learning outcomes:

- Ability to apply critical thinking skills through linguistic data analysis in phonetics, phonology, syntax, and at least one other subfield
- Understanding of advanced theoretical concepts and/or analytical techniques in at least one subfield
- Ability to write technical material in linguistics, including language description and theory-based analysis
- Ability to access scholarly literature on language structure and use it in research

Preparation for the Major

Required: Anthropology 4 or Psychology 10, Linguistics 20, and completion of the equivalent of the sixth term of one foreign language.

Students who complete an advanced upper-division language course are considered to have completed the equivalent of whatever courses are requisite to that advanced language course (e.g., if students complete German 152, they have automatically satisfied the requirement of the sixth term of work in German).

Transfer Students

Transfer applicants to the Applied Linguistics major with 90 or more units must complete the following introductory courses prior to admission to UCLA: two years of one foreign language, one introduction to linguistics course, one introduction to psychology course, and one introduction to linguistic anthropology course.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

The Major

Required: Ten upper-division courses as follows: Linguistics 102 (or 103), 119A (or 120A), 120B, 130 or C140, three courses selected from Linguistics 104, 115, 130, C140, M141, 144, M146, 170, 191B, two upper-division elective courses taught in the Linguistics Department, and one course selected from Anthropology 151, M125P, M125Q, M125R, 153, 154P, 154Q, M156, M157W, 159, Arabic 180, 181, Armenian 110, Chicana and Chicano Studies 164SL, M167SL, M170SL, Communication 119, M125, M144A, French 105, German 140, Hebrew 180A, 180B, Iranian 131, Linguistics M116, M146, M176A, M176B, M177, M178, Portuguese 100A, 100B, Slavic CM114, Spanish 100A, 100B, 160.

Linguistics and Anthropology BA

The Linguistics and Anthropology major combines the basic courses of the general linguistics program with that of anthropology, the study of humankind. Students will learn linguistic theory, the study of the structure of human language generally. They will also learn the many ways in which language affects human history, social identity, social interaction, and politics. Successful graduates will be well acquainted with linguistic structure, language diversity, and language typology, as well as the anthropological and social consequences of the nature of human language.

Learning Outcomes

The Linguistics and Anthropology major has the following learning outcomes:

- Ability to apply critical thinking skills through linguistic data analysis in phonetics, phonology, syntax, and at least one other subfield
- Understanding of advanced theoretical concepts and/or analytical techniques in at least one subfield
- Ability to write technical material in linguistics, including language description and theory-based analysis
- Ability to access scholarly literature on language structure and use it in research

Preparation for the Major

Required: Linguistics 20, completion of the equivalent of the sixth term of one foreign language and the third term of a second foreign language (at least three terms must be in a language other than those in the Romance, Slavic, and Germanic families). Anthropology 4 is strongly recommended, when offered.

Transfer Students

Transfer applicants to the Linguistics and Anthropology major with 90 or more units must complete as many of the following introductory courses as possible prior to admission to UCLA: one introduction to linguistics course and two years of one foreign language and one year of a second foreign language (at least one year must be in a language other than those in the Romance, Slavic, or Germanic families). One cultural and communication course is strongly recommended. Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

The Major

Required: Eleven upper-division courses as follows: Linguistics 102 (or 103), 110, 119A (or 120A), 120B or 127, M146; two courses from 114, 120C, 144, 160, 161, 170; one course from Anthropology 151 or Sociology M124A; and three upper-division electives from the Anthropology 130 series (one course only), the 150 series (one course only), the 160 series (one course only).
Linguistics and Asian Languages and Cultures BA

The major combines the basic courses of the general linguistics program with that of East Asian languages and cultures. Students are able to study the civilizations of China, Korea, Japan, and India; and enrich their knowledge about the nature, grammar, and history of human language at the same time.

Learning Outcomes

The Linguistics and Asian Languages and Cultures major has the following learning outcomes:

- Ability to apply critical thinking skills through linguistic data analysis in phonetics, phonology, syntax, and at least one other subfield
- Understanding of advanced theoretical concepts and/or analytical techniques in at least one subfield
- Ability to write technical material in linguistics, including language description and theory-based analysis
- Ability to access scholarly literature on language structure and use it in research

Preparation for the Major

Required: Completion of the sixth term in either Chinese, Japanese, or Korean; Linguistics 20; one cultural anthropology course; either Chinese 50, Japanese 50, or Korean 50, as appropriate; completion of the equivalent of the third term of a second foreign language.

Transfer Students

Transfer applicants to the Linguistics and Asian Languages and Cultures major with 90 or more units must complete as many of the following introductory courses as possible prior to admission to UCLA: one introduction to linguistics course, one critical reading and writing course, one year of English literature survey courses, one symbolic logic course, and two years of one foreign language and one year of a second foreign language.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

Linguistics and Computer Science BA

The major combines the basic courses of the general linguistics program with that of computer science, accommodating students who want professional preparation in computer science but do not necessarily have a strong interest in computer systems hardware. The goal of linguistics is the enrichment of knowledge about the nature, grammar, and history of human language. Linguistics is a theoretical discipline, akin to philosophy, anthropology, and cognitive psychology.

Learning Outcomes

The Linguistics and Computer Science major has the following learning outcomes:

- Ability to apply critical thinking skills through linguistic data analysis in phonetics, phonology, syntax, and at least one other subfield
- Understanding of advanced theoretical concepts and/or analytical techniques in at least one subfield
- Ability to write technical material in linguistics, including language description and theory-based analysis
- Ability to access scholarly literature on language structure and use it in research

Preparation for the Major

Required: Linguistics 20, Computer Science 31, 32, 33, 35L, Mathematics 31A or 31AL, 31B, 61, 70, completion of the third term in one foreign language.

Transfer Students

Transfer applicants to the Linguistics and Computer Science major with 90 or more units must complete:

- One foreign language or one year in each of two foreign languages. One discrete structures course and one foreign language or one year in each of two foreign languages. One probability theory course are recommended.
- The 170 series (one course only), the 170 series (one course only), the 170 series (one course only), the 170 series (one course only), the 170 series (one course only).

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

Linguistics and French BA

The major combines the basic courses of the general linguistics program with that of French. Students are able to gain practical competence and basic knowledge of French, and enrich their knowledge about the nature, grammar, and history of human language at the same time.

Learning Outcomes

The Linguistics and French major has the following learning outcomes:

- Ability to apply critical thinking skills through linguistic data analysis in phonetics, phonology, syntax, and at least one other subfield
- Understanding of advanced theoretical concepts and/or analytical techniques in at least one subfield
- Ability to write technical material in linguistics, including language description and theory-based analysis
- Ability to access scholarly literature on language structure and use it in research

Transfer Students

Transfer applicants to the Linguistics and English major with 90 or more units must complete as many of the following introductory courses as possible prior to admission to UCLA: one introduction to linguistics course, one critical reading and writing course, one year of English literature survey courses, one symbolic logic course, and two years of one foreign language and one year of a second foreign language.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

The Major

Required: Twelve upper-division courses as follows:

- Linguistics 102 (or 103), 119A (or 120A), 120B, 120C, 165A (or 165B or 165C), 185A, one course selected from 104, 127, 132, 165A, 165B, 165C, 180, 185B; Computer Science 131, 132 or 161, 180, 181.

Linguistics and English BA

The major combines the basic courses of the general linguistics program with that of English. Students are able to study the literatures and cultures of each other's world in which English is the primary language, the history and structure of the English language itself, and enrich their knowledge about the nature, grammar, and history of human language at the same time.

Learning Outcomes

The Linguistics and English major has the following learning outcomes:

- Ability to apply critical thinking skills through linguistic data analysis in phonetics, phonology, syntax, and at least one other subfield
- Understanding of advanced theoretical concepts and/or analytical techniques in at least one subfield
- Ability to write technical material in linguistics, including language description and theory-based analysis

Transfer Students

Transfer applicants to the Linguistics and English major with 90 or more units must complete:

- One foreign language or one year in each of two foreign languages. One discrete structures course and one foreign language or one year in each of two foreign languages. One probability theory course are recommended.
- The 170 series (one course only), the 170 series (one course only), the 170 series (one course only), the 170 series (one course only), the 170 series (one course only).

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

The Major

Required: Eleven upper-division courses as follows:

- Linguistics 102 (or 103), 119A (or 120A), 120B, 120C, 165A (or 165B or 165C), 185A, one course selected from 104, 127, 132, 165A, 165B, 165C, 180, 185B; Computer Science 131, 132 or 161, 180, 181.

Linguistics and Computer Science BA

The major combines the basic courses of the general linguistics program with that of computer science, accommodating students who want professional preparation in computer science but do not necessarily have a strong interest in computer systems hardware. The goal of linguistics is the enrichment of knowledge about the nature, grammar, and history of human language. Linguistics is a theoretical discipline, akin to philosophy, anthropology, and cognitive psychology.

Learning Outcomes

The Linguistics and Computer Science major has the following learning outcomes:

- Ability to apply critical thinking skills through linguistic data analysis in phonetics, phonology, syntax, and at least one other subfield
- Understanding of advanced theoretical concepts and/or analytical techniques in at least one subfield
- Ability to write technical material in linguistics, including language description and theory-based analysis
- Ability to access scholarly literature on language structure and use it in research

Preparation for the Major

Required: Linguistics 20, English 4W (or 4HW), 10A, 10B, 10C, Philosophy 31, completion of the equivalent of the sixth term of one foreign language and the third term of a second foreign language.

Transfer Students

Transfer applicants to the Linguistics and English major with 90 or more units must complete as many of the following introductory courses as possible prior to admission to UCLA: one introduction to linguistics course, one critical reading and writing course, one year of English literature survey courses, one symbolic logic course, and two years of one foreign language and one year of a second foreign language.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

The Major

Required: Twelve upper-division courses as follows:

- Linguistics 102 (or 103), 119A (or 120A), 120B, 120C, 165A (or 165B or 165C), 185A, one course selected from 104, 127, 132, 165A, 165B, 165C, 180, 185B; Computer Science 131, 132 or 161, 180, 181.

Linguistics and French BA

The major combines the basic courses of the general linguistics program with that of French. Students are able to gain practical competence and basic knowledge of French, and enrich their knowledge about the nature, grammar, and history of human language at the same time.

Learning Outcomes

The Linguistics and French major has the following learning outcomes:

- Ability to apply critical thinking skills through linguistic data analysis in phonetics, phonology, syntax, and at least one other subfield
- Understanding of advanced theoretical concepts and/or analytical techniques in at least one subfield
- Ability to write technical material in linguistics, including language description and theory-based analysis

Transfer Students

Transfer applicants to the Linguistics and English major with 90 or more units must complete as many of the following introductory courses as possible prior to admission to UCLA: one introduction to linguistics course, one critical reading and writing course, one year of English literature survey courses, one symbolic logic course, and two years of one foreign language and one year of a second foreign language.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

The Major

Required: Twelve upper-division courses as follows:

- Linguistics 102 (or 103), 119A (or 120A), 120B, 120C, 165A (or 165B or 165C), 185A, one course selected from 104, 127, 132, 165A, 165B, 165C, 180, 185B; Computer Science 131, 132 or 161, 180, 181.


**Preparation for the Major**

**Required:** Linguistics 20, French 1, 2, 3, 4, 5, 6, 12, completion of the equivalent of the third term of a second foreign language.

**Transfer Students**

Transfer applicants to the Linguistics and French major with 90 or more units must complete as many of the following introductory courses as possible prior to admission to UCLA: two years of French, one introduction to linguistics course, one French literature course, and one year of a second foreign language.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

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**The Major**

**Required:** Twelve upper-division courses as follows: Linguistics 103, 110, 120A, 120B, 165A or 165B (or 200A or 200B with a grade of A in 120A or 120B respectively and consent of instructor), two upper-division electives in linguistics, Italian 102A, 180, and three upper-division electives in Italian.

**Linguistics and Philosophy BA**

The major combines the basic courses of the general linguistics program with that of philosophy, for students who are reflective about their beliefs or who wish to become so. Students enrich their knowledge about the nature, grammar, and history of human language, and are given the opportunity to ponder the foundations of almost any other subject to which they are exposed—whether history, religion, government, law, or science.

**Learning Outcomes**

The Linguistics and Philosophy major has the following learning outcomes:

- Ability to apply critical thinking skills through linguistic data analysis in phonetics, phonology, syntax, and at least one other subfield
- Understanding of advanced theoretical concepts and/or analytical techniques in at least one subfield
- Ability to write technical material in linguistics, including language description and theory-based analysis
- Ability to access scholarly literature on language structure and use it in research

**Preparation for the Major**

**Required:** Linguistics 20, Philosophy 31, and two courses from 1, 6, 7, 21, completion of the equivalent of the sixth term of one foreign language and the third term of a second foreign language.

**Transfer Students**

Transfer applicants to the Linguistics and Philosophy major with 90 or more units must complete as many of the following introductory courses as possible prior to admission to UCLA: one introduction to linguistics course, one introduction to psychology course, one introduction to psychology course, one introduction to cognitive science course, one psychological statistics course, one psychology research methods course, and two years of one foreign language and one year of a second foreign language. One introduction to programming course is strongly recommended.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

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**The Major**

**Required:** Twelve upper-division courses as follows: Linguistics 102 (or 103), 119A (or 120A), 120B, two of 130, 132, and C135, and one upper-division elective in linguistics (multiple-listed courses may not be applied). Linguistics 165A, 165B, and whichever of 130, 132, and C135 has not been used to satisfy the requirement, are strongly recommended. Also required are Psychology 120A, 121, and three electives to be selected from 115, 116, M117C, 118, M119L, 124A, 124C, 130, 133C, 133E, 133F, 186A, 186B.

**Linguistics and Scandinavian Languages BA**

The major combines the basic courses of the general linguistics program with that of Scandinavian

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languages. Students are able to learn about Scandinavian through the study of its languages and literatures, as well as enrich their knowledge about the nature, grammar, and history of human language.

Learning Outcomes
The Linguistics and Scandinavian Languages major has the following learning outcomes:

- Ability to apply critical thinking skills through linguistic data analysis in phonetics, phonology, syntax, and at least one other subfield
- Understanding of advanced theoretical concepts and/or analytical techniques in at least one subfield
- Ability to write technical material in linguistics, including language description and theory-based analysis
- Ability to access scholarly literature on language structure and use it in research

Preparation for the Major
Required: Linguistics 20, Scandinavian 1, 2, and 3, or 11, 12, and 13, or 21, 22, and 23, completion of the equivalent of the third term of a second foreign language.

Transfer Students
Transfer applicants to the Linguistics and Scandinavian Languages major with 90 or more units must complete as many of the following introductory courses as possible prior to admission to UCLA: two years of Spanish, one Spanish composition course, one Spanish civilization course, one Spanish American civilization course, one introduction to linguistics course, and one year of a second foreign language.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

The Major
Required: Eleven upper-division courses as follows: Linguistics 103, 110, 120A, 120B, 165A or 165B (or 200A or 200B with a grade of A in 120A or 120B respectively and consent of instructor), one upper-division elective in linguistics, three courses from Scandinavian 105A, 105B, and 105C, or 106A, 106B, and 106C, or 107A, 107B, and 107C, 197 (in a topic related to Scandinavian linguistics, under the direction of a Scandinavian or Linguistics faculty member), and two upper-division electives in Scandinavian.

Linguistics and Spanish BA
The major combines the basic courses of the general linguistics program with that of Spanish. Students are able to study one of the languages, literatures, and cultures of the Hispanic heritage, as well as enrich their knowledge about the nature, grammar, and history of human language.

Learning Outcomes
The Linguistics and Spanish major has the following learning outcomes:

- Ability to apply critical thinking skills through linguistic data analysis in phonetics, phonology, syntax, and at least one other subfield
- Understanding of advanced theoretical concepts and/or analytical techniques in at least one subfield
- Ability to write technical material in linguistics, including language description and theory-based analysis
- Ability to access scholarly literature on language structure and use it in research
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Lower-Division Courses

1. Introduction to Study of Language. (5) Lecture, three hours; discussion, one hour. Survey for general undergraduate of what is known about human language; biological basis of language, scientific study of language and human cognition; uniqueness of human language, its structure, universality, its diversity; language in social and cultural setting; language in relation to other aspects of human inquiry and knowledge. P/NP or letter grading.


4. Language and Evolution. (5) Formerly numbered 4.) (Same as Indo-European Studies M70.) Lecture, four hours (when scheduled). Basic concepts and tools of evolutionary theory and linguistics relevant to how organisms with linguistic abilities could evolve, and how particular languages, and cultures, arose. How does knowledge survive and change so rapidly? P/NP or letter grading.

5. World Languages. (5) Lecture, four hours; discussion, one hour (when scheduled). Introduction to linguistic diversity of world and to such core areas of linguistics as study of sound production and patterning (phonetics and phonology), word formation (morphology), and sentence formation (syntax). Structural characteristics of world languages and methods of classifying languages and types of languages. Discussion of representative languages with audiovisual illustrations to acquaint students with distinctive features of several key language families. Discussion of such topics as sound symbolism, verbal inflections, unaffiliated languages, language contact, and language endangerment, together with related sociopolitical issues. P/NP or letter grading.

6. Out of Mouths of Babes. (4) Lecture, six hours. How children acquire language, most complex of human cognitive achievements. Look at amazing linguistic abilities of infants and their first perception and production of speech sounds, then investigation of how children learn words and rules for producing and understanding sentences. Language acquisition in special populations such as children acquiring sign language, bilingual children, and people acquiring language beyond critical period. Focus mainly on English, with consideration of other languages. Offered in summer only. P/NP or letter grading.

7. Language and Identity. (5) (Same as Philosophy M115.) Lecture, four hours; discussion, one hour (when scheduled). How do we use language to project our own identity? How do we use it to perceive or shape identity of others? Introduction to speech act theory and various claims that speech acts theory can account for systematic subordination of women; maligning of racial minorities; and, in some cases, incitement to violence through hate speech. Provides fountains for students of linguistic, mental, and social factors that influence language, from biology to psychology, and from psychology to social. P/NP or letter grading.

8. Language in Context. (4) Lecture, four hours; discussion, one hour (when scheduled). How is meaning of language influenced by world around us? Introduction to pragmatics, speech acts, ordinary language philosophy, and linguistic relativism. Good foundation for students of linguistic theory, philosophy, sociology, anthropology, and communication studies. P/NP or letter grading.

9W. Linguistic Humor: Amusing and Abusing with Language. (5) Seminar, five hours. Requisite: English Composition 3. Study of how principles of science of linguistics are applied in analyzing language structure. Data from humor and other amusements, such as self-created languages (Pig Latin and more); Introduction to basics of linguistics analysis, including language sound systems, syntactic analysis, word structure, word meaning, and pragmatics. Focus on nature of language as a tool for communication that allows people from all cultural and linguistic backgrounds to adapt language for humorous purposes, albeit shaped by knowledge of how to use language as to what counts as funny. Satisfies Writing II requirement. P/NP or letter grading.

M10. Structure of English Words. (5) Same as English M40L.) Lecture, four hours; discussion, one hour. Introduction to structure of English words of classical origin, including most common base forms and rules by which alternate forms are derived. May expect to achieve substantial enrichment of their vocabulary while learning about etymology, semantic change, and abstract rules of English word formation. P/NP or letter grading.

20. Introduction to Linguistic Analysis. (5) Lecture, four hours; discussion, one hour (when scheduled). Introduction to theory and methods of linguistics; universal properties of human language, phonetic, phonological, morphological, syntactic, and semantic structures and analysis; nature and form of grammar. P/NP or letter grading.

41B. Language and Gender: Introduction to Gender and Stereotypes. (5) (Formerly numbered Applied Linguistics 40W.) Lecture, four hours; discussion, two hours. Enforced requisite: English Composition 3. Prior knowledge of foreign languages not required. Introduction to language from sociological perspective of gender. Use of research and examples in English and other languages to explore nature of male and female genderlects and gendered language use reflected in lexicon, language behavior, phonetics and intonation, and language acquisition and linguistic change. Satisfies Writing II requirement. Letter grading.

88A-88B. Lower-Division Seminars. (4-6) Seminar, three to six hours; fieldwork, two to six hours. Requisites: upper-division courses, variable topics; consult Schedule of Classes, College of Letters and Science, or department for topics to be offered in specific term. May be repeated for credit. P/NP or letter grading.

89. Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to lower-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

89HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to upper-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

9. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members. Limited to freshmen only. P/NP or letter grading.

90. Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to lower-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

91. Tutorial, three hours. Enrolled members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

Upper-Division Courses

M115. Enforcing Normalcy: Deaf and Disability Studies. (4) (Same as Disability Studies M115.) Lecture, three hours. Exploration of historical, medical, social, political, philosophical, and cultural influences that have helped to create categories of normality and abnormality, and deafness. Building on writing of Michel Foucault and critical work in field of disability studies, inquiry into institutions that have enforced standards of normalcy throughout 19th and 20th centuries to present. Primary attention to rise of medical authority in West, history of eugenics, and contemporary bioethics issues confronting disability and deaf communities. P/NP or letter grading.

M120. History of Deaf Communities in America. (4) (Same as History M147E) Lecture, three hours; discussion, one hour (when scheduled). Designed for junior/senior/beginning graduate students and members of deaf communities in America (circa 1800 to present) by exploring major events impacting deaf people, including development of sign language, deaf education, autism, politics of deafness, eugenics, deaf revolution movements, and role of hearing technology. Historical development of emergence, growth, and survival of America’s deaf community and development of deaf identity over time. P/NP or letter grading.

121. History of Mass Media and Deaf Community. (4) Lecture, three hours. History of mass media (print, film, television, and Internet) as sources and interpreters of deafness and deaf people within context of history of social and cultural history. Examination of historical changes in products of mass media within deaf community and ways of critiquing media sources. P/NP or letter grading.

189. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

189HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to upper-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

197. Variable Topics in Linguistics. (1 to 4) Seminar, three hours; fieldwork, two hours. Variable topics offered by departmental faculty members. May be repeated for credit with topic change. P/NP or letter grading.

199. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Stu-
115. Linguistics and Speech Pathology. (2 or 4) Lecture, four hours; discussion, one hour (when scheduled). Requisites: course 102 or 103. Introduction to field of speech pathology. Topics include biological foundations of speech, language, and hearing; and disorders of speech, voice, and hearing, affecting children and adults. In-class presentation and final term paper required if taken for 4 units. P/NP or letter grading.

M116. Introduction to Japanese Linguistics. (4) (Same as Japanese M120D.) Lecture, three hours; discussion, one hour (when scheduled). Enforced requisite: Japanese 3 or 8 or Japanese placement test. Introduction to Japanese grammar, focus on linguistic analysis and problem solving in phonology, syntax, semantics, and discourse pragmatics. Letter grading.

119A. Applied Phonology. (5) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisite: includes course 120A with grade of B– or better. Not open for credit to students with credit for course 120A. Sound structures and sound patterns in world languages. Rules, rule ordering, features, syllable, and higher structure. Comparison of sound patterns of different languages. Tools of phonology as applicable to other fields. P/NP or letter grading.

120A. Phonology I. (5) Lecture, four hours; discussion, one hour (when scheduled). Requisites: courses 20, 103, or 100D. Introduction to phonology and analysis. Rules, representations, underlying forms, derivations. Justification of phonological analyses. Emphasis on practical skills with problem sets. P/NP or letter grading.

120B. Syntax I. (5) Lecture, four hours; discussion, one hour (when scheduled). Requisite: course 20 with grade of B– or better. Course 120A is not requisite to 120B. Descriptive analysis of morphological and syntactic structures in natural languages; emphasis on insight into nature of such structures rather than linguistics formalization. P/NP or letter grading.

120C. Semantics I. (5) Lecture, four hours; discussion, one hour (when scheduled). Requisite: course 119B or 120B. Survey of most important theoretical and descriptive claims about nature of meaning. P/NP or letter grading.

127. Syntactic Typology and Universals. (5) Lecture, four hours; discussion, one hour (when scheduled). Requisite: course 20. Study of essential similarities and differences among languages in grammatical devices they use to signal the following kinds of concepts: relations between persons and verbs (case and word order), negation, comparison, existence/locaton/possession, causation, interrogation, reflexivization, relativization, attribution (adjectives), time and aspect, and number (cardinal and ordinal). Data from a range of languages presented and analyzed. P/NP or letter grading.

C128A-C128B. Romance Syntax: French. (4–4) Lecture, four hours; preparation: some knowledge of French. Concurrently scheduled with course C128B. Enforced requisite: course 120B. Course C128A is enforced requisite to C128B. Aspects of structure of French language, with emphasis on properties of construction not found in English. Concurrently scheduled with courses C228A-C228B. P/NP or letter grading.

130. Language Development. (5) Lecture, four hours; discussion, one hour (when scheduled). Requisites: courses 20 or 103, 119A or 120A, 119B or 120B. Survey of research and theoretical perspectives in language development in children. Discussion and examination of child language data from English and other languages. Emphasis on cross-linguistic aspects of language development. Topics include infant speech perception and production, development of phonology, morphology, syntax, and word meaning. P/NP or letter grading.

132. Language Processing. (5) Lecture, four hours; laboratory, one hour (when scheduled). Requisites: courses 20, 119A or 120A, 119B or 120B. Central issues in language comprehension and production, with emphasis on how theories in linguistics inform the processing of written and spoken language. Topics include word understanding (with emphasis on spoken language), parsing, anaphora and inference, speech error models of sentence production, and computation of syntactic structure during production. P/NP or letter grading.

C135. Neurolinguistics. (5) Lecture, four hours; discussion, one hour (when scheduled). Requisites: courses 20, 119A or 120A, 119B or 120B. Examination of relationship between brain, language, and linguistic theory, with evidence presented from atypical language development and language disorders in the mature brain. Topics include methodologies to investigate normal and atypical hemispheric specialization for language and children and adults with acquired or congenital language disorders. Concurrently scheduled with course C235. P/NP or letter grading.

C140. Bilingualism and Second Language Acquisition. (5) Lecture, four hours; discussion, one hour (when scheduled). Requisites: courses 119A or 120A, 119B or 120B. Introduction to study of childhood bilingualism and adult and child second language (L2) acquisition, with focus on understanding nature of L2 grammatical and grammatical processes underlying L2/linguistic acquisition. Discussion of neurolinguistic and social aspects of bilingualism. Concurrently scheduled with course C244. P/NP or letter grading.

M141. Current Methods of Language Teaching. (5) (Same as English Composition M141.) Lecture, four hours; discussion, one hour. Enforced requisite: course 20. Survey of theory and practice in teaching second languages, including (1) past and present trends, and (2) current theory and practice underling skills-based instruction and integrated approaches, and (3) factors that affect second language acquisition and learning. Development of knowledge base for design, development, implementation, and evaluation of second language instruction programs. P/NP or letter grading.

144. Fundamentals of Translation and Interpreting. (4) Lecture, four hours; discussion, one hour. Recommended preparation: knowledge of English and at least one other language. Enforced requisite: course 20. Examination of salient lexical, structural, cultural, and social aspects of translation between two or more languages or dialects. Survey of development of translation theories and rise of community interpreting and critical role of language brokering. P/NP or letter grading.

M150. Introduction to Indo-European Linguistics. (5) (Same as Indo-European Studies M150.) Lecture. four hours; discussion, one hour. Enforced requisite: course 20. Indo-European languages (ancient and modern), including their relationships, chief characteristics, writing systems, and sociolinguistic contexts; nature of reconstructed Indo-European proto-language and proto-culture. One or more Indo-European languages may be investigated in detail. P/NP or letter grading.

160. Field Methods. (8) (Same as Anthropology M160.) Lecture, four hours; discussion, one hour (when scheduled). Requisites: courses 102 or 103, 119A or 120A, 119B or 120B. Analysis of language unknown to members of class from data elicited from native speaker of that language. P/NP or letter grading.

161. Language Documentation. (5) Lecture, four hours; discussion, one hour (when scheduled). Requisites: courses 20 (enforced), and 103 or 119A or 120A. Language documentation is the collection of primary data using linguistic field methods, organizing data into documents (annotated texts, dictionaries, multimedia presentations, technical articles), describing language (languages of target languages, linguists, scholars outside linguistics, general public), presentation and storage of documents (paper publication, online publication, electronic and physical archives) and languages, and organizations and initiatives for documenting endangered languages. Presentations focus
165A. Phonology II. (5) Lecture, four hours; discussion, one hour (when scheduled). Requisite: course 120A. To be taken in term following completion of course 120A. Referenced for the thorough study in phonology and analysis: autosegmental theory, syllable structure, metrical theory, interface of phonology and grammar. P/NP or letter grading.

165B. Syntax II. (5) Lecture, four hours; discussion, one hour (when scheduled). Requisite: course 120B. To be taken in term following completion of course 120B. Referenced for students who plan to do graduate work in linguistics. Form of grammars, word formation, formal and substantive universals in syntax, relation between syntax and semantics. P/NP or letter grading.

165C. Semantics II. (5) Lecture, four hours; discussion, one hour (when scheduled). Requisite: course 120C. Recommended for students who plan to do graduate work in linguistics. Further study in relevant logics, relation between logics and semantics, lexical semantics, tense and aspect, adverbs, modality and intentionality. P/NP or letter grading.

170. Language and Society: Introduction to Sociolinguistics. (4) Lecture, four hours; discussion, one hour (when scheduled). Requisite: course 20. Study of patterned variation of language and society; social dialects and social styles in language; problems of multilingual societies. P/NP or letter grading.


M176A. Japanese Phonology and Morphology. (4) (Same as Japanese CM122.) Lecture, three hours; discussion, one hour. Recommended preparation: previous study of any language from Japan or Korea. Lecturer: Philosophy 31. Prior mathematical knowledge not assumed. Mathematical introduction to phonology, syntax, and semantics. Elementary material on logic, functions, relations, and trees. P/NP or letter grading.

M177. Lecture of Korean. (4) (Same as Korean CM120.) Lecture, three hours; discussion, one hour. Recommended preparation: two years of Korean or one year of Korean and another language. Lecturer: Survey of Korean phonetics, phonology, and morphology. Letter grading.


185A. Computational Linguistics I. (5) Lecture, four hours; laboratory, one hour. Requisites: courses 120B, Programming in C, or Computer Science 32. Recommended: course 165B or 200B. Overview of formal computational ideas underlying kinds of grammars used in theoretical linguistics and psycholinguistics, and some connections to applications in natural language processing. Topics include recursion, relationship between probabilities and grammars, and parsing algorithms. P/NP or letter grading.

185B. Computational Linguistics II. (5) Lecture, four hours; discussion, one hour (when scheduled). Requisite: course 185A, with emphasis on computational analysis of current tools and frameworks used in linguistic theory and their cognitive interpretations. P/NP or letter grading.

188A. Individual Studies for USIE Facilitators. (1) Tutorial, to be arranged. Enrolled prerequisite: Honors Collegium 101E. Limited to junior/senior USIE facilitators. Limited to one hour (when scheduled). Requisite: each with faculty mentor to discuss selected seminar ULI topic, conduct preparatory research, and begin preparation of syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.


189. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

189HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to upper-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

191A. Variable Topics Research Seminars: Linguistics. (4) Seminar, three hours; discussion, one hour (when scheduled). Requisite: course 1 or 20. Research seminar on selected topics. Reading, discussion, and development of a cumulative project. May be repeated for credit with topic change. P/NP or letter grading.

191B. Variable Topics Research Seminars: Linguistics. (2 or 4) Seminar, three hours; discussion, one hour (when scheduled). Enrolled prerequisite: course 185A or 200A or as soon as possible thereafter. Further investigation of syllable structure and syntax of predicates, argument structure, head-complement relations. S/U or letter grading.

191A-292B. Undergraduate Practicum in Linguistics. (4-2) Seminar, seven hours (course 192A) and six hours (course 192B). Limited to juniors/seniors. Training and supervised practicum for advanced undergraduates to assist in linguistics laboratories. Students are involved in materials and development of innovative programs under guidance of faculty members and teaching assistants. May not be applied toward course requirements for any Linguistics Department major. Individual contract required. Information and contracts may be obtained from Linguistics Department. P/NP or letter grading.

192A. Undergraduate Practicum in Linguistics. (6) Lecture, six hours. Limited to juniors/seniors. Training and supervised practicum for advanced undergraduates to assist in linguistics laboratories. Students are involved in materials and development of innovative programs under guidance of faculty members and teaching assistants. May not be applied toward course requirements for any Linguistics Department major. Individual contract required. Information and contracts may be obtained from Linguistics Department. P/NP or letter grading.

193. Advanced Research Seminars. (1) Seminar, four hours; discussion, one hour (when scheduled). Enrolled prerequisite: course 192A or 192B and three hours (course 192B). Limited to juniors/seniors. Additional subject activity participants in experimental, computational, or fieldwork linguistic research, and have opportunity to learn variety of research methods in laboratory or other collaborative environment. Students may be involved in various kinds of research methods, including administering experiments, data analysis, and/or participating in corpus annotation. Students are expected to attend regular laboratory meetings, if offered. Consult professor in charge to enroll. May be repeated for credit. Individual contract required. P/NP grading.

195. Community or Corporate Internships in Linguistics. (2 to 4) Tutorial, to be arranged. Preparation: 3.0 grade-point average in major. Limited to junior/senior Linguistics majors. Internship in collaborative environment. Students meet on regular basis with instructor and provide periodic reports of their experience. Additional support may be provided by intern site supervisor. Individual contract with supervising faculty member required. P/NP grading.

197. Individual Studies in Linguistics. (2 to 4) Tutorial, four hours; discussion, one hour (when scheduled). Limited to juniors/seniors. Individual intensive study, with scheduled meetings to be arranged between faculty member and student. Assigned reading and tangible evidence of mastery of subject matter required. May be repeated for credit. Individual contract required. P/NP or letter grading.

198A. Honors Research in Linguistics I. (4) Tutorial, to be arranged. Preparation: 3.5 grade-point average. Recommended corequisite: course 165A (or 200A) or 165B (or 200B). Recommended: completion of both courses 165A and 165B (or 200A and 200B) before or during term in which course 198A is taken. Limited to juniors/seniors. Development of comprehensive research project on linguistic topic selected by student under direct supervision of faculty member. Consult professor in charge to enroll. May be repeated for credit. Individual contract required. Progress grading (credit to be given only on completion of course 198B).

198B. Honors Research in Linguistics II. (2) Tutorial, to be arranged. Recommended prerequisite: course 198A. Limited to juniors/seniors. Completion of honors thesis or comprehensive research project begun in course 198A under direct supervision of faculty member. Consult professor in charge to enroll. May be repeated for credit. Individual contract required. Letter grading.

199. Directed Research or Senior Project in Linguistics. (4) Tutorial, to be arranged. Limited to senior Linguistics majors. Supervised individual research or investigation of linguistic topic selected by student under guidance of faculty mentor. Culminating paper required. Consult professor in charge to enroll. May be repeated for credit. Individual contract required. P/NP or letter grading.

Graduate Courses

200A. Phonological Theory I. (4) Lecture, four hours. Preparation: graduate linguistics student or grade of A in course 120A or equivalent course in phonology. Courses 200A and 201A form two-course survey of current research in phonological theory. Interaction of phonology with morphology and syntax, syllable structure, stress, S/U or letter grading.

200B. Syntactic Theory I. (4) Lecture, four hours. Preparation: graduate linguistics student or grade of A in course 120B or equivalent course in syntax. Introduction to selected topics in theory of constituent structure and syntax of predicates, arguments, and grammatical relations. Topics include lexical representation, syntactic rules, thematic roles, the lexicon, grammatical-function changing rules, head-complement relations, S/U or letter grading.

200C. Semantic Theory I. (4) Lecture, four hours. Preparation: graduate linguistics student or grade of A in course 120B or equivalent course in syntax. In-depth introduction to selected topics in theory of constituent structure and syntax of predicates, arguments, and grammatical relations. Topics include lexical representation, syntactic rules, thematic roles, the lexicon, grammatical-function changing rules, head-complement relations, S/U or letter grading.

201A. Phonological Theory II. (4) Lecture, four hours. Requisite: course 200A. Continuation of course 200A. Second course in two-course survey of current research in phonological theory. Topics include autosegmentalism (tone, tiers, segment structure), feature theory, underspecification, prosodic morphology, S/U or letter grading.
201B. Syntactic Theory II. (4) Lecture, four hours. Requisite: course 200B. In-depth introduction to selected topics in theory of movement processes and topics selected from following areas: WH-movement and related rules, subjacency and other constraints on movement, elementary approaches to distribution of empty categories; resumptive pronoun constructions; parametric variation in movement constructions; LF WH-movement; filters; reconstruction; parasitic gaps; bare there the theory; null subject parameter. S/U or letter grading.


203. Phonetic Theory. (4) Requisite: course 120A. Preliminaries to speech analysis. Functional anatomy of vocal organs; fundamental principles of acoustic and of acoustic theory of speech production; issues in perception of speech; nature and design of feature systems for phonetic and phonological analysis.

240A. Experimental Phonetics. (4) Lecture, three hours; laboratory, one hour. Requisite: laboratory equipment to investigate articulatory, acoustic, and perceptual properties of speech. Topics include experimental design and statistics; theoretical basis of acoustic structure of speech sounds; computer-based speech processing, analysis, and modeling; perceptual and acoustic evaluation of synthetic speech. S/U or letter grading.

240B. Speech Production. (4) Lecture, three hours; laboratory, one hour. Requisite: course 104 or 204A. Survey of topics in speech production research, especially as related to linguistic phonetics. Topics include physiology, phonetic models of speech production and articulatory/acoustic relations. Emphasis on use of laboratory methods such as aerodynamic transducers, electroglottography, static and electronic tracings, electromagnetic articulography, and imaging techniques. S/U or letter grading.

204C. Speech Perception. (2 to 4) Lecture, four hours. Recommended requisite: course 104 or 204A or 111 (or 211). Limited to graduate students. Survey of topics in speech perception. May include auditory physiology and psychophysics, categorical speech perception, and cross-linguistic speech perception and word recognition. Emphasis on use of experimental methods such as lexical decision, gating, priming, eye tracking, phoneme monitoring, and word spotting. S/U or letter grading.


207. Pragmatic Theory. (2 or 4) Lecture, four hours. Requisites: courses 200C, 201C. Introduction to formal pragmatic theory. Topics include speech act theory, imperatives, and other illocutionary modes; at-issue/not-at-issue and other projective content; Gricean implicature, conversational implicature, and local implicature; and formal treatments of discourse, including game-theoretic pragmatics. S/U or letter grading.

209A. Computational Linguistics I. (4) Lecture, four hours; laboratory, one hour. Overview of formal computational models of grammar using theoretical linguistics and psycholinguistics. Themes include role of recursion, relationship between structure and interpretation (both PF and LF), relationship between grammars and probabilities, and relationship between derivations and parsing. S/U or letter grading.

209B. Computational Linguistics II. (5) Lecture, four hours; laboratory, one hour. Requisite: course 209A. Extension of basic language processing techniques to natural language models of syntactic, semantic, and discourse analysis, with particular attention to their linguistic sophistication and psychological plausibility. S/U or letter grading.

210C. Computational Semantics. (4) Lecture, four hours. Preparation: basic knowledge of semantics. Requisite: course 185A or 209A. Study of algorithms to compute and reason with meanings of sentences and texts. Emphasis real resolution, presupposition projection, and tracking time, objects, and space to be covered. S/U or letter grading.

210A. Field Methods I. (4) Lecture, four hours. Preparation: grade of B or better in course 103 or in examination on practical phonetics. Requisites: courses 200A, 200B. Analysis of a language unknown to members of class from data elicited from a native speaker of the language. Term papers to be relatively full description in human process of language. May be repeated for credit with topic change. S/U or letter grading.

210B. Field Methods II. (4) Lecture, four hours. Requisite: course 210A in preceding term. Because different languages are investigated in different years, course 210 must be taken as direct continuation of 210A in same year. When there are multiple sections, continuation must be in same section. May be repeated for credit with topic change. S/U or letter grading.

211. Intonation. (4) Lecture, two hours; laboratory, two hours. Requisite: course 120A or 120B. Survey of intonational theory for English and other languages, with particular emphasis on phonological models of intonation. Laboratory equipment used for recording and analyzing intonation, and students learn to transcribe intonational elements. Letter grading.

212. Learnability Theory. (4) Lecture, four hours. Survey of some of most significant results on capabilities of learners, given precise assumptions about their memory, time, and computational power, and precise assumptions about information provided by environment. S/U or letter grading.


213C. Linguistic Processing. (4) Lecture, four hours. Requisites: courses 165B and/or 200B. Recommended: courses 132 or 232, 211B. Survey of theoretical perspectives and contemporary empirical research in human language processing (comprehension and/or production), with emphasis on syntactic processing, ambiguity resolution, effects of memory load, and relationship between grammar and process. S/U or letter grading.

214. Survey of Current Syntactic Theories. (4) Lecture, four hours. Requisite: course 201B. Survey of several current syntactic theories, compared with one another and with theory discussed in course 201B, from point of view of descriptive and explanatory power. S/U or letter grading.

215. Syntactic Typology. (2 or 4) Lecture, four hours. Requisite: course 200B. Current results in word-order universals classification of world's languages; cross-language properties of specific construction types, including relative clauses, passives, positive and negative coreference systems, agreement systems, clitic markers, and types of sentence complements. S/U or letter grading.

216. Syntactic Theory III. (4) Lecture, four hours. Requisite: course 201B. Selected topics on syntactic theories of anaphora and quantification from the following areas: typology of binding categories (pro- nouns, anaphors, etc.); theory of locality conditions in the movement theory; parameterized quantifier movement; existential quantification and unselective binding; strong and weak crossover; superiority; scope interactions; complex quantifier structures. S/U or letter grading.

217. Experimental Phonology. (4) Lecture, four hours. Requisite: course 200A. Survey of experimental work that bears on claims about speakers' knowledge of phonology, including acoustic properties of speech, relationship between perception and phonology, and universal markedness relations. Letter grading.

218. Mathematical Structures in Language II. (4) Lecture, four hours. In-depth study of generalized quantifier theory; selected topics from distinctive feature theory, formal syntax, partial orders and lattices, formal language theory, variable binding operators. May be repeated for credit with consent of instructor. S/U or letter grading.

219. Phonological Theory III. (4) Lecture, four hours. Requisite: course 201A. Current research and issues in phonological theory. Topics include structure of phonological representations, relations between representations and phonological processes, and explanations for phonological typology. S/U or letter grading.

220. Linguistic Areas. (4) Requisites: courses 120A, and 120B or 127. Recommended: courses 165A or 200A, 165B or 200B. Analysis and classification of languages spoken in a particular area (e.g., Africa, the Balkans, South Asia, Southeast Asia, Australia, Aboriginal North America, Aboriginal South America, Far East, etc.). May be repeated for credit with topic change.

221. Morphological Structures. (4) Lecture, four hours. Requisites: courses 120A, and 120B or 127. Recommended: courses 165A or 200A, 165B or 200B. Phonological and grammatical structure of a selected language and its genetic relationships to others of its family. May be repeated for credit with topic change. S/U or letter grading.

222. Semantic Theory III. (2 or 4) Lecture, four hours. Requisites: courses 200C, 201C. Introduction of developments in ontology of formal semantics, including the role of ontological categories, times, and degrees. Presentation of empirical motivation for these developments, and some cross-domain parallels supporting them. S/U or letter grading.

225. Linguistic Structures. (4) Lecture, four hours. Requisites: courses 120A, and 120B or 127. Recommended: courses 165A or 200A, 165B or 200B. Phonological and grammatical structure of a selected language and its genetic relationships to others of its family. May be repeated for credit with topic change. S/U or letter grading.

C228A-C228B. Romance Syntax: French. (4–4) Lecture, four hours. Preparation: some knowledge of French (one Romance language). Enforced requisite: course 120B. Course C228A and/or C228B is required for students interested in C228B. Aspects of structure of French language, with emphasis on properties of construction not found in English. Concurrently scheduled with courses C158A-C158B. S/U or letter grading.

230. History of Linguistics. (4) Requisites: courses 201A, 200B, 200A. Aspects of history of linguistics. Different course offerings may deal with different areas of linguistics (e.g., phonology, syntax) or with different historical periods. May be repeated for credit with topic change.

232A. Language Processing. (5) Lecture, four hours; laboratory, one hour. Central issues in language comprehension and production, and understanding how theories in linguistics inform processing models. Topics include word understanding (with emphasis on spoken language), parsing, anaphora and inferring, declarative models of sentence production, and computation of syntactic structure during production. S/U or letter grading.

233. Language Development. (5) Lecture, four hours; laboratory, one hour. Overview of current research and development of children. Discussion and examination of child language data from English and other languages. Emphasis on universal aspects of language development. Topics may include speech and language development in children. Discussion and examination of child language data from English and other languages. Emphasis on universal aspects of language development. Topics may include speech and
C235. Neurolinguistics. (5) Lecture, four hours; discussion, one hour (when scheduled). Requisites: courses 20, 119A or 120A, 119B or 120B. Examination of relationship between brain, language, and linguistic theory, with evidence presented from atypical language development and language disorders in the mature brain. Topics include methodologies to investigate normal and atypical hemispheric specialization for language and children and adults with acquired and/or congenital language disorders. Concurrently scheduled with course C135. Graduate students expected to read more advanced neurolinguistic literature and produce research papers of greater depth. S/U or letter grading.

236. Computational Phonology. (4) Lecture, four hours. Introduction to computational models of phonology and phonological acquisition. Topics include finite state transducers, probabilistic automata, overexpressed models, dynamic programming methods. Letter grading.

M238. Analyzing Historical Texts. (4) (Same as History M266C) Seminar, four hours. Designed for graduate students. Analysis of linguistic structure and ethnohistorical context of legal and other documents written by native-speaking writers and translators. Topics include paleographic technique and text analysis software. May be repeated for credit. S/U grading.

239. Research Design and Statistical Methods. (2 or 4) Lecture, four hours. Topics include identifying and defining research topics, selecting appropriate research designs, designing student experiments, recording, analyzing, and interpreting data. S/U or letter grading.

C244. Bilingualism and Second Language Acquisition. (5) Lecture, four hours; discussion, one hour (when scheduled). Requisites: courses 119A or 120A, 119B or 120B. Introduction to study of childhood bilingualism and adult and child second language (L2) acquisition, with focus on understanding nature of grammatical processes underlying L2 acquisition. Discussion of neuro linguistic and social aspects of bilingualism. Concurrently scheduled with course C140. Graduate students expected to read more advanced literature, do in-class presentations, and submit graduate-level term paper. S/U or letter grading.

251A. Topics in Phonetics and Phonology. (4) Seminar, four hours; discussion, one hour (when scheduled). Requisites: courses 119A or 120A, 119B or 120B. Specialized topics in phonetics and phonology. Meets with course 251B. May be repeated for credit. Letter grading.

251B. Topics in Phonetics and Phonology. (4) Seminar, four hours; discussion, one hour (when scheduled). Requisites: courses 119A or 120A, 119B or 120B. Specialized topics in phonetics and phonology. Meets with course 251A. May be repeated for maximum of 8 units. S/U grading.

252A. Topics in Syntax and Semantics. (4) Seminar, three hours. Designed for graduate students. May be repeated for credit. S/U grading.

252B. Topics in Syntax and Semantics. (4) Seminar, three hours. Designed for graduate students. May be repeated for credit. S/U grading.

253A. Topics in Language Variation. (4) Seminar, four hours. Requisite: course 200B. Course 201A, 201B, 201C, 214, 215, 216, or 218 may be required. Specialized topics in syntax and semantics. Meets with course 252B. May be repeated for credit. Letter grading.

253B. Topics in Language Variation. (2) Seminar, two hours; fieldwork, four hours. Meets with course 251A. May be repeated for credit. S/U grading.

254B-254C. American Indian Linguistics. Seminar, three hours. Special topics may include child language, sociolinguistics, psycholinguistics, sociolinguistics, etc. Course may be taken independently for credit. May not be applied toward MA degree requirements when taken for 2 units. May be repeated for credit. S/U grading.

255B-255C. American Indian Linguistics. Seminar, three hours. Each course may be taken independently for credit. May not be applied toward MA degree requirements when taken for 2 units. May be repeated for credit. S/U grading.

256A-256B-256C. Seminars: Psycholinguistics/Neurolinguistics. (2 or 4 each) Seminar, three hours. Special topics may include child language, neurolinguistics, psycholinguistics, sociolinguistics, etc. Each course may be taken independently for credit. May not be applied toward MA degree requirements when taken for 2 units. May be repeated for credit. S/U grading.

257. Linguistics Colloquium. (4) Preparation: completion of MA requirements. Varied linguistic topics, generally presented by research by students, faculty, and visiting scholars. S/U grading.

258. Linguistics Colloquium. (No credit) Designed for graduate students. Same as course 257, but taken without credit by students not presenting a colloquium. S/U grading.

259. Teaching Apprentice Practicum. (1 to 4) Seminar, to be arranged. Preparation: apprentice personnel employment as teaching assistant, associate, or fellow. Teaching apprenticeship under active guidance and supervision of regular faculty member responsible for curriculum and instruction at UCLA. May be repeated for credit. S/U grading.


411A-411B. Research Orientation. (2-2) Designed for graduate students. Sequence of lectures by department faculty to acquaint new graduate students with research directions and resources of department and elsewhere on campus. May not be applied toward MA or PhD degree requirements when taken for 1 unit. May be repeated for credit. S/U grading.

422. Practicum: Phonetic Data Analysis. (2) Designed for graduate students. Workshop in examination of phonetic data, such as sound spectrograms, oscillographic records, and computer output. May not be applied toward MA or PhD degree requirements. S/U grading.

444. MA Thesis Preparation Seminar. (4) Seminar, two hours. Regular student presentations of MA thesis topics and progress, with discussion and criticism by other students and faculty. Presentations by faculty and guest speakers on topics relevant to professional development, such as abstract writing and conference presentations, preparing manuscripts for publication, curriculum vitae and personal websites, academic and nonacademic careers in linguistics. May not be applied toward MA or PhD degree requirements. S/U grading.

495. College Teaching of Linguistics. (2) Seminar, to be arranged. Designed for graduate students. Required of all new teaching assistants. Seminars, workshops, and apprentice teaching. Selected topics, including curriculum development, various teaching strategies, and their effects, teaching evaluation, and other topics on college teaching. Students receive unit credit toward full-time equivalence but not toward any degree requirements. S/U grading.

501. Cooperative Program. (2 to 8) Preparation: consent of UCLA graduate adviser and graduate dean, and host campus instructor, department chair, and graduate dean. Used to record enrollment of UCLA students in courses taken under cooperative arrangements with USC. S/U grading.

506A. Directed Studies. (1 to 8) Preparation: completion of all undergraduate deficiency courses. Directed individual study or research. May be applied toward MA course requirements. May be repeated for credit. S/U grading.

506B. Directed Linguistic Analysis. (1 to 8) Preparation: completion of all undergraduate deficiency courses. Intensive work with native speakers by students individually. May be repeated for credit. S/U grading.

507. Preparation for MA Comprehensive and PhD Qualifying Examinations. (1 to 8) Preparation: at least six graduate linguistics courses. May be taken only in terms in which students expect to take comprehensive or qualifying examinations. May not be applied toward MA course requirements. May be repeated for credit. S/U grading.


509. Research for PhD Dissertation. (1 to 16) Preparation: advancement to Ph.D. candidacy. May not be applied toward Ph.D. course requirements. May be repeated for credit. S/U grading.

Swarthmore College

Lower-Division Courses


19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

89. Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to lower-division lecture course. Exploration of topics in greater depth through supervised individual projects, papers, and other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors credit noted on transcript. P/NP or letter grading.
Upper-Division Courses


189. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

189H. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to lower-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

ANTONIO E. BERNARDO, PHD
CORINNE B. BENDERSKY, PHD
J. CLAYBURN LAFORCE, JR, PHD
BARRIE M. LAWRENCE, PHD
Management / 541

Scope and Objectives

The John E. Anderson Graduate School of Management at UCLA offers a variety of programs leading to graduate degrees at the master’s and doctoral levels. These include a professional master’s (MBA), a Master of Financial Engineering (MFE), and a Master of Science in Business Analytics (MS), as well as an Executive MBA Program designed for working managers who are moving from specialized areas into general management and a three-year Fully Employed MBA Program for emerging managers. The school also offers a Global Executive MBA degree with the National University of Singapore (NUS) Business School that prepares participants for top positions in organizations around the world. A PhD in Management is also offered (an MA degree may be earned in the process of completing PhD requirements). A certificate Executive Program, as well as research conferences and seminars for experienced managers, are also offered.

The school offers an undergraduate minor in Accounting, and an interdisciplinary minor in Entrepreneurship in conjunction with the College of Letters and Science. Several undergraduate courses in management are also offered. Enrollment in these courses, although open to all UCLA students who have completed the requisites, is limited.

Undergraduate Study

Accounting Minor

The Accounting minor provides students with a comprehensive accounting background; admission is competitive and based on overall UCLA grade-point average, grade-point average in pre-admission courses, and the grades in Management 1A and 1B. Decisions on admission to the minor are made by the Anderson School Accounting Area. Applicants are accepted in fall, winter, and spring quarters. Nontransfer students must apply subsequent to completing 90 units. Transfer students must apply after completing two academic quarters (excluding summer sessions) at UCLA.

To enter the minor, students must (1) have a cumulative UCLA grade-point average of 3.2, (2) complete all required pre-admission courses with a minimum course grade-point average of 3.2, and (3) receive grades of B or better in Management 1A and 1B. Repetition of more than one pre-admission course or of any pre-admission course more than once results in automatic denial of admission to the minor. Satisfying these requirements does not guarantee admission to the program, as only a limited number of students are admitted each year.

Required Pre-admission Courses (31 units minimum): Economics 1, 2, any statistics course offered or considered transferable to UCLA, Management 1A and 1B. (Former course 100 taken at UCLA may be substituted), Mathematics 3A or 31A, 3B or 31B or 31E, one Writing II course. If Management 1A and/or 1B are not taken at UCLA, students must complete courses 120A and 122 prior to admission to the minor.

Required Upper-Division Courses (36 units): Management 120A, 120B, 122, 127A, and three courses from 108, 109, 123, 124, 126, 127B, 127C, 128, 130A.

A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor.

Transfer credit for any of the above courses is subject to department approval and is considered only for the pre-admission courses. Only one pre-admission and one upper-division course repeat are allowed.

Each pre-admission and upper-division course must be taken for a letter grade, if taken on a Passed/Not Passed basis, it cannot be applied toward the minor program. Each upper-division course must be completed at UCLA. All courses applied toward minor requirements must receive a grade of C or better. Successful completion of the minor is indicated on the transcript and diploma.

Entrepreneurship Minor

See the Entrepreneurship section for a description of the minor.

Graduate Study

Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Division website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Graduate Degrees

The John E. Anderson Graduate School of Management offers Master of Science (MS), Candidate in Philosophy (CPhI), and Doctor of Philosophy (PhD) degrees in Management; the Master of Science (MS) degree in Business Analytics; the Master of Business Administration (MBA) degree; and the Master of Financial Engineering (MFE) degree. The school also offers the Executive MBA Program (EMBA), Fully Employed MBA Program (FEMBA), and Global Executive MBA for Asia Pacific (dual degree program with the National University of Singapore Business School).

Ten concurrent degree programs (Management MBA/Computer Science MS, Management MBA/Dentistry DDS, Management MBA/Latin American Studies MA, Management MBA/Law JD, Management MBA/Library and Information Science MLIS, Management MBA/Medicine MD, Management MBA/Nursing MSN, Management MBA/Public Health MPH, Management MBA/Policy MPP, and Management MBA/Librarian Planning MURP) are also offered.

Management

Lower-Division Courses

1A-1B. Principles of Accounting. (4-4) Lecture, three hours; discussion, one hour. Not open to freshmen. P/NP or letter grading. 1A. Introduction to financial accounting principles, including preparation and analysis of financial transactions and financial statements. Examination and recording of related transactions, including cash, receivables, marketable securities, inventories, and long-lived assets. Current liabilities. 1B. Requisite: course 1A. Completion of balance sheet with emphasis on debt and equity, including in-depth introduction to time value of money concepts. Introduction to partnership and individual income tax accounting.

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

88. Lower-Division Seminar: Special Topics in Management. (1 to 4) Seminar, three hours; outside study, nine hours. Requisite: satisfaction of Entry-Level Writing requirement. Variable topics seminar that examines specific issues or problems and ways that professionals in management approach study of them. Students define, prepare, and present their own research projects with guidance of professional school faculty member. Letter grading.

89. Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to lower-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

89HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors and departmental honors programs. Designed as adjunct to lower-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or
other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower division students under intensive faculty supervision. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP or letter grading.

Upper-Division Courses


121. Ethical Leadership in Accounting. (4) Lecture, seven and one half hours. Not open to freshmen. Review of range of ethical considerations in business decisions involving individuals, corporations, society, and international business. Analysis of cases for presentation and discussion. What is ethical dilemma posed? What is ethical reasoning? Possible decisions and bands of ethical choices supporting them? Offered in summer only. Letter grading.

122. Management Accounting. (4) Lecture, three hours. Requisites: course 1B, one statistics course. Nature, objectives, and concepts of cost accounting and control; job costing and process costing; accounting for manufacturing overhead; cost budgeting; cost reports; joint-product costing; distribution cost; standard costs; differential cost analysis; profit-volume relationships and break-even analysis. P/NP or letter grading.

123. Auditing. (4) Lecture, three hours. Requisite: course 122 or 122A. Advanced study of procedures used in verification of financial statements and related information, including ethical, legal, and other professional issues. Auditing of a complete set of financial statements of a selected company. P/NP or letter grading.


127A. Tax Principles and Policy. (4) Lecture, three hours. Requisite: course 1B. Study of fundamental income tax problems encountered by individuals and other entities in analyzing business, investment, employment, and personal decisions. Special emphasis on role of tax in shaping economic decisions and decision-making. P/NP or letter grading.

127B. Corporate and Partnership Taxation. (4) Lecture, three hours. Requisite: course 1B. Reconciled: course 127A. Study of tax issues arising in forming, operating, and dissolving corporations and partnerships. Special emphasis on closely held enterprises, including S corporations. P/NP or letter grading.

127C. International Taxation. (4) Lecture, three hours. Recommended requisite: course 127A. Study of two principle areas of international taxation from U.S. regulatory perspective: taxation of American citizens and companies conducting business in international arena (outbound transactions) and taxation of foreign nations and companies who invest or conduct business in the U.S. (inbound transactions). P/NP or letter grading.

128. Special Topics in Accounting. (4) Lecture, three hours. Requisite: course 120B. Selected topics in public accounting, such as audit and fraud examination, mergers and acquisitions, public-company status and going public, and other services. Special emphasis on entrepreneurial clients, and fund accounting. Discussion of case study of current interest in accounting profession. Business plan preparation. P/NP or letter grading.

130A. Basic Managerial Finance. (4) Lecture, three hours. Requisites: course 1B, one statistics course. Study of financial decision making by business firms, with emphasis on applications of economic and financial theories in capital market analysis. P/NP or letter grading.

140. Elements of Product and Operations Research. (4) Lecture, three hours. Designed for juniors/seniors. Introduction to optimization, decision-making, and modeling new problems through cases. Focus on developing well-written design-quality business plans and business plan presentations, understand various analytical processes required to produce such plans, improve student writing and oral presentation skills, and formally present their business plans to audience of angel and venture capital investors. Letter grading.

162. Entrepreneurship and Technology Commercialization. (4) Lecture, three hours. Designed for juniors/seniors. Introduction to new knowledge and inventions into viable commercial products and services. Focus on technology being developed at major research universities like UCLA. Initial emphasis on assessment and protection of intellectual property and early evaluation of technologies to determine potential for commercialization. How intellectual property in its various forms is protected and how rights to these assets are negotiated by parties involved. Examination of nature of contracts and negotiations to protect intellectual property. Tech-nology transfer offices, researchers, technical experts, and early investors in commercialization space that might lead to patents, licenses, or new business development. Letter grading.

163. Entrepreneurship and New Product Development. (4) Lecture, three hours. Designed for juniors/seniors. Introduction to new product innovation and management. Students assume role of product manager in identifying, developing, and commercializing new products through cases, businesses currently in news, team project, and readings to develop critical thinking, decision-making skills, and creativity in launch of successful new product (team project). Letter grading.

164. Entrepreneurial Finance and Accounting. (4) Lecture, three hours. Designed for juniors/seniors. Introduction to understanding and managing early-stage companies, with particular emphasis on capital formation of new ventures. Relation-ship between entrepreneurs and investors and dis-solution of different goals of founders, investors, including nature of negotiation and relationship between parties over time. Letter grading.


166. Social Entrepreneurship. (4) Lecture, three hours. Designed for juniors/seniors. Examination of social challenges and opportunities for develop-ing and managing enterprises with social missions. Use of framework to develop strategic implementation plan that incorporates external analysis, organizational assessment, strategy development, and executable action steps and draws on expertise and experience of faculty members and alumni as well as experts in fields of social entrepreneurship, nonprofit manage-ment, and strategic philanthropy who present selected topics of interest. Letter grading.

168. Personal Financial Health: Theory and Practice. (4) Lecture, three hours. Helps develop class of financial literacyiterate students become financially se-cure today and in future. Students gain knowledge, skills, and confidence to take charge of their financial futures and have potential to prosper. Covers many fi-nancial decisions made during college years. Interplay between financial conditions of business and financial situation of owner is something that many entrepreneur-fails to plan for when they launch new business.
169. Entrepreneurial Leadership and Practical Experience. (4. Lecture, three hours; fieldwork, eight hours. Enrollment by instructor consent. Capstone for undergraduate minor in entrepreneurship. Application of critical thinking, research skills, and education to one of the following experiences: internship at off-site entrepreneurial startup or result of entrepreneurial startup idea. Real-world experience supplemented with theoretical knowledge on entrepreneurial leadership, ethics, and professional branding. Letter grading.)

170. Real Estate Finance and Investments. (4. Lecture, three hours. Exploration of fundamentals of residential and commercial real estate finance, investment, and development. Study of qualitative concepts and quantitative tools necessary to develop real estate decision-making skills. Analysis of variety of case studies of finance, investment, and development projects from U.S., Europe, China, and Japan that highlight unique challenges and solutions that were unique to each situation. Use of specially prepared Excel models to understand and evaluate financial aspects of transactions, consideration of macroeconomic effects on housing market, and potential impact on real estate finance and investment decisions. P/NP or letter grading.)

180. Special Topics in Management. (4. Lecture, four hours. Topics of special interest to undergraduate students. Specific subjects may vary each term depending on particular interest of instructors or students. May be repeated for credit. P/NP or letter grading.)

182. Leadership Principles and Practice. (4. Lecture, six hours. Proven methods for motivating, and inspiring high performance, persuading, and influencing others; leading high-performance teams; creativity and innovation; decision-making, and negotiating skills, both one-on-one and in groups. Organizational examples, simulations, and in-class exercises. P/NP or letter grading.)

188SA. Individual Studies for USIE Facilitators. (1. Tutorial, discussion, three hours. Preparation: Honors College 101E. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to discuss selected USIE seminar topic, coursework, research, and business presentation of syllabus. Individual contract with faculty mentor required. May be repeated. Letter grading.)

188SB. Individual Studies for USIE Facilitators. (1. Tutorial, to be arranged. Preparation: Honors College 101E. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to finalize course syllabus. Individual contract with faculty mentor required. May be repeated. Letter grading.)

188SC. Individual Studies for USIE Facilitators. (2. Tutorial, to be arranged. Preparation: Honors College 101E. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to finalize course syllabus. Individual contract with faculty mentor required. May be repeated. Letter grading.)

189. Advanced Honors Seminars. (1. Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.)

195. Community or Corporate Internships in Management. (2 to 4. Tutorial, to be arranged. Limited to juniors/seniors. Internship in supervised setting in community agency or business. Students meet on a regular basis with instructor and provide periodic reports of their experience. May be repeated for maximum of 8 units. Individual contract with supervising faculty mentor required. P/NP or letter grading.)

199. Directed Research in Management. (2 to 8. Tutorial, to be arranged. Limited to juniors/seniors. Supervised individual research or investigation of selected topic or business problem under the direction of a research faculty mentor. Culminating paper or project required. May be repeated for credit. Individual contract required. P/NP or letter grading.)

Graduate Courses

201A. Business Forecasting: Turning Numbers into Knowledge. (4. Discussion, three hours. Preparation: familiarity with linear regression. Examination of one approach to analytical thinking—forcing numerical and textual data into carefully formulated alternative innate hypotheses. Development of econometric variables (growth, inflation, unemployment, interest rates, and exchange rates), industry data, and firm data. Letter grading.)

201B. Econometrics and Business Forecasting. (4. Lecture, three hours. Basic techniques of econometric modeling. Emphasis on assumptions underlying classical normal linear regression model, special problems in application, and interpretation of results. Practical applications extensively developed in student projects.)

202B. Economic Consulting and Applied Managerial Economics. (4. Lecture, three hours. Preparation: courses 402, 405. Use of economic methods to analyze issues of economic growth, development, and allocation decision, organizational decision making. Letter grading.)

205A. International Business Economics. (4. Requisite: course 405. International business environment, international economic institutions, national and regional trade policies and developments, trends in foreign economic institutions, national and regional trade policies and developments, trends in foreign affairs organization. Examination of structure of business transactions and allocation of control, risk, and return. Topics include venture capital investments, debt and loan agreements, employment agreements, distribution and marketing agreements (including franchising), motion picture production/finance/distribution and marketing agreements (including franchise, motion picture production/finance/distribution agreements, and joint ventures. Assigned reading and focus on documents that incorporate terms of business transactions of deals. Concurrently scheduled with Law 409A-409B.)

209A-209B. Managing Complex Business Deals. (209A: 3 or 4/209B: 1 or 2. Lecture, three hours. Preparation: familiarity with basic vocabulary and concepts, including basic principles of accounting and valuation. Course 209A is enforced requisite to 209B. Advanced course in business organization. Examination of structure of business transactions and allocation of control, risk, and return. Topics include venture capital investments, debt and loan agreements, employment agreements, distribution and marketing agreements (including franchising), motion picture production/finance/distribution agreements, and joint ventures. Assigned reading and focus on documents that incorporate terms of business transactions of deals. Concurrently scheduled with Law 239. In Progress (209A) and S/U or letter (209B) grading.)

214. Managerial Decision Making. (4. Lecture, three hours. Introduction to principles of rational judgment and choice, common behavioral biases of managers and consumers, and corrective tools and procedures, drawing heavily on disciplines of psychology and behavioral economics. Topics include decision structuring, chance processes, forecasting, confidence, likelihood judgment, risk perception and risk-taking, decision under uncertainty, multiattribute choice, framing and mental accounting, interpersonal conflict, allocation decisions, organizational decision making, choice architecture, happiness, and well-being. S/U or letter grading.)

215. Behavioral Analysis. (4. Lecture, three hours. Series of negotiation exercises to foster development of students’ negotiation skills and experience. Use of economic and game-theoretic concepts in debrief to gain insight and develop framework for finding broad negotiation principles applicable. S/U or letter grading.)


217A. Decision Analysis. (4. Lecture, three hours. Preparation: course 402. Managerial decision making occurs in presence of uncertainty which can be about events over which no individual has any control or it can be about what would be the best thing to do. Framework provided for structuring and analyzing such decisions, with application of framework to such scenarios as product development, litigation, business of treasure hunting, and bidding. S/U or letter grading.)

218. Tools and Analysis for Business Strategy. (4. Lecture, three hours. Goal is for students to become more comfortable with design, execution, and interpretation of data analysis that can meaningfully inform business strategy formulation. Pedagogical approach is firmly rooted in learning by doing. Use of variety of real-world examples to gain practice with quantitative methods that can be deployed in business settings to analyze underlying predictors and causes of firm success. Letter grading.)

220. Corporate Financial Reporting. (4. Lecture, three hours. Preparation: course 403. In-depth treatment of corporate financial reporting issues to enhance understanding of financial statements and student ability to interpret and use information contained in these disclosures. Emphasis on economic substance of transactions and presentation.)

222. Corporate Decision Making and Incentives. (4. Lecture, three hours. Preparation: course 403. Use of basic microeconomics to answer what information is needed to make managerial decisions, what incentives are necessary to motivate managers, and how information should be recorded to facilitate both. Essential for careers in consulting, private equity, and general management. S/U or letter grading.)

280. Choice Architecture. (3. Lecture, three hours. Leverages behavioral science principles to solve real societal and policy problems. Through partnerships with health, government, and industry counterparts, students work collaboratively on identifying the key behavioral problems within organizations; test and guide implementation of evidence-based solutions. Provides structured on-ramp to skillful application of behavioral insights in real-world contexts. Ideal for students who want to weave rigorous behavioral insight into their emerging leadership style. Letter grading.)

283. Business Law for Managers and Entrepreneurs. (4. Lecture, three hours. Introductory course that uses practical legal instruments to recognize, understand, and manage legal issues. Topics include contract law, litigation process and alternatives, intellectual property law, business formation, corporate law, employment law, and bankruptcy reorganizations. How to deal with potential legal issues before they become serious problems. S/U or letter grading.)
226. Special Advanced Topics in Accounting. (4)
Lecture, three hours. Requisite: course 403. Examination of impact of taxes on investment decisions, mergers and acquisitions, capital structure, dividend policies, and employee compensation. S/U or letter grading.

228. Financial Statement Analysis. (4)

231C. Corporate Valuation. (4)
Lecture, three hours. Requisites: courses 408, 430. Lectures, discussions, and student presentations. Issues and analytical tools relevant for valuing projects, divisions, and corporations. Theories of discounted cash flow valuation (DCF) and real valuation using market multiples. Theories of practice to value different projects, including IPO, mergers and acquisitions, divestitures, and private equity. Exploration of how real options affect investment decisions and how they can be identified and valued. Letter grading.

231D. Takeovers, Restructuring, and Corporate Governance. (4)
Lecture, three hours. Requisites: courses 230 or 430, 403, 408. Designed for second-year graduate students. Focus on economic and capital market reactions to control transactions and to defensive measures by management. Focus on interaction of strategic planning, firm value maximization, and investment decisions in life cycle of growth of firm. S/U or letter grading.

231E. Managing Finance and Financing Emerging Enterprises. (4)
Lecture, three hours. Requisites: courses 230 or 430, 403, 408. Designed for second-year graduate students. Exploration of organizational and marketing entrepreneurial enterprises. Integrative course, building on methodology, principles, and concepts provided in requisite functional and strategic core courses. Use of extensive reading and case studies to develop skills and philosophical basis for applying managerial concepts to entrepreneurial operations. S/U or letter grading.

240E. Managing Entrepreneurial Operations. (4)

240F. Global Supply Chain Management. (4)
Lecture, three hours. Requisite: course 410. Business environment today is globalized. Examination of strategic, tactical, and operational issues in supply chain management, with generous attention to emerging digital economy. S/U or letter grading.

240G. Global Operations Strategy. (4)
Lecture, three hours. Requisite: course 410. Study of challenges of operating globally in range of industries, including software, consulting, automotive, and textile. Several opportunities for hands-on quantitative methods, with emphasis on role of perspective throughout. S/U or letter grading.

241A. Technology Management. (4)
Lecture, three hours. Requisites: courses 410, 411. Management of high-technology firm, including acquisition, creation, and realization of technology assets. Research and product development, product and process technologies, technology regimes, high-technology hazards, competitive strategy and innovation. S/U or letter grading.

246A. Business and Environment. (4)
Lecture, three hours. Overview of many ways in which environmental issues interact with main functional areas of business: finance, marketing, strategy, operations, and accounting. Basic introduction to background of environmental issues, with focus primarily on business aspects. Specific topics vary from year to year, but course details what every manager should know about environmental issues in business.

M247. Intellectual Property for Technology Entrepreneurs and Managers. (2) (Same as Electrical and Computer Engineering M293L.) Seminar, two hours; outside study, four hours. Introduces intellectual property to entrepreneurs involved with start-ups and other organizations. Topics include best practices to put in place before product development starts, how to develop high-value patent portfolios, patent licensing, offensive and defensive IP litigation considerations, trade secrets, opportunities and pitfalls of open source software, trademarks, managing copyright in increasingly complex content ecosystems, and adopting IP strategies to globally marketed products. These studies are inspired by complex IP questions facing technology companies today. S/U or letter grading.

250D. Patterns of Problem Solving. (4)
Lecture, three hours. Acquisition of strategies that enhance adaptive planning and real-time judgment, based on findings from brain studies and cognitive research. Design of tools to respond to emergent uncertainties and to address situations where intense pressures of time and cost are present. Letter grading.

252. Persuasion and Influence. (4)
Lecture, three hours. Requisites: course 409. Designed for individuals interested in improving their ability to persuade and influence others. Exploration of number of well-studied persuasion and influence strategies that result in greater buy-in for one’s ideas, initiatives, proposals, products, and requests. Letter grading.

254. Incentives and Motivation in Organizations. (4)
Lecture, three hours. Course 254 is open to MBA, EMBA, and FEMBA students. Focus on strategic management of human resources to create value by directly motivating behavior consistent with goals and policies of firm. Motivating effects of different forms of monetary and non-monetary incentives in different types of organizations and for different types of employees and executives. Examination of the effectiveness of different types of motivating and compensation practices to develop skills needed to design and implement optimal reward systems for organizations. S/U or letter grading.

256. Leadership and Ethics. (4)
Lecture, three hours. Series of real-life business situations that pose complex problems of leadership and ethics, so students develop better understanding of how they can successfully manage both their leadership and ethical positions. Letter grading.

260A. Customer Assessment and Analytics. (4)

261A. Sales and Channel Management. (4) Lecture, three hours. Requisite: course 411. Study of problems in managing product distribution channels, such as personal selling, account management, determining sales force size, organization, and compensation plans. Consideration of channel selection, conflict, power, and control. Extensive use of case studies. Letter grading.

261B. Global Marketing Management. (4) Lecture, three hours. Requisite: course 411. Analysis of opportunities, distinctive characteristics, and emerging trends in foreign markets, including exploration of alternative methods and strategies for entering foreign markets; organizational planning and control; impact of social, cultural, economic, and political differences; and problems of adapting American marketing concepts and methods. Letter grading.


263A. Consumer Behavior. (4) Lecture, three hours. Requisite: course 411. Study of nature and determinants of consumer behavior. Emphasis on influence of sociopsychological factors such as personality, small groups, demographic variables, social class, and culture on formation of consumers’ attitudes, consumption, and purchasing behavior. S/U or letter grading.

264A. Marketing Research. (4) Lecture, three hours. Requisites: course 411. Designed to provide prospective students with research results rather than for specialists in research. Marketing research is aid to management decision making. Development of problem-analysis skills, providing knowledge of concepts and methods of marketing research, with increased sensitivity to limitations of marketing data. Letter grading.

264B. Data Analytics for Marketing and Finance. (4) Lecture, three hours. Enforced requisite: course 402. How to fit predictive models and visualize multivariate data using examples and topics from marketing and finance. Topics include conditional prediction and predictive models, advanced treatment of regression analysis and graphics, automated analysis for high dimensional data. Use of industry-leading R/Rstudio statistical environment. S/U or letter grading.

265. Brand Management. (4) Lecture, three hours. Requisite: course 411. Introduction to considerations in development, implementation, and management of brands. Discussion of challenges to creating and maintaining strong brands. Topics include building brand knowledge and identities, marketing mix and brands, brand architectures, and brand equity. Letter grading.

266A. New Product Development. (4) Lecture, three hours. Requisite: course 411. Examination of new product development (NPD) process with objective of learning key tools and methods and applying them to case studies, exercises, and course project. Products viewed through three lenses: quantitative rational attributes, appeal due to emotional characteristics, and cost/technology/competitive tradeoffs. NPD process also investigated through five key phases: ideation, concept generation and selection, detail design, prototyping and testing, and ramp-up and product launch. Coverage of mass customization, parallel prototyping, cost reduction, and creativity. Letter grading.

266B. Advertising and Marketing Communications. (4) Lecture, three hours. Emphasis on case- and literature-based discussion of critical issues in advertising communications. Topics include uses and limitations of advertising and communication tools, evaluation of advertising and promotional tools from development through implementation. Letter grading.

267. Digital Marketing Analytics. (4) Lecture, three hours. Requisites: courses 402, 411. Use of notion of customer life cycle as organizing principle and application to digital tools and data-analytical tools for interacting with customers and learning about their preferences as they evolve through four stages of customer life cycle: (1) customer identification, (2) customer acquisition, (3) mid-maturity purchase and transaction behavior, and (4) customer attrition or switchover to other product line. S/U or letter grading.

268. Selected Topics in Marketing. (4) Lecture, three hours. Requisite: course 411. Study of selected areas of marketing knowledge and thought. Specific subjects vary each term depending on particular interests of instructor and students. Individual projects and reports. May be repeated for credit. S/U or letter grading.


M271A. Medtech Innovation I: Entrepreneurial Opportunities in Medtech. (4) (Same as Bioengineering M233A) Lecture, three hours; outside study, nine hours. Designed for graduate and professional students interested in learning about, designing, and developing medical devices. It is believed that understanding how to identify unmet clinical needs, properly filtering through these needs using various acceptance criteria, and selecting promising needs for which potentially medtech solutions are explored. Students work in groups to expedite traditional research and development processes to invent and implement new medtech devices that increase quality of clinical care and revenue for the hospital system. Introduction to intellectual property basics and various medtech business models. Letter grading.

M271B. Medtech Innovation II: Prototyping and New Venture Development. (4) (Same as Bioengineering M233B) Lecture, three hours; outside study, nine hours. Requisite: course M271A. Designed for graduate and professional students in entrepreneurship, dentistry, design, law, management, and medicine. Emphasis on understanding how to identify unmet clinical needs, properly filtering through these needs using various acceptance criteria, and selecting promising needs for which potentially medtech solutions are explored. Students work in groups to expedite traditional research and development processes to invent and implement new medtech devices that increase quality of clinical care and revenue for the hospital system. Introduction to intellectual property basics and various medtech business models. Letter grading.


277A. Real Estate Finance Law. (1 to 8) (Same as Law M209) Lecture, three hours. Concentrated study of law governing financing of land transactions from both national and California perspectives. Topics include California deed of trust, installment land contracts, and other mortgaging substitutes, assignments of rents, receiverships, prepayment, foreclosure, priorities, California antideficiency legislation, impact of borrower bankruptcy on mortgage lenders, construction lending, future advances, and secondary market. S/U or letter grading.

277A-277B. Real Estate Finance Law. (277A: 3 or 4/277B: 1 or 2) Lecture, three hours. Course 277A is enforced requisite to 277B. Concentrated study of law governing financing of land transactions from both national and California perspectives. Topics include California deed of trust, installment land contracts and other mortgaging substitutes, assignments of rents, receiverships, prepayment, foreclosure, priorities, California antideficiency legislation, impact of borrower bankruptcy on mortgage lenders, construction lending, future advances, and secondary market. Concurrently scheduled with Law 209. In Progress (277A) and S/U or letter (277B) grading.

79A. Urban Real Estate Financing and Investing. (4) Lecture, three hours. Requisites: courses 408, 430. Investor-oriented course in which real estate and business trends are evaluated to determine alternative real estate investment opportunities. Use of current financial, economic, and investment theories and techniques to real estate investment opportunities in case studies and short case problems to illustrate development of investment strategies. S/U or letter grading.

279A. Cases in Real Estate Investments. (4) Lecture, three hours. Requisites: courses 408, 430. Development of understanding of principal issues involved with real estate investment and finance. Topics include real estate financial analysis and valuation in variety of contexts (single and multifamily residential, commercial, industrial, shopping, hotel, and other properties), real estate taxation, real estate development, process, securitization, REITs, and leasing and workout of troubled properties. S/U or letter grading.

279B. Entrepreneurial Real Estate Development. (4) Lecture, three hours. Requisites: courses 278A or 279A, 408, 430. Introduction to various aspects of real estate development from perspectives of entrepreneur and investor. Coverage of all types of development opportunities including single-family, multifamily, and hotel, office, retail, and industrial. Industry guest speakers to help reinforce principles taught. Real estate development simulation and group presentations to panel of investors included. S/U or letter grading.


281B. People in Organizations. (4) Lecture, three hours. Enforced prerequisite: course 408, 410, 414A. Designed for graduate students. Introduction to different philosophical perspectives for understanding human behavior. Theories and concepts important for understanding human behavior in organizations, as well as managerial implications of individual, group, and social behavior. Special attention to knowledge about satisfaction, motivation, and productivity in organizations.

282. Optimizing Team Performance. (4) Lecture, three hours. Enforced prerequisite: course 409, 414A. Optimization of team performance by diagnosing complex team dynamics and taking appropriate action to improve team functioning to help individuals strengthen their teamwork skills in ways that are proven to increase effectiveness and performance of teams. Letter grading.

284C. Managing Entrepreneurial Organizations. (4) Lecture, three hours. Issues involved in developing and managing entrepreneurial organizations. Topics include organizational growth, managerial tools, strategic planning, organizational design, management development, control systems, leadership, and culture shaping. Emphasis often directed towards conclusions that individuals must make as organizations grow. S/U or letter grading.

285A. Leadership, Motivation, and Power. (4) Discussion, three hours. Designed for graduate students. Topics include leadership principles, influencing and motivating people. Relative effectiveness of various leadership styles, different motivation theories, and power tactics from managerial point of view. Use
of experience-based learning methods to aid diagnosis and understanding of one's own influence styles. S/U or letter grading.

285B. Managerial Interpersonal Communication. (4) Discussion, three hours. Designed for graduate students. Interpersonal and personality factors affecting managerial communication. Styles and modes of communication in one-to-one, group, and large-systems settings. Opportunities offered to deepen understanding of one's own communication styles and skills, considering verbal, nonverbal perspective, and cross-cultural aspects. S/U or letter grading.

286. Negotiations Behavior. (4) Discussion, three hours. Practical application of theoretical principles and concepts from psychology, sociology, and economics through lectures and readings, with focus primarily on improving practical negotiating skills through experiential learning (i.e., negotiations simulations). Participants learn not only to enhance their individual abilities in dyadic and group situations, but also to analyze contexts for most effective application of these skills. S/U or letter grading.

291. Strategies for Technology-Based Corporate Development. (4) Lecture, three hours. Enforced requisites: course 420. Focus on key aspects of corporate entrepreneurship and effective implementation of new product or process developments, and effective new venture management in a corporate context.


296A. International Business Management. (4) Discussion, three hours. Analysis of multinational enterprises. Emphasis on identification and analysis of international business opportunities and starting a business. In-depth examination of problems or issues of current concern in management, with numerous topics offered each year. May be repeated for credit. S/U grading.

296C. Business Finance. (4) Lecture, three hours. Requisites: courses 295A, 296A. Legal environments in which international business operates; overseas business relationships and organizations; antitrust, taxation, transfer of capital, and technology regulations; patent, trademark, and copyright safeguards; arbitration of international business disputes; expropriation of foreign investments; international business and government relations.

297C. International Business Law. (4) Requisites: courses 295A, 296A. Legal environments in which international business operates; overseas business relationships and organizations; antitrust, taxation, transfer of capital, and technology regulations; patent, trademark, and copyright safeguards; arbitration of international business disputes; expropriation of foreign investments; international business and government relations.

298. Special Topics in Management. (1 to 4) Seminar, one hour. Designed for graduate students. In-depth examination of problems or issues of current concern in management, with numerous topics offered each year. May be repeated for credit. S/U grading.

375. Teaching Apprentice Practicum. (1 to 4) Seminar, one hour. Designed for graduate students. In-depth examination of problems or issues of current concern in management, with numerous topics offered each year. May be repeated for credit. S/U grading.

406. Global Macroeconomy. (4) Lecture, three hours. Enforced requisites: courses 402, 403, 405. Provides analytical framework for understanding the complex macroeconomic conditions in which world economy affect economic growth, inflation, interest rates behavior, exchange rate determination, global competitiveness, unemployment, and trade account. Provides skills to enable students to assess critically how developments in specific industry environments.

407. Business Analytics with Spreadsheets. (4) Lecture, three hours. Enforced requisites: course 402. Introduction to analytical methods for making strategic, tactical, and operational decisions emerging from real data involving the study of data analysis, summary statistics, regression, time series analysis, forecasting, and decision making.

408. Foundations of Finance. (4) Lecture, three hours. Introduction to managerial finance. Topics include time value of money, discounting and present values, valuation of bonds and stocks, risk and return, construction of optimal portfolios, capital budgeting, and weighted average cost of capital.

422. Analysis and Communications. (4) Discussion, three hours. Enforced requisites: courses 402, 403. Focus on three key areas of analysis: problem definition, formal problem solving, mathematical modeling, and weighted average cost of capital.

424. Strategic Business Presenting. (2) Lecture, 90 minutes. Improvement of strategic business presenting skills such as presentation delivery techniques, visual and verbal persuasion principles, building arguments with supporting evidence, art of business storytelling, and other related topics, with focus on individual student presentations.


427. Global Access Program. (8) Fieldwork, 60 hours. Enforced requisites: courses 402, 403, 405, 408, 409, 410, 411, 414A, 420. Limited to Fully Employed MBA program students. Must be taken in Summer and Fall Quarters of third year. Faculty-guided consulting project with international company or U.S. company development projects for management of client relationships, identification of problems or strategic questions, design of study, collection and analysis of secondary and primary research data, development of comprehensive business plan, and formal presentation of final report and recommendations.


440. International Preorientation. (1) Lecture, six hours. Limited to international students in MBA program. Intensive communication workshop that meets
six times (Saturdays included) per week for three weeks. Basic listening, speaking, writing, and working/leading teams for case analysis, cold call participation, presentations, and job search. Introduction to research and career resources. May not be applied toward MBA degree. Offered in summer only. S/U or letter grading.

454. Fieldwork in Organizations. (4) Fieldwork, to be arranged. Preparation: completion of at least two terms of MBA program. Required of all full-time MBA students. MBA program junior or senior students, associates, directors or other supervising faculty adviser, students perform supervised practical experience or fieldwork in or on behalf of intern or fellow. Emphasis of preparation assignment(s) to student to defined program of study that includes reporting and assessment of fieldwork experience through combination of written and oral presentations, and may include preparation of evaluations or consulting report correlating to defined program of study. S/U grading.

455E. International Exchange Program. (2 to 16) Lecture, 30 hours; discussion, 10 hours. Students attend up to four MBA-level courses at institutions with exchange agreements with Anderson School. Some courses may be taught in local language. In addition to learning subject matter of courses, provides opportunity to enhance their knowledge of a region while exchanging ideas and views with their peers at that institution. S/U grading.

457A. Fieldwork in Investment Management. (2) (Formerly numbered 457F.) Seminar, two hours; fieldwork, one hour. Seminar focuses on theories and practices of portfolio management and management structure. Review of literature to identify investment strategies. Knowledge transfer and training before and after class, and management of business relations with exchange partners. Lecture, three hours. Fieldwork, one hour. S/U or letter grading.

457B. Fieldwork in Investment Management. (2) Seminar, two hours; fieldwork, one hour. Four-term course. Course provides training in portfolio management and management. Back testing of investment strategy. Visits to portfolio management firms to gain expert guidance. In Progress grading (credit to be given only on completion of courses 457B, 457C, and 457D).

457C. Fieldwork in Investment Management. (2) Seminar, two hours; fieldwork, one hour. Four-term course. Monitoring of implemented strategy. Documentation on analysis of portfolio performance. Development of strategy for incoming class. In Progress grading (credit to be given only on completion of courses 457C and 457D).

457D. Fieldwork in Investment Management. (2) Seminar, two hours; fieldwork, one hour. Four-term course. Cummulation and transition of portfolio management project. Formal presentation of new strategy to incoming class and delivery of annual report. Training for incoming class with knowledge transfer and dissemination of tools for back testing. Letter grading.

458A-458B. Global Immersion: Two-Quarter Plan. (2-2) For course 458A: lecture, three hours; presentations, site visits, and discussion, 20 hours; for course 458B: fieldwork, three hours; presentations, site visits, and discussion, 20 hours. Course 458A is enforced requisite to 458B. Limited to Executive MBA program students. Preparation for master’s comprehensive examination or PhD qualifying examinations. S/U grading.

460A-460B. Managing Finance and Financing Emerging Enterprises. (2-2) Lecture, three hours. Course 460A is enforced requisite to 460B. Designed for second-year graduate students. Emphasis on financial, corporate financial decision making, strategies of emerging growth companies, and rapid growth companies in entrepreneurial settings. Emphasis on selection and financing vehicles that may be imperative to securing money requirements of organizations. In Progress (460A) and letter (460B) grading.

466B. Advanced Financial Policy for Managers. (4) Lecture, four hours. Limited to Executive MBA program students. Modern financial management deals with decision making under uncertainty for corporate financial management, portfolio investment decisions, financial institutions, and international financial management. Focus on learning sound theoretical tools and applying them in casework. S/U or letter grading.

472B. Customer Information Strategy. (4) Lecture, four hours. Limited to Executive MBA program students. Exploration of innovation and marketing of products and services to customers. Use of creativity tools, customer research, and marketing science to create value and allocate resources so as to maximize revenues and profits that result. S/U or letter grading.

478. Corporate Entrepreneurship. (4) Lecture, three hours; discussion and site visits, 20 hours. Preparation: completion of first-year core courses in Executive MBA program. Intensive one-week program in one foreign country, with courses taught by faculty members from partner institutions in destination country. Topics vary but are tailored to MBA curriculum, including but not limited to financing, marketing, global economics, strategies, human resources, operations, and technology management. Exposure to local business practices, company site visits, and exploration of local cultural and historical sites. S/U or letter grading.

481A-481B. Negotiations Behavior. (2-2) Lecture, three hours. Course 481A is enforced requisite to 481B. Limited to Global Executive MBA students. Preparation of theoretical principles and concepts from negotiation theory. Students learn to enhance their individual abilities in dyadic and group situations and to analyze contexts for most effective application of these skills. In Progress (481A) and letter (481B) grading.

484A-484B. Management of Technology and Innovation. (2-2) Lecture, three hours. Course 484A is enforced requisite to 484B. Limited to Global Executive MBA students. Problems of managing technological innovation in complex and rapidly changing environments. Emphasis on technological consideration into strategy, adoption of technological innovation, promoting innovation through organizational design and leadership, e-business, and e-commerce. In Progress (484A) and letter (484B) grading.

485. Corporate Entrepreneurship. (4) Lecture, three hours. Managerial efforts aimed at identification, development, and exploitation of technical and organizational innovations, management of new product or process developments, and effective new venture management in large corporations in manufacturing and service industries. Development of awareness and understanding of range, scope, and complexity of issues related to creation of organizational environment that is supportive of entrepreneurial endeavors, and insight concerning effective implementation of technological and organizational innovations in corporate setting. Letter grading.

488. Business Plan Development. (4) Lecture, four hours. Limited to MBA program students. How to develop business plans, understanding of analytical processes required to produce plans, improvement of student writing and oral presentation skills, and review of business plans of other entities. Writing of one complete business plan and presentation of it to experienced investors. Letter grading.

498. Entrepreneurship and Venture Initiation. (4) Lecture, four hours. Limited to Executive MBA program students. Introduction to basic tools and jargon required for entrepreneurship that requires financing or management of intellectual property. Terminology used by lawyers, accountants, venture capitalists, and other investors when forming and financing new companies. Assessment of feasibility of business concept and communication of concept to potential investors, employees, and business partners. S/U or letter grading.

501. Cooperative Program. (2 to 8) Preparation: consent of UCLA AGSM graduate adviser and assistant dean, and host campus instructor, department chair, and graduate dean. Used to record enrollment of UCLA students in courses taken under cooperative arrangements with USC. S/U grading.

596. Research in Management. (1 to 8) Directed individual study or research. May be repeated. S/U or letter grading.

597. Preparation for Qualifying Examinations. (4 or 12) Preparation for master’s comprehensive examination or PhD qualifying examinations. S/U grading.


Management / Executive MBA

Graduate Courses

402. Data Analysis and Management Decisions under Uncertainty. (4) (Formerly numbered Management 456A.) Lecture, four hours. Limited to Executive MBA program students. Survey of statistical model building, with emphasis on managerial interpretation of statistical summary data. Classical statistics covered through multiple regression to support courses in finance and marketing that follow. Fundamental approaches to decision making under uncertainty. S/U or letter grading.


408. Financial Policy for Managers. (4) (Formerly numbered Management 468A.) Lecture, four hours. Limited to Executive MBA program students. Modern financial management deals with decision making under uncertainty for corporate financial management, portfolio investment decisions, financial institutions,
and international financial management. Focus on learning sound theoretical tools and applying them in casework, S/U or letter grading.

409. Organizational Behavior. (4) (Formerly numbered Management 469.) Lecture, three hours. Limited to Executive MBA program students. Introduction to organizational behavior, including but not limited to optimal decision making, fostering motivation, and other topics on psychology of leadership. Lecture, discussion, and experiential applications of course content. In Progress grading.

410. Operations and Technology Management: Systems, Strategies, and Policies. (4) (Formerly numbered Management 474.) Lecture, three hours. Limited to Executive MBA program students. Analysis of strategic and operating policies and decisions for systems that produce goods and services, Examination of role of comprehensive planning, inventories, scheduling of resources, distribution systems, and system location. Comprehensive operating problems.

411. Marketing Strategy and Policy. (4) (Formerly numbered Management 472A.) Lecture, four hours. Limited to Executive MBA program students. Strategic marketing planning, with emphasis on development of marketing objectives and strategies and implementation of these strategies through pricing, channel, promotion, and new product decisions. S/U or letter grading.

41A. Leadership Foundations I. (2) (Formerly numbered Management 416A.) Lecture, two hours. Limited to Executive MBA program students. Focus on individual problem-solving and decision-making skills. Alternative conceptual frameworks presented for augmenting diagnostic and decision-making skills of individuals. Use of readings, cases, decision simulations, and discussions to explore areas of charting job and career progress, working with others, and shaping work culture. S/U or letter grading.

41B. Leadership Foundations II. (1) (Formerly numbered Management 461B.) Lecture, one hour. Limited to Executive MBA program students. Continuation of course 41A, with focus on development of self-assessment and self-reflection skills. Facilitation of self-evaluation of leadership strengths and weaknesses, with emphasis on individual problem solving and decision making and team design and development. Readings, cases, decision simulations, peer coaching, and discussions. In Progress grading (credit to be given only on completion of course 41AC).

41C. Leadership Foundations III. (1) (Formerly numbered Management 461D.) Lecture, one hour. Limited to Executive MBA program students. Continuation of course 41A, Further exploration of leadership strengths and weaknesses, with emphasis on individual problem solving and decision making, individual goal setting, and goal achievement. Readings, cases, decision simulations, peer coaching, and discussions. S/U grading.

41D. Leadership Foundations IV. (1) (Formerly numbered Management 461E.) Lecture, one hour. Limited to Executive MBA program students. Continuation of course 41A, with focus on development of self-assessment and self-reflection skills. Facilitation of self-evaluation of leadership strengths and weaknesses, with emphasis on individual problem solving and decision making and team design and development. Readings, cases, decision simulations, peer coaching, and discussions. In Progress grading (credit to be given only on completion of course 41E).

41E. Leadership Foundations V. (1) (Formerly numbered Management 461F.) Lecture, one hour. Limited to Executive MBA program students. Continuation of course 41A, Further exploration of leadership strengths and weaknesses, with emphasis on individual leadership and organizational change. Readings, cases, decision simulations, peer coaching, and discussion. S/U grading.

420. Competitive Strategy and Business Policy. (4) (Formerly numbered Management 476B.) Limited to Executive MBA program students. Study of general management task of forging a corporate competitive strategy, with focus on the economics of business rivalry within a variety of industrial settings and implications of changing environments on business strategy.

421. International Business Residential. (4) (Formerly numbered Management 472D.) Seminar, six hours. Limited to Executive MBA program students. Focuses on doing business globally. Includes on-campus seminars and intensive week of study in another country with lectures, panel discussions, and company site visits. Exposure to economic, legal and political environments, major industries and businesses, local culture, key historical events, and many aspects of conducting business in other countries. Taught by school faculty members in conjunction with lectures by faculty members from top international institutions, as well as local and regional government officials and ministers, local business executives, and influential leaders from country of focus. S/U or letter grading.

422. Leadership in Practice. (4) Lecture, six hours. Limited to Executive MBA program students. Addresses practical decision-making challenges leaders face when confronting decisions alone and in groups. Students learn to recognize cognitive biases in themselves and in others and gain skills to re-calibrate group dynamics in order to achieve better results. These skills are taught experientially through participatory simulations and post-hoc analyses. Letter grading.

428A-428B. Business Creation Capstone. (6–4) Lecture, three hours; fieldwork, three hours. Limited to Executive MBA program students. Designed for students interested in launching their own business. Students work in small teams to develop comprehensive strategy for launching that business. Fulfills MBA comprehensive examination requirement. In Progress (428A) and letter (428B) grading.

439. Selected Topics in Management. (4) Seminar, six hours. Limited to Executive MBA program students. Examination of selected problems and issues in area of current concern in management. Letter grading.

440. Selected Topics in Management. (2) Seminar, three hours. Limited to Executive MBA program students. Examination of selected problems and issues in area of current concern in management. Letter grading.

441. Selected Topics in Management. (1) Seminar, two hours. Limited to Executive MBA program students. Examination of selected problems and issues in area of current concern in management. Letter grading.

442. Selected Topics in Management. (4) Seminar, six hours. Limited to Executive MBA program students. Examination of selected problems and issues in area of current concern in management. S/U grading.

443. Selected Topics in Management. (2) Seminar, three hours. Limited to Executive MBA program students. Examination of selected problems and issues in area of current concern in management. S/U grading.

444. Selected Topics in Management. (1) Seminar, two hours. Limited to Executive MBA program students. Examination of selected problems and issues in area of current concern in management. S/U grading.

445A. Introduction to Strategic Management Research. (2) (Formerly numbered Management 470A.) Fieldwork, two hours. Limited to Executive MBA program students. Methods of organizational and strategic analysis to determine relationship of organization with its environment. In Progress grading (credit to be given only on completion of course 445B and 4450).

445B. Strategic Management Research. (4) (Formerly numbered Management 470B.) Fieldwork, four hours. Limited to Executive MBA program students. Preparation of strategic overview of selected company entailing collection of secondary data. Analysis of primary and secondary data, including (but not limited to) interviews of corporate executives, corporate financial and marketing data, industry reports, and customer and competitor interviews in Progress grading (credit to be given only on completion of course 445C).

445C. Strategic Management Research. (4) (Formerly numbered Management 470C.) Fieldwork, four hours. Limited to Executive MBA program students. Further research and analysis of one strategic issue facing selected company and identified in course 445B. Presentation of final reports and evaluation of student efforts by corporate personnel. S/U or letter grading.

450. Management–Full-Time MBA

Graduate Courses

401A-401B. Leadership Foundations. (1–3) Three-day residential format (course 401A) and lecture, three hours (course 401B). Managing and working with people, with emphasis on motivation and development of individuals, leadership and interpersonal relationships, and group dynamics in complex organizational settings. In Progress (401A) and letter (401B) grading.

402. Data and Decisions. (4) (Formerly numbered Management 402.) Lecture, three hours. Topics include probabilities, random variables (expectation, variance, covariance, normal random variables), decision trees, estimation, hypothesis testing, and multiple regression models. Emphasis on actual business problems and data. Letter grading.

403. Financial Accounting. (4) (Formerly numbered Management 403.) Lecture, three hours. Designed for graduate students. Introduction to fundamental financial accounting methods and procedures, with emphasis on financial statements. Provides basis for firm understanding of language of business—accounting. Letter grading.


405. Foundations of Finance. (4) (Formerly numbered Management 405.) Lecture, three hours. Introduction to managerial finance. Topics include time value of money, discounting and present values, valuation of bonds and stocks, risk and return, construction of optimal portfolios, capital budgeting, and weighted average cost of capital. Letter grading.

409. Organizational Behavior. (4) (Formerly numbered Management 409.) Lecture, three hours. Requires: courses 402, 403. Principles and decision analysis related to effective utilization of factors of production in manufacturing and nonmanufacturing activities for both intermittent and continuous systems. Production organizations, analytical models and methods, facilities design, and design of control systems for production operation. Letter grading.

411. Marketing Management. (4) (Formerly numbered Management 411.) Lecture, three hours. Prerequisites: courses 402, 403. Principles and decision analysis related to effective utilization of factors of production in manufacturing and nonmanufacturing activities for both intermittent and continuous systems. Production organizations, analytical models and methods, facilities design, and design of control systems for production operation. Letter grading.


Management – Fully Employed MBA

Graduate Courses

4.01. Leadership Foundations. (3) Three-day residential format. Managing and working with people, with emphasis on motivation and development of individuals, leadership and interpersonal relationships, and group dynamics in complex organizational settings. Letter grading.

4.02. Data and Decisions. (4) (Formerly numbered Management 402.) Lecture, three hours. Topics include probabilities, random variables (expectation, variance), decision trees, estimation, hypothesis testing, and multiple regression models. Emphasis on actual business problems and data. Letter grading.

4.03. Financial Accounting. (4) (Formerly numbered Management 403.) Lecture, three hours. Designed for graduate students. Introduction to fundamental financial accounting methods and procedures, with emphasis on basic financial statements. Provides basis firm understanding of language of business—accounting. Letter grading.

4.05. Managerial Economics. (4) (Formerly numbered Management 405.) Lecture, three hours. Designs focused on factors of production, producer, and market behavior. Market structure, pricing, and resource allocation. Applications to managerial strategy and public policy, with emphasis on competition, market power, and externalities. Letter grading.

4.08. Foundations of Finance. (4) (Formerly numbered Management 408.) Lecture, three hours. Introduction to managerial finance. Topics include time value of money, capital budgeting and present values, valuation of bonds and stocks, risk and return, construction of optimal portfolios, capital budgeting, and weighted average cost of capital. Letter grading.


4.10. Operations Technology Management. (4) (Formerly numbered Management 410.) Lecture, three hours. Requisites: courses 402, 403. Principles and decision analysis related to effective utilization of factors of production in manufacturing and nonmanufacturing environments and on design of control systems. Production organizations, analytical models and methods, facilities design, and design of control systems for production operations. Letter grading.


4.21. Applied Management Research. (2) (Formerly numbered Management 421B.) Fieldwork, eight hours. Must be taken after completion of at least two terms of MBA program. Under direction of MBA program senior associate dean or other supervising faculty advisor, students perform fieldwork focusing on one new business or (3) pursuit of one faculty-led special project, and formal presentation of findings and recommendations to varied audiences; how to apply visual and verbal messaging research and theory while analyzing audiences, organize and target messages for maximum impact, and communicate these messages in persuasive manner. Letter grading.

4.22. Applied Management Research. (8) (Formerly numbered Management 445.) Fieldwork, eight hours. Must be taken after completion of first year in program. Projects of organizational and strategic analysis to determine relationship of organization with its environment. In Progress grading (credit to be given only on completion of courses 427A and 427C).

4.23B. Fieldwork in Organizations. (4) (Formerly numbered Management 447B – 447C) Fieldwork, four hours. Limited to full-time MBA program students. Must be taken after completion of first year in program. Projects include: (1) faculty-guided consulting project with private companies, nonprofit government agencies, establishment of client relationships, identification of problems or strategic questions, design and direction of data analysis of data development and reporting of implementable recommendations. Letter grading.

4.23A. Introduction to Applied Management Research. (2) (Formerly numbered Management 444A) Lecture and fieldwork, eight hours. Introduction to full-time MBA program students. Must be taken after completion of first year in program. Methods of organizational and strategic analysis to determine relationship of organization with its environment. In Progress grading (credit to be given only on completion of courses 423B and 423C).

4.24. Workfield in Organizations. (4) (Formerly numbered Management 445B – 444C) Fieldwork, four hours. Limited to full-time MBA program students. Must be taken after completion of first year in program. Projects include: (1) faculty-guided consulting project with private companies, nonprofit government agencies, establishment of client relationships, identification of problems or strategic questions, design and direction of data analysis of data development and reporting of implementable recommendations. Letter grading.

4.25. Fieldwork in Organizations. (4) (Formerly numbered Management 454.) Fieldwork, to be arranged. Preparation: completion of at least two terms of MBA program. Required of all full-time MBA students. Under direction of MBA program senior associate dean or other supervising faculty advisor, students perform fieldwork focusing on one new business or (3) pursuit of one faculty-led special project, and formal presentation of findings and recommendations to varied audiences; how to apply visual and verbal messaging research and theory while analyzing audiences, organize and target messages for maximum impact, and communicate these messages in persuasive manner. Letter grading.

4.26. Fieldwork in Organizations. (4) (Formerly numbered Management 454B) Fieldwork, to be arranged. Preparation: completion of at least three terms of FEMBA program. Under direction of FEMBA program senior associate dean or other supervising faculty advisor, students perform fieldwork focusing on one new business or (3) pursuit of one faculty-led special project, and formal presentation of findings and recommendations to varied audiences; how to apply visual and verbal messaging research and theory while analyzing audiences, organize and target messages for maximum impact, and communicate these messages in persuasive manner. Letter grading.

Executive MBA Asian Pacific

Graduate Courses

4.02. Data Analysis and Management Decisions under Uncertainty. (4) (Formerly numbered Management 463.) Lecture, four hours. Limited to UCLA-NUS Executive MBA program students. Survey of statistical model building, with emphasis on managerial interpretation of statistical summary of data. Classical statistics covered through multiple regression to support courses in finance and marketing that follow. Fundamental approaches to decision making under uncertainty. Letter grading.

4.03. Financial Accounting. (4) (Formerly numbered Management 464.) Lecture, six hours. Limited to UCLA-NUS Executive MBA program students. Familiarizes the manager with functions of accounting by focusing on use of external financial reports for evaluating corporate performance and use of accounting information for internal planning and control. S/U or letter grading.

4.04. Negotiations Behavior. (4) (Formerly numbered Management 482.) Lecture, three hours. Presentation of theoretical principles and concepts from psychology, sociology, and economics through lectures and readings, with focus primarily on improving practical negotiating skills through experiential learning (i.e., negotiations simulations). Participants learn to enhance their individual abilities in dyadic and group situations and to recognize contexts for most effective application of these skills. Letter grading.

4.06A-406B. Strategic Leadership and Implementation. (2–2) (Formerly numbered 406.) Lecture, three hours. Designed to address several fundamental aspects of leading complex organizations, with emphasis on important tasks of developing well-aligned, high-performance organizations and on challenges of leading change in organizations. Enables students to develop an organized point of view on strategic leadership and to increase their awareness of themselves as leaders. In Progress (406A) and letter (406B) grading.
Management–Master of Science in Business Analytics
Graduate Courses

400. Fundamentals of Investments. (2) (Formerly numbered Management 237B.) Lecture, three hours. Limited to Master of Science in Business Analytics students. Essentials of asset pricing and portfolio choice, standard discounted cash flow approaches, and no-arbitrage framework for valuing financial securities. Basic paradigms of asset pricing, such as capital asset pricing model (CAPM), arbitrage pricing theory (APT), and Fama-French Three-Factor model. Development and illustration of dynamic portfolio selection and optimization approaches. Letter grading.


410. Logics of Organizations Management. (4) (Formerly numbered Management 474A.) Lecture, three hours. Limited to UCLA-NUS Executive MBA program students. Analysis of strategic and operating policies and decisions for systems that produce goods and services. Examination of role of comprehensive planning, inventories, scheduling of resources, distribution systems, and system location. Comprehensive operating problems. S/U or letter grading.

420. Management of Technology and Innovation. (4) (Formerly numbered Management 483.) Lecture, three hours. Problems of managing technological innovation in Asia. Topics include incorporation of technology into strategy, adoption of technological innovation, promoting innovation through organizational design and leadership, e-business, and m-business. Letter grading.

439. Selected Topics in Management. (4) Seminar, six hours. Limited to UCLA-NUS Executive MBA program students. Examination of selected problems and issues in area of current concern in management. Letter grading.

440. Selected Topics in Management. (2) Seminar, three hours. Limited to UCLA-NUS Executive MBA program students. Examination of selected problems and issues in area of current concern in management. Letter grading.

441. Selected Topics in Management. (1) Seminar, two hours. Limited to UCLA-NUS Executive MBA program students. Examination of selected problems and issues in area of current concern in management. Letter grading.

442. Selected Topics in Management. (4) Seminar, six hours. Limited to UCLA-NUS Executive MBA program students. Examination of selected problems and issues in area of current concern in management. S/U grading.

443. Selected Topics in Management. (2) Seminar, three hours. Limited to UCLA-NUS Executive MBA program students. Examination of selected problems and issues in area of current concern in management. S/U grading.

444. Selected Topics in Management. (1) Seminar, two hours. Limited to UCLA-NUS Executive MBA program students. Examination of selected problems and issues in area of current concern in management. Letter grading.

445A-445B-445C. Management Practicum. (4–2–2) (Formerly numbered Management 471A–471B.) Fieldwork, to be arranged. Three-term individual or group (three to five students) project on global strategic issues designed to allow students to employ and enhance concepts learned in classroom. In Progress (445A and 445B) and letter (445C) grading.

446. Derivative Markets. (4) (Formerly numbered Management 237D.) Lecture, three hours. Limited to Master of Financial Engineering program students. Introduction to derivative markets and basic concepts, models, analyses, and technical tools of quantitative finance used in these markets. Derivatives are both exchange traded and over-counter securities. Derivative markets are vast, largest and most liquid. Organization and role of put and call option markets, futures and forward markets, and their interrelations, with emphasis on arbitrage relations, valuation, and hedging with derivatives. In UCLA-NUS, implementation of derivative trading strategies, perspective of corporate securities as derivatives, functions of derivatives in securities markets, and recent innovations in derivative markets. S/U or letter grading.


448. Fixed-Income Markets. (4) (Formerly numbered Management 237F.) Lecture, three hours. Limited to Master of Financial Engineering program students. Quantitative approach to fixed-income securities and bond portfolio management, with focus on fixed-income security markets. Pricing of bonds and fixed-income derivatives, measurement and hedging of interest rate, credit, and equity risk, and implementation of interest rate, credit, and equity risk, and management of fixed-income portfolio risk. S/U or letter grading.


450. Applied Finance Project. (4) (Formerly numbered Management 237N.) Fieldwork, four hours. Limited to Master of Financial Engineering program students. Applied quantitative finance project that explores one quantitative finance problem that might be met in practice and involves development or use of some tools developed in MFE program. S/U or letter grading.

451. Fieldwork/Research on Financial Engineering. (4) (Formerly numbered Management 237L) Fieldwork, to be arranged. Presentation of completion of one term of MFE program. Limited to Master of Financial Engineering program students. Supervised, nonpaid, or paid practical research experience or fieldwork in organization as intern or fellow. Execution of predetermining assignment(s) pursuant to defined program of study that may include formal coursework. May not be applied toward MFE degree requirements. S/U or letter grading.

452. Special Topics in Financial Engineering. (2 to 4) (Formerly numbered Management 237M.) Lecture, three hours. Limited to Master of Financial Engineering program students. In-depth examination of problems or issues in one area of current concern in financial engineering. May be repeated for credit. S/U or letter grading.


462. SQL and Basic Data Management. (2) Lecture, three hours. Limited to Master of Science in Business Analytics students. Introduction to and practice in Structured Query Language (SQL) syntax and constructs pertaining to data definitions, data manipulation, and data controls in relational databases using MySQL and important concepts of data management including data analysis and modeling for relational database management systems (RDBMS). Letter grading.


406. Prescriptive Models and Data Analytics. (4) Lecture, three hours. Limited to Master of Science in Business Analytics students. Fundamental techniques for data analytics, including experimental design and analysis, regression analysis, and model design, and how to implement these approaches using statistical analysis software. Letter grading.


408. Competitive Analytics. (4) Lecture, three hours. Limited to Master of Science in Business Analytics students. How business analytics can be used to optimize internal processes and resources. Applications of data analytics to examine competitive conditions in industry and market. S/U or letter grading.


412. Business Analytics Supervised Project. (4) Fieldwork, three hours. Limited to Master of Science in Business Analytics students. Hands-on applied analytics project that helps prepare students for career in quantitative analysis and data science by testing their ability to solve complex analytical business problems in real-world settings. Students hone their communication skills and delve deeply into interest of area of business interest. Students learn strategy, business consulting, entrepreneurship, business plan development, project management, analysis, market assessment, financial analysis, and planning. Letter grading.

413. Industry Seminar II. (2) Seminar, 90 minutes to three hours. Required of Master of Science in Business Analytics students. Industry guest speaker presentations. S/U or letter grading.

431. Internet Customer Analytics. (2) Lecture, three hours (five weeks). Limited to Master of Science in Business Analytics students. Focuses on strategies and tactical issues that come up after foundational stage, specifically those issues related to customer acquisition and customer retention. Introduction of analytics frameworks, data structures, and models needed to support best practices around these issues. S/U or letter grading.

432. Health Care Analytics. (2) Lecture, three hours (five weeks). Limited to Master of Science in Business Analytics students. Exploration of opportunities for improvement in health care systems and operations, using tools such as regression analysis, linear optimization, queuing theory, decision analysis, Monte Carlo simulation, and machine learning. Emphasis on operations challenges facing health care managers and technologies for improving efficiency in variety of health care settings. Introduction of data analytics and operations management in health care industry, and practical experience with developing quantitative tools and empirical analyses. S/U or letter grading.

433. Entertainment Analytics. (2) Lecture, three hours (five weeks). Limited to Master of Science in Business Analytics students. Introduction to business analytics in entertainment industry. Focus on movie studios, television, and online media. Entertainment and media executives have changed way they approach decision making as result of big data and analytics in last two years, including making greater use of specialized analytics tools; employing dedicated data insights teams to identify: insights; and relying on enhanced data analytics such as simulation, optimization, or predictive analytics. Examination of content as it is produced by studios and then goes from one stage to another, being shown in theaters, broadcast on television, and Internet. Analytics of providing content looking both at investment need to produce and disseminate content, and how revenues are being characterized, covered, and accounted for. Letter grading.


435. Data Visualization. (2) Lecture, three hours (five weeks). Limited to Master of Science in Business Analytics students. Offers solid basis for working with data and for exploring discipline. Collection, visualization, and processing of big data through lectures, case studies, and intensive class project. Tableau and Python are used. Addresses both theoretical underpinning of domain and intensive applied computing component. S/U or letter grading.

436. Fraud Analytics. (2) Lecture, three hours (five weeks). Limited to Master of Science in Business Analytics students. How to build analytics side of fraud detection model systems. Covers all algorithmic aspects of solving fraud problem, in particular how to approach, and design, algorithmic solution. Focus on algorithmic development. Does not address software engineering aspects of building and fielding fraud solution. Topics covered are background for building real-time fraud detection systems and forensic accounting principles. S/U or letter grading.

437. Forecasting and Time Series. (2) Lecture, three hours (five weeks). Limited to Master of Science in Business Analytics students. Covers principal methods of time series analysis and forecasting that are applicable in many functional areas of business, including simple and multiple regression, seasonality decomposition, AutoRegressive Integrated Moving Average (ARIMA), vector autoregressive, dynamic linear, error correction models. Use of R, R Studio and its various packages for regression and time series econometrics analysis and forecasting models. S/U or letter grading.

438. Sports Analytics. (2) Lecture, three hours. Preparation: programming experience (Python), basic statistics. Discussion of theory, development, and application of analytics in sports for purposes of in-game strategy, player performance, team management, sports operations, and fantasy competitions, among other topics. Lectures, labs, guest speakers from sports industry and academia, and culminating group project. S/U or letter grading.

Management—PhD Graduate Courses

200. Economics of Decision. (4) (Formerly numbered Management 200A) Discussion, three hours. Preparation: basic probability theory. Basics of single-person decision theory and introduction to noncooperative game theory. Examination in some detail of von Neumann-Morgenstern expected utility theory. Other topics in decision theory include subjective expected utility theory and departures from expected utility behavior. S/U or letter grading.

201A. Probability, Statistics, and Computational Methods for Economics. (4) (Formerly numbered Management 204A) Lecture, three hours. Designed for PhD students. Introduction to probabilistic, statistical, and computational tools needed for applied research in business fields. Probability theory, models of convergence, hypothesis testing, Bayesian inference, R programming, linear algebra, numerical optimization, simulation methods, numerical integration. S/U or letter grading.

201B. Theory and Application of Regression Analysis. (4) (Formerly numbered Management 204B) Lecture, three hours. Recommended requisite: course 201A. Introduction to general regression analysis. Linear model, maximum likelihood and asymptotic tests, endogeneity, instrumental variables, differences-in-differences, regression-discontinuity design, propensity score matching, limited dependent variable models, introduction to panel data. S/U or letter grading.


202A-202B-202C. Accounting Workshops. (1–1–2) (Formerly numbered Management 229X-229Y-229Z) Lecture, two hours. Designed for PhD students. Intended to develop ability to critically evaluate research in fields relevant to study of accounting. Papers presented in colloquium format by leading scholars in accounting. Active participation and intellectual interchange encouraged through discussion of papers during colloquium. May be repeated for credit. S/U grading.

203A-203B. Research Topics in Finance. (2–2) (Formerly numbered Management 236A-236B) Seminar, three hours. Course 236A is requisite to 236B. Designed for PhD students in their second through fourth year. Intended to help students bridge gap between coursework and research. Students select academic financial economics papers that they present, replicate, and critique. In Progress (203A) and S/U or letter (203B) grading.

204A-204B-204C. Finance Workshops. (1–1–2) (Formerly numbered Management 239X-239Y-239Z) Lecture, 90 minutes. Designed for PhD students. Intended to develop ability to critically evaluate finance research. Papers presented in colloquium format by leading scholars in finance. Active participation and intellectual interchange encouraged through discussion of papers in sessions prior to workshop, as well as during colloquium. May be repeated for credit. S/U grading.


206A-206B-206C. Research Seminars: Management and Organizational Behavior. (1–1–2) (Formerly numbered Management 258X-258Y-258Z) Seminar, two hours. Designed for PhD students. De-
development of ability to critically evaluate research in fields relevant to study of problems or issues of current concern in management and organizational behavior. Papers presented in colloquium format by leading scholars in economics. Active participation and intellectual interchange encouraged through discussion of papers during colloquium. May be repeated for credit. S/U or letter grading.

207A-207B-207C. Workshops: Marketing. (1–1–2) (Formerly numbered Management 268X-268Y-268Z.) Lecture, three hours. Designed for PhD students. Examination in depth of problems or issues of current concern in accounting, such as application of information economics and principal-agent model to accounting. S/U or letter grading.

231. Network Flows and Integer Programming. (4) (Formerly numbered Management 210C.) Lecture, three hours. Preparation: linear programming. Survey course to (1) lay foundations for more advanced study of graphs, network flow models, and integer programming models and their applications, (2) establish connections between optimization and real problems drawn from many areas of management, and (3) build professional skills needed to apply these tools. S/U or letter grading.

232. Behavior under Uncertainty. (4) (Formerly numbered Management 212C.) Lecture, three hours. Preparation: linear programming. Survey course to (1) lay foundations for more advanced study of graphs, network flow models, and integer programming models and their applications, (2) establish connections between optimization and real problems drawn from many areas of management, and (3) build professional skills needed to apply these tools. S/U or letter grading.


241A. Models for Operations Planning, Scheduling, and Control. (4) (Formerly numbered Management 242A.) Lecture, three hours. Designed for PhD students. Examination in depth of problems or issues of current concern in accounting, such as application of information economics and principal-agent model to accounting. S/U or letter grading.


244. Advanced Studies in Organizational Behavior. (4) (Formerly numbered Management 259B.) Lecture, three hours. Designed for graduate students. Doctoral-level survey of research literature assessing how organizations utilize human resources to enhance individual, group, and organizational effectiveness. Current theory and research in psychology, anthropology, organization behavior, and economics, including topics such as careers, participation, negotiations, and team/group work systems. S/U or letter grading.

245. Research in Organizations. (4) (Formerly numbered Management 259C.) Seminar, three hours. Designed for graduate students. Doctoral-level survey of major topics in organizational behavior, with focus on research associated with study of organizational systems and organizational environments. Topics may include demography, organizational change, organizational structure, and networks. Letter grading.

246. Theory in Marketing. (4) (Formerly numbered Management 269A.) Lecture, three hours. Serves as mechanism to introduce students to development of theory in marketing by identifying and analyzing major topic of theory development and testing. Prepares students for conducting theoretically grounded research in marketing. S/U or letter grading.

247. Research in Marketing Management. (4) (Formerly numbered Management M292A.) Lecture, three hours. Designed for PhD students. Study of research issues associated with marketing management decisions. Recent research in areas of strategic marketing, marketing segmentation, new product development, pricing, and sales force management examined critically. Review of both quantitative and behavioral approaches to studying these issues. S/U or letter grading.

248. Quantitative Research in Marketing. (4) (Formerly numbered Management 269C.) Lecture, three hours. Designed for PhD students in management and related fields. Students are assumed to have good background in marketing principles and to be familiar with probability, statistics, mathematical programming, and econometrics. Review of a range of quantitative models as applied in marketing research. S/U or letter grading.

249. Behavioral Research in Marketing. (4) (Formerly numbered Management 269D.) Seminar, three hours. Designed for PhD students who are conducting research in consumer behavior or related areas. Empirical research in consumer behavior surveyed and critically evaluated from theoretical as well as practical perspectives. S/U or letter grading.

250. Special Research Topics in Marketing. (4) (Formerly numbered Management 269E.) Lecture, three hours. Designed for PhD students. Advanced selected topics in marketing, with emphasis on theoretical development of core concept in marketing research. May be repeated for credit. S/U or letter grading.

M251. Research and Development Policy. (4) (Formerly numbered Management M292A.) Lecture, three hours. Designed for PhD students. Study of research issues associated with marketing management decisions. Recent research in areas of strategic marketing, marketing segmentation, new product development, pricing, and sales force management examined critically. Review of both quantitative and behavioral approaches to studying these issues. S/U or letter grading.

M252. Special Topics in Management Theory. (4) (Formerly numbered Management 298A.) Lecture, three hours. Designed for PhD students. Examination in depth of problems or issues of current concern in management theory. Emphasis on recent contributions to theory, research, and methodology. Special interest to advanced PhD candidates, academic staff, or distinguished visiting faculty. May be repeated for credit. S/U or letter grading.

M253. Field Research in Organizations and Management. (4) (Formerly numbered Management 299M) Seminar, three hours. Designed for PhD students. Immersion in discipline and practice of using field data to conduct management research. Students become more informed users and reviewers of variety of methodological approaches. Students gain familiarity with approaching companies to partner on research, gathering and preparing to analyze field data, and what to
expect in review process for paper that uses field data. Content of research discussed could extend to other fields (e.g., strategy, psychology, judgment and decision making). S/U or letter grading.


255. Information and Trading in Financial Markets. (4) Lecture, three hours. Consideration of research on how information is processed in financial markets. Emphasis on classical models, as well as psychological approaches to stock price movements. Review of behavioral interpretations of trading behavior and price patterns in financial markets. S/U or letter grading.

MATERIALS SCIENCE AND ENGINEERING

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Sunneel Kodambaka, PhD
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Jaime Marian, PhD
Ali Mosleh, PhD (Evalyn Knight Professor of Engineering)
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Gaurav Sant, PhD
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Amartya S. Banerjee, PhD
Ximin He, PhD
Aaswath P. Raman, PhD

Adjunct Associate Professors
Eric P. Bescher, PhD
Sergey Prikhodko, PhD

Adjunct Assistant Professors
Magdalena Balonis-Sant, PhD
Marta Pozuelo, PhD

Scope and Objectives
At the heart of materials science and engineering is the understanding and control of the microstructure of solids. Microstructure is used broadly in reference to electronic and atomic structure of solids—and defects within them—at size scales ranging from atomic bond lengths to airplane wings. The structure of solids over this wide range dictates their structural, electrical, biological, and chemical properties. The phenomenological and mechanistic relationships between microstructure and the macroscopic properties of solids are, in essence, what materials science is all about.

Materials engineering builds on the foundation of materials science and is concerned with the design, fabrication, and optimal selection of engineering materials that must simultaneously fulfill dimensional, property, quality control, and economic requirements.

The undergraduate program in the Department of Materials Science and Engineering leads to the BS degree in Materials Engineering. Students are introduced to the basic principles of metallurgy and ceramic and polymer science as part of the Materials Engineering major. The Chemistry/Materials Science major is offered by the Department of Chemistry and Biochemistry in the College of Letters and Science.

The department also has a program in electronic materials that provides a broad-based background in materials science, with opportunity to specialize in the study of those materials used for electronic and optoelectronic applications. The program incorporates several courses in electrical engineering in addition to those in the Materials Science curriculum.

The graduate program allows for specialization in one of the following fields: ceramics and ceramic processing, electronic and optical materials, or structural materials.

Undergraduate Study
The materials engineering program is accredited by the Engineering Accreditation Commission of ABET.

The Materials Engineering major is a designated capstone major. Students undertake two individual projects involving materials selection, treatment, and serviceability. Successful completion requires working knowledge of physical properties of materials and strategies and methodologies of using materials properties in the materials selection process. Students learn and work independently and practice leadership and teamwork in and across disciplines. They are also expected to communicate effectively in oral, graphic, and written forms.

Materials Engineering BS

Capstone Major
The materials engineering program is designed for students who wish to pursue a professional career in the materials field and desire a broad understanding of the relationship between microstructure and properties of materials. Metals, ceramics, and polymers, as well as the design, fabrication, and testing of metallic and other materials such as oxides, glasses, and fiber-reinforced composites, are included in the course contents.

Learning Outcomes
The Materials Engineering major has the following learning outcomes:

• Application of knowledge of mathematics, natural science, and engineering to analysis of materials and other systems
• Learn and work independently
• Practice leadership and teamwork in and across disciplines
• Design of a system, component, or process to meet desired needs
• Effective oral, graphic, and written communication
• Identification, formulation, and solution of engineering problems

Materials Engineering Option

Preparation for the Major
Required: Chemistry and Biochemistry 20A, 20B, 20L; Civil and Environmental Engineering M20 or Computer Science 31 or Mechanical and Aerospace Engineering M20; Materials Science and Engineering 10, 90L; Mathematics 31A, 31B, 32A, 32B, 33A, 33B (or Mechanical and Aerospace Engineering 82); Physics 1A, 1B, 1C.

The Major

Required: Civil and Environmental Engineering 91 (or Mechanical and Aerospace Engineering 101), 108, Electrical and Computer Engineering 100, Materials Science and Engineering 104, 110, 110L, 120, 130, 131, 131L, 132, 143A, 150, 160; one upper-division mathematics course selected from Civil and Environmental Engineering 103, Electrical and Computer Engineering 102, Mathematics 132, Mechanical and Aerospace Engineering 102B, 102C; two laboratory courses (4 units) from Materials Science and Engineering 121L, 141L, 143L, 16SL, or up to 2 units of 199; three technical breadth courses (12 units) selected from an approved list available in the Office of Academic and Student Affairs; two capstone design courses (Materials Science and Engineering 140A and 140B); and two major field elective courses (8 units) from Chemical Engineering CM114, Civil and Environmental Engineering 130, 135A, Electrical and Computer Engineering 2, 123A, 123B, Materials Science and Engineering C111, C112, 121, 122, 151, 161, 162, Mechanical and Aerospace Engineering 156A, 166C; plus at least one elective course (4 units) from Chemistry and Biochemistry 30A, 30AL, Electrical and Computer Engineering 131A, Materials Sci-
Preparation for the Major
Required: Chemistry and Biochemistry 20A, 20B, 20L; Civil and Environmental Engineering M20 or Computer Science 31 or Mechanical and Aerospace Engineering M20; Materials Science and Engineering 10, 90L; Mathematics 31A, 31B, 32A, 32B, 33A, 33B (or Mechanical and Aerospace Engineering 82); Physics 1A, 1B, 1C.

The Major
Required: Electrical and Computer Engineering 100, 101A, 121B, Materials Science and Engineering 104, 110, 110L, 120, 121L, 122, 130, 131, 131L, 132, Mechanical and Aerospace Engineering 101; one upper-division mathematics course selected from Civil and Environmental Engineering 103, Electrical and Computer Engineering 102, Mathematics 132, Mechanical and Aerospace Engineering 182B, 182C; either Materials Science and Engineering 150 or 160 and one course (4 units) from Electrical and Computer Engineering 123A, 123B, Materials Science and Engineering 150, 160; 4 laboratory units from Materials Science and Engineering 141L, 161L, or up to 2 units of 199; three technical breadth courses (12 units) selected from an approved list available in the Office of Academic and Student Affairs; two capstone design courses (Materials Science and Engineering 140A and 140B); and one major field elective course (4 units) from Electrical and Computer Engineering 110, 131A, Materials Science and Engineering 111, 112, 143A, or 162.

For information on UC, school, and general education requirements, see the College and Schools chapter.

Electronic Materials Option

Graduate Study
Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Division website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Graduate Degrees
The Department of Materials Science and Engineering offers Master of Science (MS) and Doctor of Philosophy (PhD) degrees in Materials Science and Engineering.

Materials Science and Engineering

Lower-Division Courses

10. Freshman Seminar: New Materials. (1) Seminar; one hour; outside study, two hours. Preparation: high school chemistry and physics. Not open to students with credit for course 104. Introduction to basic concepts of materials science and new materials vital to advanced technology. Microstructural analysis and various material properties discussed in conjunction with such applications as biomedical sensors, pollution control, and microelectronics. Letter grading.

13L. Cultural (Materials) Science Investigations in Art and Archaeology. (5) Laboratory, four hours; discussion, two hours; site visits, four hours; outside study, five days. Focus on portable X-ray fluorescence (XRF) and neutron based, visible, near infrared (UV/Vis/NIR) spectroscopy and forensic imaging, with emphasis on fundamentals of techniques, data collection and interpretation, and effects of weathering on prehistoric and posthistoric objects. Use of renaissance technology and taphonomic processes to help answer questions related to ancient materials manufacturing technologies, material variability, and human interaction with environment. Experimental techniques and analysis of materials through: X-ray fluorescence spectroscopy (XRF); fiber optic reflectance spectroscopy (FORS); and forensic multispectral imaging. Letter grading.

19. Fiat Lux Freshman Seminars. (1) Seminar; one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

33. Materials Structure and Technology in Archaeology and Architecture. (5) Seminar, four hours; laboratory, two hours; site visits, four hours; outside study, five days. Exploration of three classes of materials and composites for their durability and sustainability as time-proven exemplars of technology innovation and/or invention. Letter grading.

90L. Physical Measurement in Materials Engineering. (2) Laboratory, four hours; outside study, two hours. Various physical measurement methods utilized in materials science and engineering. Mechanical, thermal, electrical, magnetic, and optical techniques. Letter grading.

99. Student Research Program. (1 to 2) Tutorial (supervised research experience), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Courses

104. Science of Engineering Materials. (4) Lecture, three hours; discussion, one hour; outside study, eight hours. Requisites: Chemistry 20A, 20B, 20L, Physics 1A, 1B. General introduction to different types of materials used in engineering designs: metals, ceramics, plastics, and composites, relationship between structure (crystals and microstructure) and properties of technological materials. Illustration of their fundamental differences and their applications in engineering. Letter grading.

M105. Principles of Nanoscale and Nanotechnology. (4) (Same as Engineering M101.) Lecture, four hours; discussion, one hour; outside study, seven hours. Enforced requisites: Chemistry 20A, 20B, Physics 1C. Introduction to underlying science encompassing chemistry, physics, and fabrication of technologically important nanoscale systems. New phenomena that emerge in very small systems typically with feature sizes below few hundred nanome-
122. Principles of Electronic Materials Processing. (4) Lecture, four hours; discussion, one hour; outside study, seven hours. Enforced requisite: course 104. Description of basic semiconductor materials for device processing; preparation and characterization of silicon, GaAs, GaP, and films. Discussion of principles of CVD, MOCVD, LPE, and MBE; metals and dielectrics. Letter grading.

130. Phase Relations in Solids. (4) Lecture, four hours; discussion, one hour; outside study, seven hours. Enforced requisite: course 132 or Chemistry 110A. Diffusion in metals and ionic solids, nucleation and growth theory; precipitation from solid solution, eutectoid decomposition, design of heat treatment processes of alloys, growth of intermediate phases, gas-solid reactions, design of oxidation-resistant alloys, recrystallization, and grain growth. Letter grading.

131L. Diffusion and Diffusion-Controlled Reactions Laboratory. (2) Laboratory; two hours; outside study, four hours. Enforced requisite: course 131. Design of heat treatment, performing experiments in study interdiffusion, growth of intermediate phases, recrystallization, and grain growth in metals. Analysis of data. Comparison of results with theory. Letter grading.


140B. Materials Selection and Engineering Design B. (3) Formerly numbered 140). Lecture, two hours; laboratory, two hours; outside study, five hours. Enforced requisite: course 140A. Explicit guidance among materials available for design in engineering. Properties and applications of steels, nonferrous alloys, polymeric, ceramic, and composite materials, coatings. Materials selection, treatment, and serviceability emphasized as part of successful design. Design projects. Letter grading.

141L. Computer Methods and Instrumentation in Materials Science. (2) Laboratory, four hours. Preparation: knowledge of BASIC or C or assembly language. Limited to junior/senior Materials Science and Engineering majors. Interface and control techniques, real-time data acquisition and processing, computer-aided techniques. Letter grading.

143A. Mechanical Behavior of Materials. (4) Lecture, four hours; discussion, one hour; outside study, seven hours. Enforced requisites: course 104, Mechanical and Aerospace Engineering 101. Plastic flow of metals under simple and combined loading, strain rate and temperature effects, dislocations, fracture, microstructural effects, mechanical and thermal treatment of steel for engineering applications. Letter grading.

143L. Mechanical Behavior Laboratory. (2) Laboratory, four hours. Requisites: courses 90L, 143A (may be taken concurrently). Methods of characterizing mechanical behavior of various materials; elastic and plastic deformation; fracture; fatigue, creep, and creep. Letter grading.

150. Introduction to Polymers. (4) Lecture, four hours; discussion, one hour; outside study, seven hours. Polymerization mechanisms, molecular weight and distribution, chemical structure and bonding, structure crystallinity, and morphology and their effects on physical properties. Glassy polymers, rubbery polymers, elastomers, adhesives. Fiber forming polymers, polymer processing technology, plastication. Letter grading.


160. Introduction to Ceramics and Glasses. (4) Lecture, four hours; discussion, one hour. Outside study, seven hours. Enforced requisites: courses 104, 130. Introduction to ceramics and glasses being used as important materials of engineering, processing techniques, and unique properties. Examples of design and control of properties for certain specific applications in engineering. Letter grading.

161. Processing of Ceramics and Glasses. (4) Lecture, four hours; discussion, one hour. Requisite: course 160. Study of processes used in fabrication of ceramics and glasses for structural applications, optics, electronics. Specific topics include modern techniques of powder synthesis, greenware forming, sintering, glass melting. Microstructure properties relations in ceramics. Fracture analysis and design with ceramics. Letter grading.


162. Electronic Ceramics. (4) Lecture, four hours; outside study, eight hours. Requisites: course 104, Physics 1C. Utilization of ceramics in microelectronics; thick film and thin film resistors, capacitors, and substrates; design and processing of electronic ceramics and packaging; magnetic ceramics; ferroelectric ceramics and electro-optic devices; optical waveguides and lasers. Letter grading.

163. Chemical Engineering 163. Electrochemical Processes. (4) (Same as Chemical Engineering CM114.) Lecture, four hours; discussion, one hour; outside study, seven hours. Requisites: course 130 (or Mechanical and Aerospace Engineering 101) and Chemical Engineering 102. Fundamentals of electrochemistry and engineering applications to industrial electrochemical processes. Primary emphasis on fundamental approach to analysis of materials science and engineering from given set of journal publications. Instruction leads students through several crucial steps, including brainstorming, choosing title, coming up with outline, concise writing of abstract, conclusion, and final polishing. Other subjects include writing style, word choices, and grammar. Letter grading.

CM501 to CM590. Letter grading.

166. Special Courses in Materials Science and Engineering. (4) Seminar, four hours; outside study, eight hours. Special topics in materials science and engineering for undergraduate students taught on experimental or temporary basis, such as those taught by resident and visiting faculty members. May be repeated once for credit with topic or instructor change. Letter grading.

194. Research Group Seminars: Materials Science and Engineering. (4) Seminar, four hours; outside study, eight hours. Designed for undergraduate students who are part of ongoing research in areas including research methods and current literature in field or research of faculty members or students. May be repeated for credit. Letter grading.

199. Directed Research in Materials Science and Engineering. (2 to 6) Tutorial, to be arranged. Limited to juniors/seniors. Supervised individual research or investigation under guidance of faculty mentor. Culminating project or project required. Occasional field trips may be arranged. May be repeated for credit with school approval. Individual contract required; enrollment petitions available in Office of Academic and Student Affairs. Letter grading.

Graduate Courses

200. Principles of Materials Science I. (4) Lecture, four hours; discussion, one hour; outside study, seven hours. Requisite: course 120. Lattice dynamics and thermal properties of solids, classical and quantized electron theory, electrons in a periodic potential, transport in semiconductors, dielectric and magnetic properties of solids. Letter grading.


C211. Introduction to Materials Characterization B (Electron Microscopy). (4) (Formerly numbered 211.) Lecture, four hours; outside study, eight hours. Characterization of microstructure and microchemistry of materials; transmission electron microscopy; recip-
rational, electron diffraction, stereoscopic projection, direct observation of defects in crystals, replicas; scanning electron microscopy: emissive and reflective modes; chemical analysis; electron optics of both instruments. Concurrently scheduled with course C111. Letter grading.


M213. Cultural Materials Science I: Analytical Imaging and Documentation in Conservation of Materials. (4) (Same as Conservation M215) Lecture, two hours; laboratory, two hours. Basic and advanced techniques on digital photography, computer-aided recording tools, and scientific imaging to determine and document condition (defects) and technological features of archaeological and ethnographic materials. Development of basic theoretical knowledge on imaging and photonics technology and practical skills on conservation photo-documentation, analytical (bio)chemical principles, and advanced imaging techniques. Letter grading.

M213L. Cultural Materials Science Laboratory: Technical Study. (4) (Same as Conservation M210L) Laboratory, four hours. Requisites: courses M213 (or M216) and one course from Conservation 260 through M264. Corequisite: course C112 or CM212 (or Conservation M210). Research-based laboratory through object-based problem-solving approach in conservation materials science, experimental techniques, characterization, and analysis of archaeological and ethnographic materials (using materials science principles and reverse engineering processes) to determine technological features, defects, and products of alteration. Hands-on experience with noninvasive imaging and spectroscopic techniques, sampling and sample preparation methods, analysis of microsamples. Letter grading.

M214. Structure, Properties, and Deterioration of Materials: Rock Art, Wall Paintings, Mosaics. (2) (Same as Conservation M264) Lecture, three hours. Recommended: basic knowledge of general chemical and materials science. Introduction to materials and techniques of rock art, wall paintings (including painted surfaces on cement and composite decorative, technical, and artistic), and mosaics; chauvetian and ethnographic context, techniques, and materials. Pigments, colorants, and binding media. Chemical, optical, and structural properties. Relationship between composition (chemistry, structure (crystals, molecular arrangement, and microstructure), and properties explained using basic concepts from physics and chemistry. Intrinsic attributes and resistance to weathering. Causes, sources, and mechanisms of deterioration (physical, chemical, and biocidal), Letter grading.

M215. Conservation Laboratory: Rock Art, Wall Paintings, and Mosaics. (4) (Same as Conservation M250) Laboratory, four hours. Requisites: courses M214, M216 (or C112 or CM212), Conservation 210L. Recommended: course M213. Research-based laboratory on conservation of rock art, wall paintings (archaeological and decorative, technical, and artistic), and mosaics, and decorated architectural surfaces. Experimental techniques and analysis of materials (using materials science and reverse engineering processes) for characterization, conservation, constituent materials, and alteration products; development of conservation treatment proposals, testing of conservation products, and methods and conservation treatment. Letter grading.


221. Science of Electronic Materials. (4) Lecture, four hours; discussion, one hour; outside study, seven hours. Requisites: course 120, Studio of major physical and chemical principles affecting properties and performance of semiconductor devices. Topics include band structure, carrier statistics, band-gap engineering, optical, and transport properties, novel materials systems, and characterization. Letter grading.

222. Growth and Processing of Electronic Materials. (4) Lecture, four hours; discussion, one hour; outside study, seven hours. Requisites: courses 120, 130, 131. Thermodynamics and kinetics that affect semiconductor growth and device processing. Particular emphasis on fundamentals of growth (bulk and epitaxial), heteroepitaxy, implantation, oxidation. Letter grading.

223. Materials Science of Thin Films. (4) Lecture, four hours; discussion, one hour; outside study, seven hours. Requisites: courses 120, 121, 130, 131. Structure, properties and application of thin films used in microelectronics for data and information processing. Topics include film deposition, interface properties, stress and strain, adhesion, phase changes, and kinetics, reliability. Letter grading.

224. Deposition Technologies and Their Applications. (4) Lecture, four hours; discussion, one hour; outside study, seven hours. Requisites: courses 120, 121, 130, 131. Examination of physics behind majority of modern thin film deposition technologies based on vapor phase transport. Basic vacuum technology and gas kinetics. Deposition methods used in high-technology applications. Theory and experimental techniques. Physical vapor deposition (PVD), chemical vapor deposition (CVD), plasma-enhanced chemical vapor deposition processes. Letter grading.


226. Si-CMOS Technology: Selected Topics in Materials Science. (4) Lecture, three hours; discussion, one hour; outside study, eight hours. Recommended prerequisite: Electrical Engineering 221B. Requisites: courses 130, 131, 200, 221, 222. Selected topics in materials science from modern Si-CMOS technology; including technological challenges in high-k/metal gate stacks, strained Si, three-dimensional FETs, source/drain engineering including transient-enhanced diffusion, nonvolatile memory, and metatization for organic contacts. Letter grading.

243A. Fracture of Structural Materials. (4) Lecture, four hours; laboratory, two hours; outside study, four hours. Requisites: course 143A. Engineering and scientific aspects of crack nucleation, slow crack growth, and unstable fracture. Dislocations, dislocation models, fatigue, fracture in reactive environments, alloy development, fracture-safe design. Letter grading.

243C. Dislocations and Strengthening Mechanisms in Solids, Part II. (4) Lecture, four hours; discussion, one hour; outside study, seven hours. Requisites: course 143A. Elastic and plastic behavior of crystals, geometry, mechanics, and interaction of dislocations, mechanisms of yielding, work hardening, and other strengthening. Letter grading.

246A. Mechanical Properties of Nonmetallic Crystalline Solids. (4) Lecture, four hours; discussion, one hour; outside study, seven hours. Requisites: course 160. Materials and environmental factors affecting mechanical properties of nonmetallic crystalline solids, including atomic structure, local and atomistic-scale defects, microstructural features, residual stresses, temperature, stress state, strain rate, size and surface conditions. Letter grading.

246B. Structure and Properties of Glasses. (4) Lecture, four hours; discussion, one hour; outside study, seven hours. Requisites: course 160. Structure of amorphous solids and glasses. Conditions of glass formation, interfacial glass structure. Mechanical, electrical, and optical properties of glass and relationship to structure. Letter grading.

246D. Electronic and Optical Properties of Ceramics. (4) Lecture, four hours; discussion, one hour; outside study, seven hours. Prerequisites governing electronic properties of ceramic single crystals and glasses and effects of processing and microstructure on these properties. Electronic conduction, ferroelectricity, and photochromism. Magnetic ceramics, infrared, visible, and ultraviolet transmission. Unique application of ceramics. Letter grading.

247. Nanoscale Materials: Challenges and Opportunities. (4) Lecture, four hours; discussion, eight hours. Emphasis on up-to-date subjects in materials and potential applications, including nanoscale materials and biomaterials. Letter grading.
261. Risk Analysis for Engineers and Scientists. (4) Lecture, four hours; discussion, one hour; outside study, seven hours. Topics include definition and fundamental concepts of risk, sociotechnical context of risk assessment and risk management, perception and reality of risk, risk-informed decision-making, domains of application (safety, health, security, economy, and environment), principal methods of risk assessment, including overview of probability and statistics, how to identify risk scenarios, techniques modeling failures of complex systems (e.g., fault tree and event tree analysis), data collection and analysis, model integration and computational algorithms for risk calculation and identification of risk drivers, simulation approach to risk modeling, uncertainty analysis, examples of risk assessment of engineered systems (e.g., space and aviation, nuclear power, petro-chemical plants), other applications (risk of medical procedures, financial risk, natural hazards risk). Letter grading.

CM263. Electrochemical Processes. (4) (Same as Chemical Engineering CM214.) Lecture, four hours; discussion, one hour; outside study, seven hours. Requisites: course 130 (or Mechanical and Aerospace Engineering 105A), Chemical Engineering 102B. Fundamentals of electrochemistry and engineering applications of electrochemical processes. Primary emphasis on fundamental approach to analyze electrochemical processes. Specific topics include electrochemical reactions on metal and semiconductor oxidation, electrodeposition, electrochemistry, synthetic fuels, cell, cells and nonaqueous batteries, gas–solid-state electrochemistry. May be concurrently scheduled with course CM163. Letter grading.

270. Computer Simulations of Materials. (4) Lecture, four hours; outside study, eight hours. Introduction to modern methods of computational modeling in materials science. Topics include basic statistical mechanical models of materials, Properties of electrons and interatomic bonding in molecules, crystals, and liquids, with emphasis on practical methods for solving Schrödinger equation and using it to calculate physical properties such as elastic constants, equilibrium structures, binding energies, vibrational frequencies, electronic band gaps and band structures, properties of defects, surfaces, interfaces, and magnetism. Extensive hands-on experience with modern density-functional theory code. Letter grading.

271. Electronic Structure of Materials. (4) Lecture, four hours; outside study, eight hours. Preparation: basic knowledge of quantum mechanics. Recommended requisite: course 200. Introduction to modern first-principles electronic structure calculations for various types of materials. Properties of electrons and interatomic bonding in molecules, crystals, and liquids, with emphasis on practical methods for solving Schrödinger equation and using it to calculate physical properties such as elastic constants, equilibrium structures, binding energies, vibrational frequencies, electronic band gaps and band structures, properties of defects, surfaces, interfaces, and magnetism.

CM280. Introduction to Biomaterials. (4) (Same as Bioengineering CM278.) Lecture, three hours; discussion, two hours; outside study, seven hours. Requisites: course 104, or Chemistry 20A, 20B, and 20L. Engineering materials used in medicine and dentistry for repair and/or restoration of damaged natural tissues. Topics include relationships between material properties, suitability to task, surface chemistry, processing and treatment methods, and biocompatibility. Concurrently scheduled with course CM180. Letter grading.

282. Exploration of Advanced Topics in Materials Science and Engineering. (2) Lecture, one hour; discussion, one hour; outside study, four hours. Students will select a topic from a list prepared by their advisor and obtain permission from the instructor. The students will present a summary preview of their topic prior to the beginning of the class. Discussions follow each presentation. May be repeated for credit. S/U grading.

296. Seminar: Advanced Topics in Materials Science and Engineering. (2) Seminar, two hours; outside study, four hours. Advanced study and analysis of current topics in materials science and engineering. Discussion of current research and literature in research specialty of faculty members teaching course. May be repeated for credit. S/U grading.

297C. Composites Manufacturing. (4) (Same as Mechanical and Aerospace Engineering M297C.) Lecture, four hours; outside study, eight hours. Requisites: course 151, Mechanical and Aerospace Engineering 166C. Matrix materials, fibers, fiber preforms, elements of processing, autoclave/compression molding, filament winding, pultrusion, transfer molding, rolling, consolidation, chemical vapor deposition, infiltration, composites. Letter grading.

598. Research for and Preparation of PhD Dissertation. (2 to 18) Tutorial, to be arranged. Limited to graduate materials science and engineering students. Petition forms to be arranged for credit. S/U grading.

599. Research for and Preparation of PhD Dissertation. (2 to 18) Tutorial, to be arranged. Limited to graduate materials science and engineering students. Usually taken after students have been advanced to candidacy. S/U grading.

Mathematics

College of Letters and Science

6363 Mathematical Sciences

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Mathematics

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Peter Petersen, PhD

Sorin T. Popa, PhD (Yuji, Kyoko, and Masamichi Takesaki Endowed Professor of Operator Algebras)

Mason A. Porter, PhD

Marcus L. Roper, PhD

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Wotao Yin, PhD

William R. Zame, PhD
Program, which offers a Mathematics/Economics major.

The Mathematics major is designed for students whose basic interest is mathematics. The Applied Mathematics major concerns applications of mathematics to the sciences, including the life, social and physical sciences, and engineering. The Financial Actuarial Mathematics major concerns the applications of mathematics to finance, the actuarial field, and related areas. The Mathematics of Computation major is for mathematics students who have a secondary interest in computing. The Mathematics/Applied Science major is for those with interest in the applications of mathematics to a particular outside field. The Mathematics for Teaching major is for students planning to teach mathematics at the high school level. As part of the Mathematics/Applied Science major, the department offers programs for students interested in the fields of mathematics/history of science and medical and life sciences.

Each course taken to fulfill any of the requirements for any of the mathematics majors must be taken for a letter grade.

The Mathematics for Teaching major is a designated capstone major. In their senior year students complete a year-long course sequence that culminates in a model lesson presentation, paper, and portfolio. Through their capstone work, students demonstrate their familiarity with research and current issues in mathematics education, as well as their capacities to problem solve; reason quantitatively, geometrically, and algebraically; construct viable arguments; critique others’ reasoning; and use tools strategically.

The Data Theory major is a designated capstone major. Students work in small teams to solve a large, open-ended data science problem for community-based or campus-based clients. Emphasis is placed on the development and theoretical support of a statistical or campus-based project. Students may undertake research on the foundations of data science, studying advanced topics and writing a senior thesis.

Preliminary Examination in Mathematics

If students wish to enroll in Mathematics 1, 3A, 31A, or 31AL, they must pass the Mathematics Diagnostic Test.

For specific information about the online test, refer to the Schedule of Classes or the department website; or contact the Mathematics Student Services Office, 6356 Mathematical Sciences.

Advanced Placement in Calculus

Students who have taken the Advanced Placement (AP) Calculus AB Test and obtained a score of 5 receive 8 units of credit and Mathematics 31A, 31B equivalency; those with a score of 4 receive 4 units of credit and Mathematics 31A equivalency. They may petition for 31A, 31B equivalency, or they may take courses 31A or 31AL at UCLA, although they must still satisfy the course requisites (Mathematics Diagnostic Test). Students who take the BC Test and obtain a score of 5 receive 8 units of credit and Mathematics 31A, 31B equivalency; those with a score of 4 receive 4 units of credit and Mathematics 31A equivalency. They may petition for 31A, 31B equivalency, or they may take courses 31A or 31AL at UCLA, although they must still satisfy the course requisites (Mathematics Diagnostic Test). Students receiving a score of 4 or lower on the AB examination, or 3 or lower on the BC examination, should consult with the undergraduate mathematics counselor prior to enrolling in a calculus course at UCLA.

Credit Limitations

Credit is given for at most one course in each of the following groups: (1) 3A, 31A, 31AL; (2) 3B, 31B, 31E; (3) 110A, 11P; (4) 170A, 170E; (5) former course 174A, 174E.

Courses from only one of the following statistics sequences may be applied toward any mathematics major: (1) Statistics 100A (or Mathematics 170A or 170E), 100B (or Mathematics 170S), 100C or (2) former Statistics 110A, 110B.

Mathematics 2 is not open for credit to students with credit for any course from Mathematics 110A through 1199.

Mathematics 132 is not open for credit to students with credit for Physics 132.

Mathematics 151A is not open for credit to students with credit for Electrical and Computer Engineering 133A.

Mathematics 170A, 170E, and Statistics 100A are not open for credit to students with credit for Electrical and Computer Engineering 131A.

Mathematics 170S is not open for credit to students with credit for Statistics 100B.

Former Mathematics 174A and course 174E are not open for credit to students with credit for Econometrics 141.

For lower-division mathematics courses, students may not take or repeat a course for credit if it is a prerequisite for a more advanced lower-division course for which they already have credit. This applies in particular to the repetition of courses (e.g., if students wish to repeat Mathematics 31B, they must do so before completing course 32B; if students wish to repeat Mathematics 3B or 31B or 32A, they must do so before completing course 33A).

For upper-division mathematics courses, students may not take or repeat a course for credit if it is the equivalent of a more advanced upper-division course for which they already have credit. This applies in particular to the repetition of courses (e.g., if students wish to repeat Mathematics 131A, they must do so before completing course 131B or 131BH).

Students may not receive credit for both a course and the honors version of that course (e.g., they may not receive credit for both Mathematics 113A and 113AH).

Program in Computing Courses

Program in Computing 1 is designed for students who wish a broad, general introduction to the topic of
Mathematics BS

Learning Outcomes
The Mathematics major has the following learning outcomes:

- Strong mathematical content knowledge of single and multivariate differential and integral calculus, and differential equations
- Ability to synthesize material, solve problems, and think abstractly
- Familiarity with linear algebra, techniques of proof, and foundations of real analysis
- Ability to perform basic computer programming, especially in C++

Premajor
Students entering UCLA directly from high school or first-term transfer students who want to declare the Mathematics premajor at the time they apply for admission are automatically admitted to the premajor.

Current UCLA students need to apply for the Mathematics major by filing a petition with the Student Services Office in 6356 Mathematical Sciences. All students are identified as Mathematics premajors until they satisfy the following minimum requirements for the major: (1) achieve grades of C or better in all premajor mathematics sequenced courses, or of any mathematics sequenced courses or of any mathematics sequenced courses with a 2.5 minimum overall grade-point average, (2) achieve a minimum overall 2.5 grade-point average in the calculus sequence with no more than two repeats, (3) complete one 12-unit term in residence in regular session at UCLA, (4) be enrolled in UCLA regular session at the time of application, and before completing 160 quarter units.

The Major
Required: Mathematics 110A, 110B, 115A, 115B, 120A, 120A, 131A, 131B, 131B, and at least five elective courses from 106 through 199 and Statistics 100A through 102C. Each course must be taken for a letter grade. The 12 courses must be completed with a minimum overall grade-point average of 2.0, with grades of C– or better in Mathematics 115A and 131A.

Mathematics 115A is required of all majors and is intended to be the first upper-division course taken. It is strongly advised that students take Mathematics 115A as soon as the major is declared, if not earlier.

Applied Mathematics BS

Learning Outcomes
The Applied Mathematics major has the following learning outcomes:

- Strong mathematical content knowledge of single and multivariate differential and integral calculus, and differential equations
- Ability to synthesize material, solve problems, and think abstractly
- Familiarity with linear algebra, techniques of proof, and foundations of real analysis
- Ability to perform basic computer programming, especially in C++

Premajor
Students entering UCLA directly from high school or first-term transfer students who want to declare the Applied Mathematics premajor at the time they apply for admission are automatically admitted to the premajor.

Current UCLA students need to apply for the Applied Mathematics major by filing a petition with the Student Services Office in 6356 Mathematical Sciences. All students are identified as Applied Mathematics premajors until they satisfy the following minimum requirements for the major: (1) achieve grades of C or better in all premajor mathematics sequenced courses (Mathematics 31A or 31AL, 31B, 32A, 32B, 33A, 33B), (2) achieve a minimum 2.5 grade-point average in the calculus sequence with no more than two repeats, (3) complete one 12-unit term in residence in regular session at UCLA, (4) be enrolled in UCLA regular session at the time of application, and (5) file a petition to declare the major before completing 160 quarter units.

Preparation for the Major
Required: Mathematics 31A or 31AL, 31B, 32A, 32B, 33A, 33B, Physics 1A, 1B, Program in Computing 10A, and one course from Chemistry and Biochemistry 20A, 20B, Physics 1C. Each course must be taken for a letter grade. The mathematics sequenced courses (Mathematics 31A or 31AL, 31B, 32A, 32B, 33A, 33B) are calculated separately from the other preparation for the major courses and must be completed with a minimum overall 2.5 grade-point average and a grade of C or better in each course. The other preparation courses must be completed with a minimum overall 2.0 grade-point average and a grade of C– or better in each course.

Repitition of more than two mathematics sequenced courses or of any mathematics sequenced course more than once results in automatic dismissal from the major.

Freshman Students
To enter the major, students must petition after they have completed the six sequenced courses with a 2.5 minimum overall grade-point average, have completed one 12-unit term in residence in regular session at UCLA, are enrolled in UCLA regular session at the time of application, and before completing 160 quarter units.

Transfer Students
Transfer applicants to the Applied Mathematics major with 90 or more units must complete as many of the following introductory courses as possible prior to admission to UCLA: two years of calculus for majors, two calculus-based physics courses, one C++ programming course, and one course from general chemistry for majors or calculus-based physics.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

After satisfying the preparation for the major requirements, students need to petition to enter the major at the Student Services Office after completing one 12-unit term in residence in regular session at UCLA, and while enrolled in UCLA regular session at the time of application, and before completing 160 quarter units.

The Major
Required: Mathematics 115A, 131A, either 131B or 132, 142; two two-term sequences from two of the following categories: numerical analysis—courses
151A and 151B, Probability and Statistics—courses 170A and 170B, or Statistics 100A and 100B, Differential Equations—courses 134 and 135; four courses from 106 through 199 and Statistics 100A through 102C (appropriate courses from other departments may be substituted for some of the additional courses provided departmental consent is given before such courses are taken). Each course must be taken for a letter grade. The 12 courses must be completed with a minimum overall grade-point average of 2.0, with grades of C− or better in Mathematics 115A and 113A.

Mathematics 115A is required of all majors and is intended to be the first upper-division course taken. It is strongly advised that students take Mathematics 115A as soon as the major is declared, if not earlier.

Data Theory BS

Capstone Major

Learning Outcomes

The Data Theory major has the following learning outcomes:

- Understanding of mathematical and statistical bases of most common methods of data science
- Ability to explain in writing, with examples, how concepts of statistics and mathematics together solve real-world problems involving data
- Skillfully manage data
- Development, comparison, and testing of data-driven models to solve problems
- Understanding and explanation of variability when fitting and interpreting models of real-world systems
- Carrying out of reproducible data analysis using accepted practices of research community
- Written and verbal communication of findings of analyses
- Identification of areas of active research in data science
- Insightfully address problems concerning ethics of data use and storage, including data privacy and security
- Demonstrated mastery of concepts and skills of machine learning, modeling and supervised learning, dimension reduction and unsupervised learning, and deep learning
- Demonstrated familiarity with numerous software tools used in statistical and data science work and research
- Demonstrated knowledge of mathematical foundations, including pure and applied linear algebra, basic analysis, probability, and optimization theory
- Study and evaluation of proofs of mathematical and statistical results employed in data theory
- Work effectively in a team on a data science problem
- Demonstrated eligibility for graduate study in applied mathematical science or statistical science

Premajor

Students entering UCLA directly from high school or first-term transfer students who want to declare the Data Theory premajor at the time they apply for admission are automatically admitted to the premajor. Students must visit the student services office of either the Mathematics Department or Statistics Department in order to petition to enter the major. All students are identified as Data Theory premajors until they satisfy the following minimum requirements for the major.

Preparation for the Major

Required: Mathematics 31A, 31B, 32A, 32B, 33A, 42, 115A; Program in Computing 10A; one course selected from Statistics 10, 12, 13, 15; Statistics 20, 21. Each course must be completed with a grade of C− or better and an overall grade-point average of at least 2.7. All students must take Mathematics 42 at UCLA. The major is limited in size according to available resources.

Repetition of more than two mathematics or statistics sequenced courses or of any mathematics or statistics sequenced course more than once results in automatic dismissal from the major.

Freshman Students

To enter the major, students must petition after they have completed the preparation for the major courses. Students who have an overall grade-point average (GPA) of at least 3.3 in the preparation for the major courses, and have completed all preparation for the major courses before the fall quarter of their third year at UCLA, will be admitted to the major.

Students whose overall GPA is between 2.7 and 3.3, or who fail to complete the preparation courses before the fall quarter of their third year, are admitted only if space is available. All students must petition before they have earned 160 units, or by the winter quarter of their junior year, whichever comes first. Only grades for courses that are taken at the University of California, including UIC summer schools, are counted for this GPA computation.

Transfer Students

Transfer applicants to the Data Theory major are admitted to the premajor. Applicants with 90 or more units must have completed the following by the end of the spring term prior to entry to UCLA: two years of calculus for physical science and/or engineering majors, one linear algebra course, one C++ programming course, one statistics course.

Transfer students must have completed all preparation for the major coursework, and must have passed Mathematics 42, 115A, and at least 4 units of upper-division coursework required for this major, with at least a 3.3 GPA, in order to be eligible to petition to enter the major. Transfer students will be admitted to the major if they satisfy these requirements. Transfer students who fail to meet these criteria for automatic admission will be admitted only if resources allow. Transfer students must petition to enter the major no later than the spring quarter of their first year at UCLA.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

After satisfying the preparation for the major requirements, students must visit the student services office of either the Mathematics Department or Statistics Department in order to petition to enter the major.

The Major

Required: Mathematics 118, 131A, 136, Statistics 101A, 102A, 102B, 101C, 147, 184; one two-quarter sequence: Mathematics 170E and 170S, or Statistics 100A and 100B; one elective selected from Mathematics 151A, 151B, 164, 168, 171, 174E, 178A, 178B, 178C, 179 or 182; one elective selected from Statistics 100C, 101B, 102C, or CIS1 through 199 (except Statistics 182, 186, or 189); two additional electives from either of the above lists; a capstone course (Mathematics M148 or Statistics M148), to be taken during the final year.

Only 4 units of course 199 may be applied toward the major. Courses 189 and 189HC may not be applied toward any of the major requirements.

Each major course must be taken for a letter grade, and students must have an overall grade-point average of 2.0 or better.

Financial Actuarial Mathematics BS

Learning Outcomes

The Financial Actuarial Mathematics major has the following learning outcomes:

- Strong mathematical content knowledge of single and multivariate differential and integral calculus, and differential equations
- Demonstrated knowledge of how to synthesize material, solve problems, and think abstractly
- Familiarity with linear algebra, techniques of proof, and foundations of real analysis
- Working knowledge at the level needed to pass the examination of the first three preliminary actuarial examinations by the Society of Actuaries
- Strong content knowledge of the fourth and fifth preliminary examinations
- Familiarity with basic statistical analysis including probability distributions, random variables, survey sampling, testing, data summary, sums of squares principle, testing general linear hypothesis in regression, and inference procedures
- Ability to perform basic computer programming, especially in C++

Premajor

Students entering UCLA directly from high school or first-term transfer students who want to declare the Financial Actuarial Mathematics premajor at the time they apply for admission are automatically admitted to the premajor.

Current UCLA students need to apply for the Financial Actuarial Mathematics major by filing a petition with the Student Services Office in 6356 Mathematical Sciences. All students are identified as Financial
Actuarial Mathematics premajors until they satisfy the following minimum requirements for the major: (1) achieve grades of C or better in all premajor mathematics sequenced courses (Mathematics 31A, 31B, 32A, 32B, 33A, 33B, Program in Computing 10A) with a minimum 2.5 grade-point average and no more than two repeats, (2) achieve grades of C or better in all premajor economics courses (Economics 1, 2, 11, Management 1A, 1B) with a minimum 2.5 grade-point average and no more than one repeat, (3) complete one 12-unit term in residence in regular session at UCLA, and while enrolled in UCLA regular session at the time of application, and (5) file a petition to declare the major before completing 160 quarter units.

Preparation for the Major
Required: Mathematics 31A or 31AL, 31B, 32A, 32B, 33A, 33B, and one course selected from Mathematics 11N, 42, 61, 70; Economics 1, 2, 11, Management 1A, Program in Computing 10A, 10B or 16A. Each course must be taken for a letter grade. The economics preparation for the major courses (Economics 1, 2, 11, Management 1A) are calculated separately from the mathematics preparation for the major courses (Mathematics 11N or 42 or 61 or 70, 31A or 31AL, 31B, 32A, 32B, 33A, 33B, Program in Computing 10A, 10B or 16A). The economics preparation courses must be completed with a minimum overall 2.5 grade-point average and a grade of C or better in each course, as must the mathematics preparation courses.

Repetition of more than one economics preparation course, more than two mathematics preparation courses, or of any economics or mathematics preparation course more than once results in automatic dismissal from the major.

Freshman Students
To enter the major, students must petition after they have completed the six sequenced courses with a 2.5 minimum overall grade-point average, have completed one 12-unit term in residence in regular session at UCLA, are enrolled in UCLA regular session at the time of application, and before completing 160 quarter units.

Transfer Students
Transfer applicants to the Financial Actuarial Mathematics major with 90 or more units must complete as many of the following introductory courses as possible prior to admission to UCLA: two years of calculus for majors, one C++ programming course, one microeconomics theory course, one macroeconomics course, and two terms of accounting principle.

Transfer credit for any of the above is subject to department approval; consult with an undergraduate counselor before enrolling in any courses for the major.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

After satisfying the preparation for the major requirements, students need to petition to enter the major at the Student Services Office after completing one 12-unit term in residence in regular session at UCLA, and while enrolled in UCLA regular session at the time of application.

Preparation for the Major
Required: Ten mathematics/statistics courses, including Mathematics 115A, 131A, 170E, 170S, 174E (or Economics 141 or Statistics 138), 177, 178A, 178B, 178C, 179; and two courses from Economics 101 through 199B, Statistics 100C. Each course must be taken for a letter grade. Transfer credit is subject to department approval; consult with an undergraduate counselor before enrolling in any courses for the major.

To graduate, the ten Mathematics Department courses must be completed with an overall grade-point average of 2.0, with grades of C– or better in Mathematics 115A and 131A, as must the two elective courses.

Mathematics 115A is required of all majors and is intended to be the first upper-division course taken. It is strongly advised that students take Mathematics 115A as soon as the major is declared, if not earlier.

Mathematics of Computation BS
Learning Outcomes
The Mathematics of Computation major has the following learning outcomes:

- Strong mathematical content knowledge of single and multivariate differential and integral calculus, and differential equations
- Ability to synthesize material, solve problems, and think abstractly
- Familiarity with linear algebra, techniques of proof, and foundations of real analysis
- Ability to perform basic computer programming, especially in C++

Premajor
Students entering UCLA directly from high school or first-term transfer students who want to declare the Mathematics of Computation premajor at the time they apply for admission are automatically admitted to the premajor.

Current UCLA students need to apply for the Mathematics of Computation major by filing a petition with the Student Services Office in 6336Mathematical Sciences. All students are identified as Mathematics of Computation premajors until they satisfy the following minimum requirements for the major: (1) achieve grades of C or better in all premajor mathematics sequenced courses (Mathematics 31A or 31AL, 31B, 32A, 32B, 33A, 33B), (2) achieve a minimum 2.5 grade-point average in the calculus sequence with no more than two repeats; (3) complete one 12-unit term in residence in regular session at UCLA, (4) be enrolled in UCLA regular session at the time of application, and (5) file a petition to declare the major before completing 160 quarter units.

The Major
Required: Eleven Mathematics Department courses, including Mathematics 115A, 131A, 131B or 132, 151A, 151B, and six courses from 106 through 199 and Statistics 100A through 101C; three upper-division computer science courses (12 units). Each course must be taken for a letter grade. The 14 courses must be completed with a minimum overall grade-point average of 2.0, with grades of C– or better in Mathematics 115A and 131A.

Mathematics 115A is required of all majors and is intended to be the first upper-division course taken. It is strongly advised that students take Mathematics 115A as soon as the major is declared, if not earlier.
Mathematics/Applied Science BS

The Mathematics/Applied Science major is designed for students with a substantial interest in mathematics and its applications to a particular field. It is an individual major in that students, in consultation with a faculty adviser, design their own program. They may also select one of the established programs: mathematics/history of science plan or medical and life sciences plan. In the past, Mathematics/Applied Science majors have combined the study of mathematics with fields such as atmospheric and oceanic sciences, biochemistry, biology, chemistry, economics, geography, physics, psychology, and statistics.

Students interested in designing an individual program should meet with the undergraduate adviser, 6356 Mathematical Sciences, during their sophomore year. A proposed program is drawn up, then forwarded to the mathematics/applied science curriculum committee for approval. All programs must include the following preparation for the major and major courses.

Learning Outcomes

The Mathematics/Applied Science major has the following learning outcomes:

- Strong mathematical content knowledge of single and multivariate differential and integral calculus, and differential equations
- Familiarity with linear algebra, techniques of proof, and foundations of real analysis
- Ability to synthesize material, solve problems, and think abstractly
- Ability to perform basic computer programming, especially in C++
- Familiarity with basic statistical analysis including probability distributions, random variables, survey sampling, testing, data summary, sums of squares principle, testing general linear hypotheses in regression, and inference procedures

Premajor

Students entering UCLA directly from high school or first-term transfer students who want to declare the Mathematics/Applied Science premajor at the time they apply for admission are automatically admitted to the premajor.

Current UCLA students need to apply for the Mathematics/Applied Science major by filing a petition with the Student Services Office in 6356 Mathemati-
cal Sciences. All students are identified as Mathematics/Applied Science premajors until they satisfy the following minimum requirements for the major:

1. Achieve grades of C or better in all premajor mathematics sequenced courses (Mathematics 31A or 31AL, 31B, 32A, 32B, 33A, 33B),
2. Achieve a minimum 2.5 grade-point average in the calculus sequence with no more than two repeats,
3. Complete one 12-unit term in residence in regular session at UCLA, and
4. Be enrolled in UCLA regular session at the time of application, and
5. File a petition to declare the major before completing 160 quarter units.

Preparation for the Major

Required: Mathematics 31A or 31AL, 31B, 32A, 32B, 33A, 33B, Program in Computing 10A. Additional preparation, varying with the individual program, may be required. Each course must be taken for a letter grade. The mathematics sequenced courses (Mathematics 31A or 31AL, 31B, 32A, 32B, 33A, 33B) are calculated separately from the other preparation for the major courses and must be completed with a minimum overall 2.5 grade-point average and a grade of C or better in each course. The other preparation courses must be completed with a minimum overall 2.0 grade-point average and a grade of C– or better in each course.

Repetition of more than two mathematics sequenced courses or of any mathematics sequenced course more than once results in automatic dismissal from the major.

Freshman Students

To enter the major, students must petition after they have completed the six sequenced courses with a 2.5 minimum overall grade-point average, have completed one 12-unit term in residence in regular session at UCLA, are enrolled in UCLA regular session at the time of application, and before completing 160 quarter units.

Transfer Students

Transfer applicants to the Mathematics/Applied Science major with 90 or more units must complete as many of the following introductory courses as possible prior to admission to UCLA: two years of calculus for majors and one C++ programming course. Additional courses are required for each concentration plan.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

After satisfying the preparation for the major requirements, students need to petition to enter the major at the Student Services Office after completing one 12-unit term in residence regular session at UCLA, and while enrolled in UCLA regular session at the time of application.

The Major

Required: Fourteen courses, seven in the Mathematics Department selected from Mathematics 106 through 199 and seven upper-division courses in a related field selected from one or two other departments. Each course must be taken for a letter grade.

The seven Mathematics Department courses must be completed with a minimum overall grade-point average of 2.0, with grades of C or better in Mathematics 115A and 131A, as must the seven courses outside mathematics.

Mathematics 115A is required of all majors and is intended to be the first upper-division course taken. It is strongly advised that students take Mathematics 115A as soon as the major is declared, if not earlier.

Medical and Life Sciences Plan

Preparation for the Major

Required: Mathematics 31A or 31AL, 31B, 32A, 32B, 33A, 33B, Chemistry and Biochemistry 20A, 20B, 20L, 30A, 30AL, Life Sciences 7A, 7B, 7C, Physics 1A, 1B, Program in Computing 10A. Each course must be taken for a letter grade. The mathematics sequenced courses (Mathematics 31A or 31AL, 31B, 32A, 32B, 33A, 33B) are calculated separately from the other preparation for the major courses and must be completed with a minimum overall 2.5 grade-point average and a grade of C or better in each course. The other preparation courses must be completed with a minimum overall 2.0 grade-point average and a grade of C– or better in each course.

Repetition of more than two mathematics sequenced courses or of any mathematics sequenced course more than once results in automatic dismissal from the major.

The Major

Required: Seven mathematics courses, including Mathematics 115A, 131A, 134, 170A, 170B, and one course from 110A through 199 and Statistics
100B through 101C, six outside courses, including Neuroscience M101A, M101B, and M101C, and three courses from Biostatistics 100A, Chemistry and Biochemistry CM160A, Computer Science CM186, Ecology and Evolutionary Biology C119A, 133, C135, Life Sciences 107, Physiological Science 100, M135, and any additional upper-division course from these fields with consent of the administering department and the Mathematics Department. Each course must be taken for a letter grade. The seven Mathematics Department courses must be completed with a minimum overall grade-point average of 2.0, with grades of C– or better in Mathematics 115A and 131A, as must the six outside courses.

Mathematics 115A is required of all majors and is intended to be the first upper-division course taken. It is strongly advised that students take Mathematics 115A as soon as the major is declared, if not earlier.

Mathematics for Teaching

BS

Capstone Major

The Mathematics for Teaching major is designed primarily for students planning to teach mathematics at the high school level. It provides exposure to a broad range of mathematical topics, especially those appropriate for the prospective teacher. Students planning to pursue graduate studies in mathematics or related fields are encouraged to enter the Mathematics, Applied Mathematics, or Mathematics of Computation major.

Learning Outcomes

The Mathematics for Teaching major has the following learning outcomes:

• Strong mathematical content knowledge
• Sound theoretical and practical background for mathematics expected to be taught in secondary schools
• Understanding of the importance of mathematical thinking to design teaching to imbue students with a problem-solving and analytical spirit
• Familiarity with pedagogical research and ability to apply it to classroom work
• Ability to effectively plan lessons
• Preparation and experience in different modes of instruction
• Ability to use mathematical sophistication to shape lessons
• Preparedness to recognize and respond to expected difficulties that arise in the classroom due to conceptual understanding and misunderstanding

Premajor

Students entering UCLA directly from high school or first-term transfer students who want to declare the Mathematics for Teaching premajor at the time they apply for admission are automatically admitted to the premajor.

Current UCLA students need to apply for the Mathematics for Teaching major by filing a petition with the Student Services Office in 6356 Mathematical Sciences. All students are identified as Mathematics for Teaching premajors until they satisfy the following minimum requirements for the major: (1) achieve grades of C or better in all premajors mathematics sequenced courses (Mathematics 31A, 31B, 32A, 32B, 33A, 33B); (2) achieve a minimum 2.5 grade-point average in the calculus sequence with no more than two repeats, (3) complete one 12-unit term in residence in regular session at UCLA, (4) be enrolled in UCLA regular session at the time of application, and (5) file a petition to declare the major before completing 160 quarter units.

Preparation for the Major

Required: Mathematics 31A or 31AL, 31B, 32A, 32B, 33A, 33B, 61, Physics 1A or 5A, Program in Computing 10A, and two courses from Chemistry and Biochemistry 20A, 20B, Physics 1B, 1C, 5B, 5C, Program in Computing 108 through 97. Each course must be taken for a letter grade. The mathematics sequenced courses (Mathematics 31A or 31AL, 31B, 32A, 32B, 33A, 33B) are calculated separately from the other preparation for the major courses and must be completed with a minimum overall 2.5 grade-point average and a grade of C or better in each course. The other preparation courses must be completed with a minimum overall 2.0 grade-point average and a grade of C– or better in each course.

Repetition of more than two mathematics sequenced courses or of any mathematics sequenced course more than once results in automatic dismissal from the major.

Freshman Students

To enter the major, students must petition after they have completed the six sequenced courses with a 2.5 minimum overall grade-point average, have completed one 12-unit term in residence in regular session at UCLA, are enrolled in UCLA regular session at the time of application, and before completing 160 quarter units.

Transfer Students

Transfer applicants to the Mathematics for Teaching major with 90 or more units must complete as many of the following introductory courses as possible prior to admission to UCLA: two years of calculus for majors, one discrete structures course, one C++ programming course, and three courses from calculus-based physics, general chemistry for majors, and computing.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

After satisfying the preparation for the major requirements, students need to petition to enter the major at the Student Services Office after completing one 12-unit term in residence in regular session at UCLA, and while enrolled in UCLA regular session at the time of application.

The Major

Required: Mathematics 106, 110A or 117, 115A, 120A or 123, 131A, 170A or Statistics 100A, Statistics 100B, one course from Mathematics 110B through 191H or Statistics 100C, one course from Mathematics 131B through 136, one course from 142 through 167, and a capstone series in the senior year (courses 105A, 105B, 105C). Each course must be taken for a letter grade. The 13 courses must be completed with a minimum overall grade-point average of 2.0, with grades of C– or better in Mathematics 115A and 131A.

Mathematics 115A is required of all majors and is intended to be the first upper-division course taken. It is strongly advised that students take Mathematics 115A as soon as the major is declared, if not earlier.

Honors

Honors Courses

The department offers a lower-division honors sequence in calculus, and upper-division honors sequences in algebra and analysis. The sequences are intended for students (not necessarily mathematics majors) who desire a broad, comprehensive introduction to these topics.

Honors Program

Students majoring in Mathematics, Applied Mathematics, and Mathematics of Computation who wish to graduate with departmental honors should apply for admission to the honors program in the Student Services Office. They may apply any time after completing four courses from the calculus sequence or from upper-division mathematics courses with an overall grade-point average of 3.6 or better. The program entails taking a specified sequence of courses as part of the major requirements, completing an approved seminar offered by the Mathematics Department or submitting an original research project, and earning an overall GPA of at least 3.6 in approved upper-division and graduate mathematics courses.

Students completing the program are awarded honors at graduation; if they demonstrate exceptional achievement (i.e., at least a 3.8 GPA in upper-division mathematics courses taken for the major), they are awarded highest honors. Contact the department for more information.

Computing Specialization

Majors in Mathematics, Applied Mathematics, Financial Actuarial Mathematics, Mathematics/Computer Science, or Mathematics for Teaching may select a specialization in Computing by (1) satisfying all the requirements for a bachelor’s degree in the specified major and (2) completing Mathematics 61 or 180, Program in Computing 10A, 108, two courses from 10C, 15, 16A, 20A, 20B, 30, 40A, 60, and at least two courses from Mathematics 149 through 199, with a minimum grade of C– in each course and a combined grade-point average of at least 2.0. Students must petition for admission to this program and are advised to do so after they complete Program in Computing 108 (petitions should be filed in the Student Services Office). Students graduate with a bachelor’s degree in their major and a specialization in Computing.
Subject Matter Preparation Program for Single-Subject Credential in Mathematics

Students interested in obtaining a single-subject secondary school credential in mathematics should consult with a departmental counselor regarding the requirements for a waiver from the Mathematics California Subject Examination for Teachers (CSET), which is required by the California Commission on Teacher Credentialing. Students should meet with a departmental counselor as early in their undergraduate careers as possible because the program does require additional courses beyond the major requirements. See the Curtis Center website for details on teaching credential requirements. For additional information, contact the Education Department credentialing specialist at 310-825-8228.

Mathematics Minor

The Mathematics minor is designed to provide students with the opportunity to widen their background and general comprehension of the role of mathematics in various disciplines. To enter the minor, students must have completed all of the lower-division minor courses with grades of C or better (an overall grade-point average of 2.0 or better) and at least one upper-division mathematics course.

Required Lower-Division Courses (12 units): Mathematics 32A, 33A, 33B.

Required Upper-Division Courses (20 units): At least five courses (20 units) selected from Mathematics 106 through 199.

A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor.

Each minor course must be taken for a letter grade. Students must complete all of the lower-division minor courses with grades of C or better. Upper-division courses must have an overall grade-point average of 2.0 or better that is calculated separately from the lower-division courses. Successful completion of the minor is indicated on the transcript and diploma.

Graduate Study

Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Division website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Graduate Degrees

The Department of Mathematics offers the Master of Arts in Teaching (MAT) degree in Mathematics; and Master of Arts (MA), Candidate in Philosophy (CPhil), and Doctor of Philosophy (PhD) degrees in Mathematics.

Mathematics

Lower-Division Courses

1. Precalculus. (4) Lecture, three hours; discussion, one hour. Preparation: three years of high school mathematics. Finite mathematics consisting of matrices, Gauss/Jordan method, combinatorics, probability, Bayes theorem, and Markov chains. P/NP or letter grading.

2. Finite Mathematics. (4) Lecture, three hours; discussion, one hour. Preparation: three years of high school mathematics. Linear and polynomial functions and their graphs, applications to optimization, inverse, exponential, and logarithmic functions. Trigonometric functions. P/NP or letter grading.

Mathematics for Teaching Minor

The Mathematics for Teaching minor is designed for students majoring in fields other than mathematics who plan to teach secondary mathematics after graduation. The minor recognizes completion of requisite coursework for the Joint Mathematics Education Program and also prepares students for the contents of the California Subject Examination for Teachers (CSET). Post-bachelor credentialing programs will see that students with this minor have taken coursework on secondary mathematics from an advanced standpoint that is recommended by the Conference Board of the Mathematical Sciences and the California Commission on Teacher Credentialing. This minor is not open to students in any Mathematics Department major.

To enter the minor, students must have completed Mathematics 11A with a grade of C or better. If Mathematics 11A was not completed at UCLA, students must show proof that they completed an equivalent course with a grade of C or better.

Required Upper-Division Courses (29 units): Mathematics 105A, 105C, 110A or 117, 115A, 120A or 123, 131A.

Mathematics 115A is intended to be the first upper-division course taken. It is strongly advised that students take Mathematics 115A as soon as the major is declared, if not earlier.

A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor.

Each minor course must be taken for a letter grade with a grade of C– or better in each, and students must have an overall grade-point average of 2.0 or better in the minor. Successful completion of the minor is indicated on the transcript and diploma.

3C. Ordinary Differential Equations with Linear Algebra for Life Sciences Students. (4) Lecture, three hours; discussion, one hour. Requisite: course 3B with grade of C– or better. Multivariable modeling, matrices and vectors, eigenvalues and eigenvectors, linear and nonlinear systems of differential equations, probabilistic applications of integration. P/NP or letter grading.

11N. Gateway to Mathematics: Number Theory. (4) Lecture, three hours; discussion, one hour. Requisites: courses 31A, 31B. Introductory number theory course for freshmen and sophomores. Topics include prime number theory and cryptographic applications, factorization theory (in integers and Gaussian integers), Pythagorean triples, Fermat descent (for sums of squares and Fermat quartic), Pell’s equation, and Diophantine approximation. P/NP or letter grading.

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

31A. Differential and Integral Calculus. (4) Lecture, three hours; discussion, one hour. Preparation: at least three and one half years of high school mathematics (including some coordinate geometry and trigonometry). Requisite: successful completion of Mathematics Diagnostic Test or course 1 with grade of C– or better. Differential calculus and applications; introduction to integration. P/NP or letter grading.

31AL. Differential and Integral Calculus Laboratory. (1) Lecture, three hours; discussion, one hour; laboratory, one hour. Preparation: at least three and one-half years of high school mathematics (including some coordinate geometry and trigonometry). Requisite: successful completion of Mathematics Diagnostic Test or course 1 with grade of C– or better. Not open for credit to students with credit for course 31A. Intended for students who still need to review precalculus material (laboratory) while starting calculus. Differential calculus and applications; introduction to integration. P/NP or letter grading.

31AX. Workshop in Differential Calculus. (1) Discussion, one hour. Corequisite: course 31A. Supplementary techniques and applications for solving problems in differential calculus. Limits of investigation set by individual instructor. P/NP grading.

31B. Integration and Infinite Series. (4) Lecture, three hours; discussion, one hour. Requisite: course 31A with grade of C– or better. Not open for credit to students with credit for course 3B. Transcendental functions; methods and applications of integration; sequences and series. P/NP or letter grading.

31BH. Integration and Infinite Series (Honors). (4) Lecture, three hours; discussion, one hour. Enforced requisite: course 31A with grade of B or better. Honors course parallel to course 31B. P/NP or letter grading.

31BX. Workshop in Integral Calculus. (1) Discussion, one hour. Corequisite: course 31B. Supplementary techniques and applications for solving problems in integral calculus. Limits of investigation set by individual instructor. P/NP grading.

31E. Calculus for Economics Students. (4) Lecture, three hours; discussion, one hour. Preparation: course 31A with grade of C– or better. Not open for credit to students with credit for course 3B, 3C, or 31B. Calculus for applications to economics. Partial differentiation, implicit functions, exponential and logarithmic functions, extrema, optimization, constrained optimization. P/NP or letter grading.

32A. Calculus of Several Variables. (4) Lecture, three hours; discussion, one hour. Requisite: course 31A with grade of C– or better. Introduction to differential calculus of several variables, vector field theory. P/NP or letter grading.
32AH-232H. Calculus of Several Variables (Honors). (4) Lecture, three hours; discussion, one hour. Enforced requisite for course 32AH: course 31A with grade of B or better; for 32BH: courses 31B and 32A, with grades of B or better. Honors sequence parallel to courses 31B, 32A, 32B. P/NP or letter grading.

32B. Calculus of Several Variables. (4) Lecture, three hours; discussion, one hour. Enforced requisites: courses 31B and 32A, with grades of C– or better. Introduction to integral calculus of several variables, line and surface integrals, and the fundamental theorems of calculus. P/NP or letter grading.

M32T. Essential Calculus for Mathematical Biologists. (4) (Same as Computational and Systems Biology M32 and Life Sciences M32.) Lecture, three hours; discussion, one hour. Enforced requisites: Life Sciences 30A, 30B. Not open to students with credit for course 31A, 31B, 32A, or 32B. Designed for life sciences students. Methods and results of single and multivariable calculus essential for quantitative training in biology. Limits, differentiation (single and several variables), optimization, integration and methods of integration, Taylor polynomials and applications to approximation, Taylor and other power series, vector valued functions, gradients, and Lagrange multipliers. P/NP or letter grading.

33A. Linear Algebra and Applications. (4) Lecture, three hours; discussion, one hour. Enforced requisite: course 31B or 31B or 32A with grade of B or better. Honors course parallel to course 33A. P/NP or letter grading.

33B. Differential Equations. (4) Lecture, three hours; discussion and computer lab, one hour. Enforced requisite: course 31B with grade of C– or better. Highly recommended: course 33A. First-order, linear differential equations; second-order, linear differential equations with constant coefficients; power series solutions; linear systems. P/NP or letter grading.

33BX. Workshop in Infinite Series and Differential Equations. (1) Discussion, one hour. Corequisite: course 33B. Supplementary techniques and applications for problem solving in infinite series and differential equations. Limits of investigation set by individual instructor. P/NP grading.

42. Introduction to Data-Driven Mathematical Modeling: Life, Universe, and Everything. (4) Lecture, three hours; discussion, one hour. Enforced requisites: courses 31A, 31B, 32A, 32B, 33A, one statistics course from Statistics 10, 12, 13, one programming course from Computer Science 31, Program in Computing 10A, Statistics 20. Introduction to data-driven mathematical modeling combining data analysis with mechanistic modeling of phenomena from various applications. Topics include model formulation, data visualization, nondimensionalization and order-of-magnitude physics, introduction to discrete and continuous dynamical systems, and introduction to discrete and continuous stochastic models. Examples drawn from many fields and practice problems from Mathematics Contest in Modeling. P/NP or letter grading.

61. Introduction to Discrete Structures. (4) Lecture, three hours; discussion, one hour. Enforced requisites: courses 31A, 31B. Not open for credit to students with credit for course 180 or 184. Discrete structures commonly used in computer science and mathematics, including sets and relations, permutations and combinations, graphs, and basic counting principles. Bayes’ rule, continuous and discrete random variables, jointly distributed random variables, multivariate normal and conditional distributions. In-depth discussion of betting schemes in gambling, occurrence of rare events, coincidences, and statistical predictions. P/NP or letter grading.

71SL. Classroom Practices in Elementary School Mathematics. (2) Seminar, three hours; fieldwork, three hours. Introduction for prospective mathematics teachers to field of elementary education and learning of mathematics in elementary school classrooms. Pairs of students are placed in local elementary school classrooms to observe, participate, and assist mentor teachers in instruction. Discussion of teaching methods and characteristics of development of students at this level, and best means to teach appropriate mathematics concepts at this level. P/NP grading.

72SL. Classroom Practices in Middle School Mathematics. (2) Seminar, 90 minutes; fieldwork, two and one half hours. Enforced requisites: courses 31A and 31B, with grades of C– or better. Introduction for prospective mathematics teachers to field of secondary education fieldwork, two hours. Development of professional development students at this level, and best means to teach appropriate mathematics concepts at this level. P/NP grading.

73SL. Key Issues in K-12 Mathematics. (3) Seminar, two hours; discussion, two hours. Introduction to K-12 mathematics activity in U.S. Cultivation of interest in teaching through exploration of sequences of mathematical content and habits of mind taught in K-12. Analysis of lessons or sequences of lessons in current California State Standards in Mathematics (CCSS-M), mathematical structures that underlie these sequences, and cognitive aspects of learning mathematics. Development of professional mathematics teacher’s habits of mind outlined in CCSS-M (including proof and mathematical modeling), and effective strategies for teaching mathematics to diverse student groups. Fieldwork in local mathematics classrooms arranged by Cal Teach program. P/NP grading.

74SL. Mathematics and Pedagogy for Teaching Elementary Mathematics. (3) Seminar, two hours; discussion, one hour. Development of students at this level, and best means to teach appropriate mathematics concepts at this level. P/NP grading.

89. Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to lower-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

89CH. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to lower-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

95. Transition to Upper-Division Mathematics. (4) Lecture, three hours; discussion, one hour. Enforced requisites: courses 32A, 32B. Not open for credit to students with credit for course 131A or 132. Introduction to framework of proof-based upper-division mathematics courses. Basic logic; structure of mathematical proofs; sets, functions, and cardinality; natural numbers and induction; construction of real numbers; topology of real numbers; sequences and convergence; continuity. May not be applied toward major requirements. P/NP or letter grading.

97. Variable Topics in Mathematics. (4) Lecture, three hours; discussion, one hour. Study of selected topics in mathematics at introductory level. P/NP or letter grading.

98XA. PEERS Collaborative Learning Workshops for Life Sciences Majors. (1) Laboratory, three hours. Corequisite: associated upper-division course in mathematics for life sciences majors. Limited to Program for Excellence in Education and Research in Science (PEERS) students. Development of intuition and problem-solving skills in collaborative learning environment. May be repeated four times, but only 1 unit may be applied toward graduation. P/NP grading.

98XB. PEERS Collaborative Learning Workshops for Physical Sciences and Engineering Majors. (1) Laboratory, three hours. Corequisite: associated under-graduate lecture course in mathematics for physical sciences and engineering majors. Limited to Program for Excellence in Education and Research in Science (PEERS) students. Development of intuition and problem-solving skills in collaborative learning environment. May be repeated four times, but only 1 unit may be applied toward graduation. P/NP grading.

99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Courses

General and Teacher Training

100. Problem Solving. (4) Lecture, three hours. Requisite: course 31B with grade of C– or better. Problem-solving techniques and heuristics useful as preparation for Putnam Examination and similar competitions. Continued fractions, inequalities, modular arithmetic, closed form evaluation of sums and products, problems in geometry, rational functions and polynomials, other nonlinear problems. Participants expected to take Putnam Examination. P/NP grading.

101. Advanced Problem Solving. (4) Lecture, three hours. Requisite: course 100 or significant experience with mathematical competitions. Enrollment based on one selection test or Putnam results. Advanced problem solving techniques and mathematical topics useful as preparation for Putnam Examination. Problems in abstract algebra, linear algebra, number theory, combinatorics, probability, real and complex analysis, differential equations, Fourier analysis. Regular practice tests given to Putnam competition. May be repeated for maximum of 12 units. P/NP or letter grading.

103A. Mathematics and Pedagogy for Teaching Middle School Mathematics. (2) Seminar, one hour; fieldwork (classroom observation and participation), two hours. Requisite: course 115A. Course 103A is enforced requisite to 103B, which is enforced requisite to 103C. Facilitates student development in mathematical and pedagogical understandings required to teach middle school mathematics curriculum. Exploration of California’s grades 6 through 8 mathematics from professional perspective, practice with effective teaching strategies for application of topics in current research and standards in mathematics education. Fieldwork in local mathematics classrooms (observation and presenting lesson plan) arranged by Cal Teach. P/NP grading.

103B. Problem Solving for Physical Sciences and Engineering Majors. (1) Seminar, one hour; fieldwork (classroom observation and participation). In-depth discussion with fieldwork in local mathematics classrooms. Development of intuition and problem-solving skills in collaborative learning environment. May be repeated four times, but only 1 unit may be applied toward graduation. P/NP grading.


104. Introduction to Data-Driven Mathematical Modeling: Life, Universe, and Everything. (4) Lecture, three hours; discussion, one hour. Enforced requisite: course 103A. Observation, participation, or tutoring in mathematics classes at middle school and secondary levels. May be repeated for credit. P/NP (undergraduates) or S/U (graduates) grading.


97. Variable Topics in Mathematics. (4) Lecture, three hours; discussion, one hour. Study of selected topics in mathematics at introductory level. P/NP or letter grading.

Mathematics / 565
157. **Software Techniques for Scientific Computation**.
   - **Lecture**, three hours; discussion, one hour. Requisites: courses 151A, Program in Computing 10C.
   - Software structures, concepts, and conventions that support object-oriented programming. Identification of classes (stati, methods), encapsulation, polymorphism, and inheritance. Design and implementation of computer applications requiring scientific computation, visualization, and GUI components. Interlanguage interfacing. P/NP or letter grading.

157X. **Workshop in Software Techniques for Scientific Computation**.
   - **Discussion**, one hour. Corequisite: course 157. Supplementary techniques and applications for solving problems in scientific computing. Limits of investigation set by individual instructor. P/NP grading.

164. **Optimization**.

167. **Mathematical Game Theory**.
   - **Lecture**, three hours; discussion, one hour. Enforced requisites: courses 32B, 33A, 170A. Not open for credit to students with credit for Statistics 183/C283. Mathematical modeling of strategic interactions. Topics include extensive and normal form games, background probability, lotteries, mixed strategies, pure and mixed Nash equilibria, Sequential games, Repeated games and evolutionary game theory. P/NP or letter grading.

168. **Introduction to Networks**.
   - **Lecture**, three hours; discussion, one hour. Requisites: courses 115A, 170E (or 170A or Electrical and Computer Engineering 131A or Statistics 100A). Introduction to network science (including theory, computation, and applications). Study of complex systems of interacting agents. Study of networks in technology, social, information, biological, and mathematics involving basic structural features of networks, generative models of networks, network summary statistics, centrality, random graphs, clustering, and dynamical processes on networks. Introduction to advanced topics as time permits. P/NP or letter grading.

170A. **Probability Theory I**.

170B. **Probability Theory II**.
   - **Lecture**, three hours; discussion, one hour. Enforced requisites: courses 131A, 170A. Continuation of rigorous presentation of probability theory based on real analysis. Probability space, probability and conditional probability, independence, Bayes' rule, discrete and continuous random variables and their distributions, expectation, moments and variance, conditional distribution and expectation, weak law of large numbers, P/NP or letter grading.

170E. **Introduction to Probability and Statistics 1: Probability**.
   - **Lecture**, three hours; discussion, one hour. Requisites: courses 31A, 31B. Not open for credit to students with credit for course 170A, Economics 141, or Statistics C183/C283. Mathematical modeling of financial securities in discrete and continuous time. Options, forwards, futures, interest rates, contingent claims, and pricing (tree models and Black-Scholes) of European and American options. Greeks and numerical methods. P/NP or letter grading.

174E. **Mathematics for Finance for Mathematics/Economics Students**.
   - **Lecture**, four hours. Requisites: courses 32B, 33B. Designed to prepare students for Society of Actuaries Financial Mathematics examination. Provides understanding of fundamental concepts of financial mathematics and how these concepts are applied in calculating present and accumulated values from various streams of cash flows as basis for future use in re- searcing, valuation, pricing, and contingent claims, investment analysis, capital budgeting, and valuation of contingent cash flows. Letter grading.

177. **Theory of Interest and Applications**.
   - **Lecture**, three hours; discussion, one hour. Requisite: course 32B. Types of interest, time value of money, annuities and similar contracts, loans, bonds, portfolios and general cash flows, rate of return, term structure of interest rates, duration, convexity and immunization, short rate models, derivatives, forwards, futures, and options. Letter grading.

178. **Foundations of Actuarial Mathematics: Life and Health Insurance**.
   - **Lecture**, three hours; discussion, one hour. Requisites: courses 32B, 170A or 170E (or Statistics 183/C283). Designed to prepare students for Society of Actuaries Life and Health Insurance examination. Topics include univariate probability distributions, probability distributions and random variables (including normal distribution, exponential, Poisson, hypergeometric, binomial, and geometric), functions of two random variables, use of software in actuarial sciences, determination of expected values, and actuarial models. P/NP or letter grading.
annuites, premium calculations and policy values, re- serves, pension plans and retirement benefits. Letter grading.


Discrete Mathematics


182. Algorithms. (4) Lecture, three hours; discussion, one hour. Requisite: course 3C or 32A, and 61. Not open for credit to students with credit for Computer Science 180. Graphs, greedy algorithms, divide and conquer algorithms, dynamic programming, network flow. Emphasis on designing efficient algorithms useful in diverse areas such as bioinformatics and al- location of resources, P/NP or letter grading.


Special Studies

188A. Individual Studies for USIE Facilitators. (1) Tutorial, to be arranged. Enforced corequisite: Honors Colleague 101E. Limited to junior/senior USIE facilita- tors. Individual study in regularly scheduled meetings with faculty mentor to discuss selected USIE seminar topic, conduct preparatory research, and begin prepa- ration of syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.


188SC. Individual Studies for USIE Facilitators. (2) Tutorial, to be arranged. Enforced corequisite: course 188B. Limited to junior/senior USIE facilitators. Individ- ual study in regularly scheduled meetings with fac- ulty mentor while facilitating USIE 883 course. Individual contract with faculty mentor required. May not be repeated. Letter grading.

189. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate seminar. Exploration of a topic in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible stu- dents. Honors content noted on transcript. P/NP or letter grading.

189HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. De- signed as adjunct to upper-division lecture course. In- dividual study under the instructor to explore topics in greater depth through supplemental read- ings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract re- quired. Honors content noted on transcript. Letter grading.


191. Variable Topics Research Seminars: Mathe- matics. (4) Seminar, three hours. Variable topics re- search course in mathematics that covers material not covered in regular mathematics upper-division curric- ulum. Reading, discussion, and development of culmi- nating project. May be repeated for credit with topic and/or instructor change. P/NP or letter grading.

191H. Honors Research Seminars: Mathematics. (4) Seminar, three hours. Individual study on ad- vanced topics in mathematics. Content varies from year to year. May be repeated for credit by petition. P/ NP or letter grading.

192A-192D. Introduction to Collaborative Learning Theo- ry and Practice. (1) Seminar, one hour. Requisite: one course from 1, 3A, 3B, 3C, 31A, 31L, 32A, 32B, 33A, 33B, or equivalent. Student must be Learning As- sistant (LA) in quarter this course is taken. Training seminar for undergraduate students who are selected for LA program. Exploration of current topics in peda- gogy and education research focused on methods of learning, and their practical application to supervised learning in small group settings. Students practice and evaluate communication skills. May be repeated for maximum of 16 units, but cannot be applied toward upper-division courses required for majors or minors. Letter grading.

193. Community Internships in Mathematics Edu- cation. (4) Tutorial, to be arranged. Limited to juniors/ seniors. Internship to be supervised by Center for Community Learning and Leadership Department. Students meet on regular basis with instructor, provide periodic reports of their experience, have assigned readings on mathematics education, and complete final paper. May not be repeated and may not be ap- plied toward major requirements. Individual contract with supervising faculty member required. P/NP grading.

197. Individual Studies in Mathematics. (2 to 4) Tu- torial, three hours per week per unit. Limited to juniors/ seniors. At discretion of chair and subject to avail- ability of staff, individual intensive study of topics suit- able for undergraduate course credit but not specifi- cally offered as separate courses. Scheduled meet- ings to be arranged between faculty member and student. Assigned reading and tangible evidence of mastery of subject. May be repeated for maximum of 12 units, but no more than one 197 or 199 course may be applied toward upper-division courses required for majors offered by Mathematics Department. Individual contract required. P/NP or letter grading.

199. Directed Research or Senior Project in Mathe- matics. (2 or 4) Tutorial, three hours per week per unit. Limited to juniors/seniors. Supervised individual research under guidance of faculty mentor. Scheduled meetings to be arranged between faculty member and student. Culminating report required. May be repeated for maximum of 12 units, but no more than one 197 or 199 course may be applied toward upper-division courses required for majors offered by Mathematics Department. Individual contract required. P/NP or letter grading.

Graduate Courses

Teacher Preparation

201A-201B. Topics in Algebra and Analysis. (4–4) Preparation: bachelor's degree in mathe- matics. Designed for mathematics/education program students. Important ideas of algebra, geometry, and calculus leading effectively from elementary to modern mathematics. Approaches to number system, point sets, geometric interpretations of algebra and analysis, integration, differentiation, series and analytic functions. May not be applied toward MA degree re- quirements.

202A-202B. Mathematical Models and Applica- tions. (4–4) Preparation: bachelor's degree in mathe- matics. Designed for mathematics/education program students. Development of mathematical theories de- scribing various empirical situations. Basic character- istic postulates; development of a logical structure of treatments. Modern topics such as operations re- search, linear programming, game theory, learning models, models in social and life sciences. May not be applied toward MA degree requirements.

203. Master's Linear Algebra. (4) Lecture, four hours; discussion, on period and number of treatment of fundamental results of pure and applied linear algebra over fields. Applications to contemporary research. Preparation for linear algebra portion of UCLA Math- ematics Basic Examination that is required of MA and PhD students. SU or letter grading.

204. Master's Analysis. (4) Lecture, four hours; discus- sion, one hour. Rigorous treatment of fundamental results of analysis. Applications to contemporary re- search. Preparation for analysis portion of UCLA Math- ematics Basic Examination that is required of MA and PhD students. SU or letter grading.

Number Theory

205A-205B-205C. Number Theory. (4–4–4) Lecture, three hours. Requisites: courses 210A, 246A. Alge- braic number theory, including ideal theory, valuations, local fields, cyclotomic fields. Introduction to class-field theory, analytic number theory, L-functions and class number formulas, and modular forms. SU or letter grading.


207A-207B-207C. Topics in Number Theory. (4–4–4) Lecture, three hours. Adeleic analysis on GL(1) and GL(2), especially Tate’s thesis and Hecke theory, auto- morphic representations. Special values of L-functions and p-adic L-functions, arithmetic theory of modular forms, advanced topics in analytic number theory, Modern theory, especially of modular curves. S/ U or letter grading.


209A. Cryptography. (4) (Same as Computer Sci- ence M291A) Lecture, four hours. Introduction to theory of cryptography, stressing rigorous definitions and proofs of security. Topics include notions of hardness, one-way func- tions, trapdoor permutations, pseudorandom functions and pseudorandom permuta- tions, semantic security, public-key and private-key encryption, secret-sharing, message authentication,
digital signatures, interactive proofs, zero-knowledge proofs, collision-resistant hash functions, commitment protocols, key-agreement, contract signing, and two-party secure computation with static security. Letter grading.

M209B. Cryptographic Protocols. (4) (Same as Computer Science M228B.) Lecture, four hours. Requisite: course M209A. Consideration of advanced cryptographic protocol design and analysis. Topics include noninteractive zero-knowledge proofs; zero-knowledge proofs; homomorphic encryption and non-black-box zero-knowledge; IP=PSpace protocol, stronger notions of security for public-key encryption, including chosen ciphertext security; secure multiparty computation; dealing with dynamic adversary; non-malleability and composability of secure protocols; software protection; threshold cryptography; identity-based cryptography; private information retrieval; protection against man-in-the-middle attacks; voting protocols; identification protocols; digital cash schemes; lower bounds on use of cryptographic primitives, software obfuscation. May be repeated for credit with topic change. Letter grading.

Algebra

210A-210B-210C. Algebra. (4—4—4) Requisites: courses 110A, 110B, 110C. Students with credit for courses 110B and/or 110C cannot receive MA degree credit for courses 210B and/or 210C. Group theory, including theorems of Sylow and Jordan/Holder/Schur. Transfer theory, infinite Abelian groups, free products of rings and modules. S/U or letter grading.

210B. Homological Algebra. (4) Lecture, three hours. Requisites: courses 210A, 210B, 210C. Advanced topics in modern homological algebra, such as triangulated categories, derived graded algebras as dg-categories, tilting theory and applications of group cohomology to representation theory, stable categories and module representation theory, and other current topics. S/U or letter grading.


212. Structure of Rings. (4) Requisite: course 210A. Radical, imbeddable modules and primitive rings, rings and algebras with minimum condition.

Logic and Foundations

220A-220B-220C. Mathematical Logic. (4—4—4) Lecture, three hours. Requisite: course M114S. Fundamental methods and results in mathematical logic, using mathematical methods to reason about existence of nonconstructive proofs and computations in many different settings. Topics include compactness theorem, saturation of models, completeness and incompleteness theorems of Gödel, Turing computability and degrees of unsolvability, recursion in Baire space, Zermelo-Frankel axioms, universe of constructible sets, and related equiconsistency results in set theory. S/U or letter grading.

222A-222B. Lattice Theory and Algebraic Systems. (4—4) Lecture, three hours. Requisite: course 210A. Partially ordered sets, lattices, distributivity, modularity; completeness, interaction with combinatorics, topology, and logic; algebraic systems, congruence lattices, subdirect decomposition, congruence laws, equational bases, applications to lattices.

223C. Topics in Combinatorics. (4) Lecture, three hours. Requisites: courses 220A, 220B. Degrees of unsolvability, recursively enumerable sets, undecidable theories; inductive definitions, admissible sets and ordinals; recursion in higher types; recursion and complexity. Topics vary from year to year. May be repeated for credit with consent of instructor. S/U or letter grading.

223D. Topics in Descriptive Set Theory. (4) Lecture, three hours. Requisites: courses 220A, 220B. Classical and effective results on Borel and projective sets; infinite games of perfect information and principle of determinacy; consequences of determinacy, including productivity, structure theory of pointclasses, and partition properties. Topics vary from year to year. May be repeated for credit with consent of instructor. S/U or letter grading.

223M. Topics in Model Theory. (4) Lecture, three hours. Requisites: courses 220A, 220B. Ultraproducts, preservation theorems, interpolation theorems, saturated models, and applications to o-minimal theories, enriched languages, stable model theory, and applied model theory. Topics vary from year to year. May be repeated for credit with consent of instructor. S/U or letter grading.

225S. Topics in Set Theory. (4) Lecture, three hours. Requisites: courses 220A, 220B, 220C. Forcing and independence results, including independence of continuum hypothesis and independence of axiom of choice; inner model theory; large cardinals; proofs of determinacy; combinatorial topics vary from year to year. May be repeated for credit with consent of instructor. S/U or letter grading.

Geometry and Topology

225A. Differential Topology. (4) Lecture, three hours; discussion, one hour. Manifolds, tangent vectors, smooth maps, tangent bundles and vector bundles in general, vector fields and integral curves, Sard theorem, the Morse theory, measure of critical values, embedding theorems, transversality, degree theory, Lefschetz fixed-point theorem, Euler characteristic, Ehresmann theorem that proper submersions are locally trivial fibrations. S/U or letter grading.

225B. Differential Geometry. (4) Lecture, three hours; discussion, one hour. Lie derivatives, integrable distributions and Frobenius theorem, differential forms, integration and Stokes theorem, de Rham cohomology, Mayer/Vietoris sequence, Poincaré duality, Thom classes, degree theory and Euler characteristic revisited from viewpoint of de Rham cohomology, Riemannian manifolds, volume forms, and interpretation of classical integral theorems as aspects of Stokes theorem for differential forms. S/U or letter grading.

225C. Algebraic Topology. (4) Lecture, three hours; discussion, one hour. Introduction to homotopy theory, fundamental group and covering spaces, singular homology and cohomology theory, axioms of homotopy theory, Mayer-Vietoris sequence, calculation of homology and cohomology of standard spaces, cell complexes and cellular homology, de Rham theorem on isomorphism of de Rham differential-form cohomology and singular cohomology with real coefficients. S/U or letter grading.


233. Partial Differential Equations on Manifolds. (4) Lecture, three hours. Requisites: courses 226A, 251A. Topics may include Laplacian operator on a Riemannian manifold, eigenvalues of the Laplace operator, isoperimetric inequalities, elliptic estimates, harmonic functions, function theory on manifolds, Green’s function, heat equation, minimal hypersurfaces, prescribed curvature equations, harmonic maps, Yam/Willmore equations, Monge/Ampere equations.

234. Topics in Differential Geometry. (4) Lecture, three hours. Requisites: courses 226A, 226B. Complete Kahler geometry, fundamental groups and symmetric spaces, finiteness and convergence theorems for Riemannian manifolds, almost flat manifolds, closed geodesics, manifolds of positive scalar curvature, manifolds of constant curvature. Topics vary from year to year. May be repeated for credit by petition.

235. Topics in Manifold Theory. (4) Lecture, three hours. Requisites: courses 225A, 225B. Emphasis on low-dimensional manifolds. Structure and classifica-


275E. Stochastic Particle Systems. (4) Lecture, three hours. Requisite: course 275C. Interacting particle systems, including contact process, stochastic Ising model, and exclusion processes; percolation theory. S/U or letter grading.


Special Studies


282. Rotating Fluids and Geophysical Fluid Dynamics. (4, 4) Lecture, three hours. Requisite: course 272A. Review of basic theory of rotating continua, fluid equations, integrals, integrals, real solutions, flow created by slowly moving bodies, flows where viscosity is negligible, vortices, boundary layers and their separation, wave, water waves, ship waves, compressional waves, shock waves, turbulence theory (overview).


596. Directed Individual Study or Research. (2 to 8) Tutorial, to be arranged. Supervised individual reading and study on project approved by a faculty member, which may be repeated for credit, but only two 596 courses (8 units) may be applied toward MA degree unless departmental consent is obtained. S/U or letter grading.

599. Research in Mathematics. (2 to 12) Tutorial, to be arranged. Preparation: advancement to PhD candidacy. Study and research for PhD dissertation. May be repeated for credit. S/U grading.

Program in Computing

Lower-Division Courses

1. Introduction to Computers and Computing. (4) Lecture, three hours; laboratory, one hour. Not open for credit to students with credit for course 1S or 10A; may not be taken concurrently with course 1S or 10A. Fundamentals of computers and computing: editors, spreadsheets, file manager; machine organization and computer hardware; Internet; software applications. P/NP grading.

13. Mathematical Software Tools for Information Management. (4) Lecture, one hour; laboratory, two hours. Preparation: some familiarity with computers. Not open for credit to students with credit for course 1; may not be taken concurrently with course 1. Open to students by application: taken by students with credit for more advanced courses. Introduction to spreadsheets and databases in laboratory setting. P/NP grading.
3. Introduction to Computing for Social Sciences and Humanities. (4) Lecture, three hours; discussion, two hours. No prior programming knowledge required. Not open for credit to students pursuing specialization in Computing or to students with credit for course 20E. Basic principles of object-oriented programming and concepts, with applications from social sciences and humanities. Overview of Java programming language, programming with objects, control structures, function, classes, and object-oriented design, event-driven programming, application to multi-tagent models. P/NP or letter grading.

10A. Introduction to Programming. (5) Lecture, three hours; discussion, two hours; laboratory, eight hours. No prior programming experience assumed. Basic principles of programming, using C++; algorithmic, procedural problem solving; program design and development; basic data types, control structures and functions; functional arrays and pointers; introduction to classes for programmer-defined data types. P/NP or letter grading.

10B. Intermediate Programming. (5) Lecture, three hours; discussion, two hours; laboratory, eight hours. Requisite: course 10A or Computer Science 31. Abstract data types and their implementation using C++ class mechanism; dynamic data structures, including linked lists, stacks, queues, trees, and hash tables; applications; object-oriented programming and software reuse; recursion; algorithms for sorting and searching. P/NP or letter grading.

10C. Advanced Programming. (5) Lecture, three hours; discussion, two hours; laboratory, eight hours. Enforced requisite: course 10B. More advanced algorithms and data structures techniques; additional emphasis on algorithmic efficiency; advanced features of C++, such as inheritance and virtual functions; graph algorithms. P/NP or letter grading.

15. Introduction to Lisp and Symbolic Computation. (5) Lecture, three hours; discussion, two hours; laboratory, eight hours. Enforced requisite: course 10A. Introduction to Lisp programming language. Basics: list structures, recursion, function abstraction. Advanced topics: knowledge representation, higher-order functions, problem solving algorithms and heuristics. P/NP or letter grading.

16A. Python with Applications I. (5) Formerly numbered 16.) Lecture, three hours; discussion, two hours. Requisite: course 10A or Computer Science 31 or equivalent, with grades of C- or better. Introduction to Python programming language for students who have already taken beginning programming course in strongly typed, compiled language (C++, C, Java, etc.). Variables, expressions, control structures, functions, data structures, files, and exception handling. P/NP or letter grading.

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating other activities and led by lecture course instructor. S/U or letter grading.

185HC. Honors Contracts. (1 to 4) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to upper-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

Graduate Courses


375. Teaching Apprentice Practicum. (1 to 4) Seminar, one to four hours. Preparation: apprenticeship personnel employment as teaching assistant, associate, or fellow. Teaching apprenticeship under active guidance and supervision of regular faculty member responsible for curriculum and instruction at UCLA. May be repeated for credit. S/U grading.

Mathematics/Economics

Interdepartmental Program

College of Letters and Science

6363 Mathematical Sciences

Box 951555

Los Angeles, CA 90095-1555

Mathematics/Economics 310-206-1286

Program e-mail

Don M. Blasius, PhD, Co-Chair

Ichiro Obara, PhD, Co-Chair

Faculty Committee

Don M. Blasius, PhD (Mathematics)
Scope and Objectives

In recent years economics has become increasingly dependent on mathematical methods, and the mathematical tools it employs have become more sophisticated. Mathematically competent economists, with bachelor's degrees and with advanced degrees, are needed in industry and government. Graduate programs in economics and finance programs in graduate schools of management require strong undergraduate preparation in mathematics for admission.

The Mathematics/Economics BS degree program is designed to give students a solid foundation in both mathematics and economics, stressing those areas of mathematics and statistics that are most relevant to economics and the parts of economics that emphasize the use of mathematics and statistics. It is ideal for students who may wish to complete a higher degree in economics.

Undergraduate Study

Mathematics/Economics BS

Learning Outcomes

The Mathematics/Economics major has the following learning outcomes:

- Strong mathematical content knowledge of single and multivariable differential and integral calculus and differential equations
- Familiarity with linear algebra, techniques of proof, and the foundations of real analysis
- Ability to synthesize material, problem solve, and think abstractly
- Ability to perform basic computer programming, especially in C++
- Familiarity with various principles of macro- and microeconomics (analysis, institutions, policy)

Pre-major

Students entering UCLA directly from high school or first-term transfer students who want to declare the Mathematics/Economics premajor at the time they apply for admission are automatically admitted to the premajor.

Current UCLA students need to apply for the Mathematics/Economics premajor at the time they apply for admission as automatically admitted to the premajor.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

After satisfying the preparation for the major requirements, students need to petition to enter the major at the Student Services Office after completing the preparation course more than once results in automatic dismissal from the major.

Preparation for the Major

Required: Mathematics 31A or 31AL, 31B, 32A, 32B, 33A, 33B, 61, Economics 1, 2, 11, Program in Computing 10A, one Writing II course. Each course must be taken for a letter grade. The economics preparation for the major courses (Economics 1, 2, 11) are calculated separately from the mathematics preparation for the major courses (Mathematics 31A or 31B, 32A, 32B, 33A, 33B, 61, Program in Computing 10A).

The economics preparation courses must be completed with a minimum overall 2.7 grade-point average and a grade of C or better in each course, as must the mathematics preparation courses. Students must receive a grade of C or better in the Writing II course.

Repetition of more than one economics preparation course, more than two mathematics preparation courses, or of any economics or mathematics preparation course more than once results in automatic dismissal from the major.

Honors Program

Students who wish to graduate with departmental honors should apply for admission to the honors program in the Mathematics Department Student Services Office. They may apply any time after completing the preparation for the major courses and meeting the following requirements: (1) be officially enrolled in the Mathematics/Economics major, (2) complete all the preparation for the major courses, (3) achieve a minimum 3.5 grade-point average in the mathematics preparation for the major courses, (4) achieve a minimum 3.5 grade-point average in the economics preparation for the major courses, and (5) achieve a minimum 3.5 grade-point average in Economics 11, 101, and 102.

To qualify for honors at graduation, students must (1) complete Mathematics 115AH, 131AH, and 131BH, (2) complete Economics 198A and 198B (the thesis process requires enrollment in a two-term sequence for economics courses), (3) present the thesis in Economics 1988, and (4) complete the major requirements with a minimum 3.5 grade-point average in both the upper-division economics and mathematics courses. Highest honors are awarded at the discretion of the departmental honors committee based on grade-point average and quality of the senior thesis.

Computing Specialization

Majors in Mathematics/Economics may select a Computing specialization by (1) satisfying all the requirements for a bachelor's degree in the major; and (2) completing Mathematics 61 or 180, Program in Computing 10A, 108, two courses from 10C, 15, 16A, 20A, 20B, 30, 40A, 60, and at least two courses from Mathematics 149 through 159, with a minimum grade of C– in each course and a combined grade-point average of at least 2.0. Students must petition for admission to the program and are advised to do so after they complete Program in Computing 108 (petitions should be filed in the Mathematics Department Student Services Office). Students graduate with a bachelor's degree in mathematics/economics and a specialization in Computing.
Aerospace Engineering BS

Capstone Major

The Aerospace Engineering program is concerned with the design and construction of various types of fixed-wing and rotary-wing (helicopters) aircraft used for air transportation and national defense. It is also concerned with the design and construction of spacecraft, the exploration and utilization of space, and related technological fields.

Aerospace engineering is characterized by a very high level of technology. The aerospace engineer is likely to operate at the forefront of scientific discoveries, often stimulating these discoveries and providing the inspiration for the creation of new scientific concepts. Meeting these demands requires the imaginative use of many disciplines, including fluid mechanics and aerodynamics, structural mechanics, materials and aeroelasticity, dynamics, control and guidance, propulsion, and energy conversion.

Learning Outcomes

The Aerospace Engineering major has the following learning outcomes:

- Application of knowledge of mathematics, science, and engineering
- Function as a productive member of a team that considers multiple aspects of an engineering problem
- Design of a system, component, or process to meet desired needs
- Effective oral and written communication
- Identification, formulation, and solution of engineering problems

Preparation for the Major

Required: Chemistry and Biochemistry 20A, 20B, 20L; Mathematics 31A, 31B, 32A, 32B, 33A; Mechanical and Aerospace Engineering M20 (or Computer Science 31); 82; Physics 1A, 1B, 1C, 4AL, 4BL.

The Major

Required: Mechanical and Aerospace Engineering 1, 101, 102, 103, 105A, 105D, 107, 150A, 157, 166A, 171A; two departmental breadth courses (Electrical and Computer Engineering 100 and Materials Science and Engineering 104)—if one or both of these courses are taken as part of the technical breadth requirement, students must select a replacement upper-division course or courses from the department—except for Mechanical and Aerospace Engineering 156A—or, by petition, from outside the department; one of the following two tracks (16 units): aeronautics (150B, 150P, 154A, 154S) or space (150R, 161A, 161B, 161C); three technical

Undergraduate Study

The aerospace engineering and mechanical engineering programs are accredited by the Engineering Accreditation Commission of ABET.

The Aerospace Engineering and Mechanical Engineering majors are designated capstone majors. Within their capstone courses, Aerospace Engineering students are exposed to the conceptual and design phases for aircraft development and produce a structural design of a component, such as a lightweight aircraft wing. Mechanical Engineering students work in teams in their capstone courses to propose, design, analyze, and build a mechanical or electromechanical device. Graduates of both programs should be able to apply their knowledge of mathematics, science, and engineering in technical systems; design a system, component, or process to meet desired needs; function as productive members of a team; identify, formulate, and solve engineering problems; and communicate effectively, both orally and in writing.
broad courses (12 units) selected from an approved list available in the Office of Academic and Student Affairs; one capstone design course (Mechanical and Aerospace Engineering 157A); one major field elective course (4 units) from the track not chosen (105B or C150P, C150R or 161A) and one major field elective course (4 units) from Mechanical and Aerospace Engineering 150B, C150S, 154S, 161A, 161B, 161C (unless taken as a required course), or from 94, 131A, 131G, 133A, 135, 136, 137, 138, 140, 140C, 150C, 150G, 155, 156, 157A, 161A through 161C, 164C, 168, 169A, 171B, 172, 174, 175A, 181A, 182B, 182C, 183A (unless taken as a required course), C183C, 185, C186, C187L.

For information on UC, school, and general education requirements, see the College and Schools chapter.

Graduate Study

Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Division website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Graduate Degrees

The Department of Mechanical and Aerospace Engineering offers the Master of Science (MS) degree in Manufacturing Engineering, Master of Science (MS) and Doctor of Philosophy (PhD) degrees in Aerospace Engineering, and Master of Science (MS) and Doctor of Philosophy (PhD) degrees in Mechanical Engineering.

Mechanical and Aerospace Engineering

Lower-Division Courses

1. Undergraduate Seminar. (1) Seminar, one hour; outside study, two hours. Introduction by faculty members and industry lecturers to mechanical and aerospace engineering disciplines through current and emerging applications in aerospace, medical instrumentation, automotive, entertainment, energy, and manufacturing industries. P/NP grading.

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.


94. Introduction to Computer-Aided Design and Drafting. (4) Lecture, two hours; laboratory, four hours. Fundamentals of computer graphics and two- and three-dimensional modeling on computer-aided design and drafting systems. Students use one or more online computer systems to design and display various objects. Letter grading.

99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per unit. Entry-level courses for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Courses


102. Dynamics of Particles and Rigid Bodies. (4) Lecture, four hours; discussion, two hours; outside study, six hours. Requisites: course 101, Mathematics 33A, Physics 1A. Fundamental concepts of Newtonian mechanics. Kinematics and kinetics of particles and rigid bodies in two and three dimensions. Impulse-momentum and work-energy relationships. Applications. Letter grading.

103. Elementary Fluid Mechanics. (4) Lecture, four hours; discussion, two hours; outside study, six hours. Requisites: Mathematics 32B, 33A, Physics 1B. Introductory course dealing with application of principles of mechanics to flow of compressible and incompressible fluids. Letter grading.

105A. Introduction to Engineering Thermodynamics. (4) Lecture, four hours; discussion, two hours; outside study, six hours. Requisites: Chemistry 20B, Mathematics 32B. Phenomenological thermodynamics. Concepts of equilibrium, temperature, and reversibility. First law and concept of energy; second law and concept of entropy. Equations of state and thermodynamic properties. Engineering applications of these principles in analysis and design of closed and open systems. Letter grading.

105D. Transport Phenomena. (4) Lecture, four hours; discussion, two hours; outside study, six hours. Requisites: courses 82, 103, 105A. Transport phenomena; heat conduction, heat transfer, mass species diffusion, convective and conductive heat and mass transfer, and radiation. Engineering applications in thermal and environmental control. Letter grading.

107. Introduction to Modeling and Analysis of Dynamic Systems. (4) Lecture, four hours; discussion, one hour; laboratory, two hours; outside study, five hours. Enforced requisites: courses M20 or (Computer Science 31). 82, Electrical Engineering 100. Introduction to modeling of physical systems, with examples of mechanical, fluid, thermal, and electrical systems. Description of these systems with coverage of impulse response, convolution, frequency response, first- and second-order system transient response analysis, and numerical solution. Nonlinear differential equation descriptions with discussion of equilibrium solutions, small signal linearization, large signal response, block diagram representation and response of interconnections of systems. Hands-on experiments reinforce lecture material. Letter grading.

131A. Intermediate Heat Transfer. (4) Lecture, four hours; discussion, two hours; outside study, six hours. Enforced requisites: courses M20 or (Civil Engineering M20 or Computer Science 31), 82, 105D. Steady conduction: two-sided, two-ended, tapered, and circular fins; buried cylinders, transient conduction: slabs, cylinders, products. Convection: transpiration, laminar pipe flow, film condensation, boundary layers,
C131G. Microscopic Energy Transport. (4) Lecture, four hours; outside study, eight hours. Requisites: course 105G. Exploration of basic principles of transport of energy in natural and fabricated structures by three carriers: electrons, phonons, and molecules. Study of statistical properties of heat carriers, common Landauer framework for heat flow, scattering and propagation of heat, derivation of classical laws from microscopic transport equations, and deviation from classical laws at small scale. Concurrently scheduled with course C231G. Letter grading.

133A. Energy and Environment. (4) Lecture, four hours; discussion, two hours; outside study, six hours. Requisites: courses 103, 105A. Applications of thermodynamic principles to engineering processes. Energy conversion systems. Rankine cycle and other cycles, refrigeration, psychrometry, reactive and non-reactive fluid flow systems. Elements of thermodynamic design. Letter grading.

135. Fundamentals of Nuclear Science and Engineering. (4) Lecture, four hours; outside study, six hours. Requisites: course 82, Chemistry 20A. Review of nuclear physics, radioactivity and decay, and radiation interaction with matter. Nuclear fission, nuclear fusion, nuclear power processes and mass effect, chain reactions, criticality, neutron diffusion and multiplication, heat transfer issues, and applications. Introduction to nuclear power plants for commercial electricity production, aerospace power, spacecraft propulsion, nuclear fusion, and nuclear science for medical uses. Letter grading.

136. Energy and Environment. (4) Lecture, four hours; outside study, six hours. Enforced requisite: course 105A. Global energy use and supply, electrical power generation, fossil fuel and nuclear power plants, renewable energy such as hydropower, biomass, geothermal, solar, wind, and ocean, fuel economy and transportation, energy conservation, air and water pollution, global warming. Letter grading.

C137. Design and Analysis of Smart Grids. (4) Lecture, four hours; outside study, eight hours. Demand response; transactive/price-based load control; home area network, smart energy profile; advanced metering infrastructure; renewable energy integration; solar and wind generation intermittency and connection; microgrids; grid stability; energy storage and electric vehicles-simulation; monitoring; distribution and transmission grids; consumer-centric technologies; sensors and controls, and computing. Interconnected, wireless, and powerline communications for smart grids; grid modeling, stability, and control; frequency and voltage regulation; ancillary services; wide-area grid analysis. Letter grading.

C138. Introduction to Statistical Thermodynamics. (4) Lecture, four hours; outside study, eight hours. Requisites: courses 105A, 105D. Introduction to basic concepts and tools of statistical thermodynamics. Abstract concepts of entropy, temperature, and chemical potential and exploring thermodynamic consequences from ground up using only mathematical and statistical principles. Discussion of equilibrium properties of thermodynamic systems and associated distributions. Provides foundation for other studies in transport phenomena, plasma, chemical kinetics, micro/nanoscale science and technology, and other related subjects. Concurrently scheduled with course C238. Letter grading.

CM140. Introduction to Biomechanics. (4) [Same as Biogenenging CM140] Lecture, four hours; discussion, two hours; outside study, six hours. Requisites: courses 101, 102, or 166A. Introduction to the mechanical functions of human body; skeletal adaptations to optimize load transfer, mobility, and function. Dynamics and kinematics. Fluid mechanics applications. Heat and mass transfer. Power generation. Laboratory simulations and tests. Concurrently scheduled with course CM240. Letter grading.
noscale position systems. Hands-on exercises include build-your-own flexure kits, CAD and FEA simulations, and term project. Concurrently scheduled with course C290A. Letter grading.

162D. Mechanical Engineering Design I. (4) Lecture, two hours; laboratory, four hours; outside study, six hours. Enforced requisite: course 162D. Limited to seniors. Second of two mechanical engineering capstone design courses. Students groups continue design projects started in course 162D, using made of CAD design laboratory, CAD analysis laboratory, and mechatronics laboratory. Design theory, design tools, economics, marketing, manufacturability, quality, intellectual property, design for manufacture and assembly, quality, reliability, and engineering ethics. Students conduct hands-on design, fabrication, and testing. Culminating project demonstration or competition. Preparation of design project presentations in both oral and written formats. Letter grading.

166A. Analysis of Aerospace Structures. (4) Lecture, four hours; discussion, two hours; outside study, six hours. Requisites: courses 82, 101. Not open to students with credit in course 156A. Introduction to two-dimensional elasticity, stress-strain laws, yield and fatigue; bending of beams; torsion of beams; warping; torsion of thin-walled cross sections; shear flow, stability; bending torsion of thin-walled, stiffened structures used in aerospace vehicles; elements of plate theory; buckling of columns. Letter grading.

166B. Design of Composite Structures. (4) Lecture, four hours; discussion, two hours; outside study, six hours. Enforced requisite: course 156A or 166A. History of composites, stress-strain relations for composite materials, bending and extension of symmetric laminates, failure analysis, design examples and design studies, buckling of composite components, non-symmetric laminates, micro mechanics of composites. Letter grading.

M168. Introduction to Finite Element Methods. (4) (Same as Civil Engineering M135C.) Lecture, four hours; discussion, one hour; outside study, seven hours. Requisite: course 156A or 166A or Civil Engineering 130. Introduction to basic concepts of finite element methods (FEM) and applications to structural and solid mechanics and heat transfer. Direct matrix structural analysis; weighted residual, least squares, and Ritz approximation methods; shape functions; convergence properties; isoparametric formulation of multidimensional heat flow and elasticity; numerical integration. Practical use of FEM software; geometric and analytical modeling; preprocessing and postprocessing techniques; term projects with computers. Letter grading.

169A. Introduction to Mechanical Vibrations. (4) Lecture, four hours; discussion, two hours; outside study, six hours. Requisites: courses 101, 102, 107. Fundamentals of vibration theory and applications. Free, forced, and transient vibration of one and two degrees of freedom systems, including damping. Normal modes; damping; linear mode shapes; transient response to initial conditions and step functions; constrained systems with friction, and free vibration isolation devices, vibrations of continuous systems. Letter grading.

171A. Introduction to Feedback and Control Systems: Design I. (4) Lecture, four hours; discussion, two hours; outside study, six hours. Enforced requisite: course 107. Introduction to feedback principles, control systems design, and system stability. Modeling of physical systems in engineering and other fields; transform methods; control design using Nyquist, Bode, and root locus methods; compensation; computer-aided analysis and design. Letter grading.


172. Control System Design Laboratory. (4) Lecture, four hours; laboratory, four hours; outside study, six hours. Enforced requisite: course 171A. Introduction to loop shaping controller design with application to laboratory electromechanical systems. Power spectrums models of noise and disturbances, and performance trade-offs imposed by conflicting requirements. Constraints on sensitivity function and complementary sensitivity function imposed by nonminimum phase plants. Lecture topics supported by weekly hands-on design projects. Emphasis on design philosophy, design methods, and use of attributes, acceptance sampling. Letter grading.

C175A. Probability and Stochastic Processes in Dynamical Systems. (4) Lecture, four hours; outside study, eight hours. Enforced requisites: courses 82, 107. Probability theory, stochastic sequences and processes, expectation, conditional expectation, Gauss/Markov sequences, and minimum variance estimator (Kalman filter) with applications. Concurrently scheduled with course C271A. Letter grading.

181A. Complex Analysis and Integral Transforms. (4) Lecture, four hours; discussion, one hour; outside study, six hours. Enforced requisite: course 82. Complex variables, analytic functions, conformal mapping, contour integrals, singularities, residues, Cauchy integrals; Laplace transform: properties, convolution, inversion; Fourier transform: properties, convolution, FFT, applications in dynamics, vibrations, structures, and heat conduction. Letter grading.

182B. Mathematics of Engineering. (4) Lecture, four hours; discussion, one hour; outside study, seven hours. Enforced requisite: course 82. Complex variables, analytic functions, conformal mapping, contour integrals, singularities, residues, Cauchy integrals; Laplace transform: properties, convolution, inversion; Fourier transform: properties, convolution, FFT, applications in dynamics, vibrations, structures, and heat conduction. Letter grading.


Welding/joining, Rapid prototyping, electronics and electro-micro-mechanical systems (MEMS) and nanotechnology. Letter grading.

M183B. Introduction to Microscale and Nanoscale Manufacturing. (4) (Same as Bioengineering M153, Chemical Engineering M155, and Electrical and Computer Engineering M183B.) Laboratory, four hours; outside study, five hours. Enforced requisites: Chemistry 20A, Physics 1A, 1B, 4AL, 4BL. Introduction to general manufacturing methods, mechanisms, constraints, and nanofabrication processes. Focus on concepts, physics, and instruments of various microfabrication and nanofabrication processes that are currently applied in industry and academia, including various photolithography technologies, physical and chemical deposition methods, and physical and chemical etching methods. Hands-on experience for fabricating microstructures and nanostructures in modern cleanroom environment. Letter grading.

C183C. Rapid Prototyping and Manufacturing. (4) Lecture, four hours; laboratory, two hours; outside study, six hours. Enforced requisite: course 183A. Rapid prototyping (RP), solid freeform fabrication, or additive manufacturing has emerged as popular manufacturing technology to accelerate product creation in new, creative, and decisive ways. Manufacturing builds parts directly from CAD models. This novel manufacturing technology enables building of parts that have traditionally been impossible to fabricate because of their complexity or variety in materials. In analogy to speed and flexibility of desktop publishing, rapid prototyping is also called desktop manufacturing, with actual three-dimensional solid objects instead of 2-dimensional images. Methodology of rapid prototyping has also been extended into meso-/micro-/nano-scale to produce three-dimensional functional miniature components. Concurrently scheduled with course C290A. Letter grading.

185. Introduction to Radio Frequency Identification and Its Application in Manufacturing and Supply Chain. (4) Lecture, four hours; discussion, two hours; outside study, six hours. Enforced requisite: course M20 or Civil Engineering M20 or Computer Science 31. Manufacturing today requires assembling of individual components into assembled products, shipping of such products, and eventually use, maintenance, and recycling of such products. Radio frequency identification (RFID) chips installed on components, sub-assemblies, and assemblies of products allow them to be tracked automatically through supply chain. RFID tags have memory and small CPU that allows information about product status to be written, stored, and transmitted without physical contact to a reader that is programmed by reader to enterprise software by way of RFID middleware layer. Study of how RFID is being utilized in manufacturing, with focus on automotive and aerospace. Letter grading.

and biodegradation. Basic physical, chemical, and biological principles related to these techniques, top-down and bottom-up (self-assembly) nanofabrication, nanocharacterization (AEM, SEM, etc.), and optical and electrochemical biosensors. Students encouraged to create their own ideas in self-designed experiments. Concurrently scheduled with course C287L. Letter grading.

188. Special Courses in Mechanical and Aerospace Engineering. (2 to 4) Lecture, two to four hours; outside study, eight hours. Special topics in mechanical and aerospace engineering for undergraduates in areas of mechanical and aerospace engineering that are not covered elsewhere in the curriculum. Topic discussions given for experimental work in research areas in research specialty. May be repeated for credit. P/NP or letter grading.

194. Research Group Seminars: Mechanical and Aerospace Engineering. (2 to 4) Seminar, two hours. Designed for undergraduate students who are part of a research group. Discussion of research methods and current literature in field. Student presentation of projects in research specialty. May be repeated for credit. P/NP or letter grading.

199. Directed Research in Mechanical and Aerospace Engineering. (2 to 8) Tutorial, to be arranged. Limited to juniors/seniors. Supervised individual research or investigation under guidance of faculty member. Course or project report required. May be repeated for credit with school approval. Individual contract required; enrollment petitions available in Office of Academic and Student Affairs. Letter grading.

Graduate Courses


231B. Radiation, Laser, and Laser Physics. (4) Lecture, four hours; outside study, eight hours. Requisite: course 105D. Radiative properties of materials and radiative energy transfer. Emphasis on fundamental concepts, including energy-generating and electromagnetic waves as well as analytical methods for calculating radiative properties and radiation transfer in absorbing, emitting, and scattering media. Applications cover laser-material interactions in addition to traditional areas such as combustion and thermal radiation. Letter grading.


231G. Microscopic Energy Transport. (4) (Formally numbered 231G) Lecture, four hours; outside study, eight hours. Requisite: course 105D. Exploration of basic principles of transportation of energy in natural and engineered systems. Topics include: heat carriers: electrons, phonons, and molecules. Study of statistical properties of heat carriers, common Landauer framework for heat flow, scattering and propagation of heat carriers, derivation of classical laws from microscopic transport equations, and deviation from classical laws at small scale. Term project. Concurrently scheduled with course C131G. Letter grading.

233. Nanotechnology. (4) Lecture, four hours; outside study, eight hours. Introduction to fundamental principles of energy transport, conversion, and storage at nanoscale, and recent developments in energy conversion and energy technologies involving nanotechnology. Focus on basics of thermal science, solid state, quantum mechanics, electromagnetics, and statistical physics. Topic discussions given for examples that connect technological application, fundamental challenge, and scientific-solution-based nanotechnology to improve device performance and energy efficiency. Letter grading.

233A. Nuclear Reactor Theory. (4) Lecture, four hours; outside study, eight hours. Underlying physics and mathematics of nuclear reactor (fission) core design. Diffusion theory, reactor kinetics, slowing down and thermalization, multigroup methods, introduction to feedback theory. Letter grading.

237. Design and Analysis of Smart Grids. (4) Lecture, four hours; outside study, eight hours. Demand response; transactive/price-based load control; home-area network, smart energy profile; advanced metering. Energy flows; effects of variable fluid properties. Analogies among convective transport processes. Letter grading.


239A. Introduction to Statistical Thermodynamics. (4) Lecture, four hours; outside study, eight hours. Requisites: courses 105A, 105D. Introduction to basic concepts and tools of statistical thermodynamics. Abstraction concepts of entropy, temperature, and chemical potential are explained by developing these concepts from ground up using only mechanical and statistical principles. Discussion of equilibrium properties of thermodynamic systems, found through Boltzmann factorization and distributions. Provides sound foundation for further studies in transport phenomena, plasma, chemical kinetics, micro/nanoscale science and technology, and other related subjects. Concurrently scheduled with course C138. Letter grading.

239B. Seminar: Current Topics in Transport Phenomena. (2 to 4) Seminar, two to four hours; outside study, four to eight hours. Designed for graduate mechanical and aerospace engineering students. Lectures, discussions, student presentations, and projects in areas of current interest in transport phenomena. May be repeated for credit. S/U grading.

239F. Special Topics in Transport Phenomena. (2 to 4) Lecture, two to four hours; outside study, four to eight hours. Designed for graduate mechanical and aerospace engineering students. Advanced and current study of one or more aspects of heat and mass transfer, such as turbulence, stability and transition, buoyancy effects, variational methods, and measurement techniques. May be repeated for credit with topic change. S/U grading.

239G. Special Topics in Nuclear Engineering. (2 to 4) Lecture, two to four hours; outside study, four to eight hours. Designed for graduate mechanical and aerospace engineering students. Advanced study in areas of nuclear engineering, such as reactor safety, risk-benefit trade-offs, nuclear materials, and reactor design. May be repeated for credit with topic change. S/U grading.

239H. Special Topics in Fusion Physics, Engineering, and Technology. (2 to 4) Seminar, two to four hours; outside study, four to eight hours. Designed for graduate mechanical and aerospace engineering students. Advanced treatment of subjects selected from research areas in fusion science and engineering, such as instabilities in burning plasmas, alternate fusion confinement concepts, inertial confinement fusion, fission-fusion hybrid systems, and fusion reactor safety. May be repeated for credit with topic change. S/U grading.

250A. Foundations of Fluid Dynamics. (4) Lecture, four hours; outside study, eight hours. Requisite: courses 150A, 150B, 156A or 166A. Introduction to basic principles of fluid mechanics at graduate level, with emphasis on incompressible flow. Flow kinematics, basic equations, constitutive relations, exact solutions on the Navier/Stokes equations, vorticity dynamics, decomposition of flow fields, potential flow. Letter grading.

250B. Viscous and Turbulent Flows. (4) Lecture, four hours; outside study, eight hours. Requisite: course 150A. Advanced treatment of subjects selected from research areas in fluid mechanics, including magneto-meters, memory devices, motors, and antennas. Letter grading.

250C. Compressible Flows. (4) Lecture, four hours; outside study, eight hours. Requisites: courses 150A, 150B. Effects of compressibility in viscous and inviscid flow. Steady and unsteady supersonic and transonic flows; method of characteristics; small disturbance theories (linearized and hyperbolic); shock dynamics. Letter grading.

250D. Computational Aerodynamics. (4) Lecture, four hours; outside study, eight hours. Requisites: courses 150A, 150B, 182C. Introduction to useful methods for computation of aerodynamic flow fields. Coverage of potential, Euler, and Navier/Stokes equations for subsonic to hypersonic speeds. Letter grading.

250E. Spectral Methods in Fluid Dynamics. (4) Lecture, four hours; outside study, eight hours. Enforced requisites: courses 82, 182B, 182C, 250A, 250B. Introduction to basic concepts and techniques of various spectral methods applied to solving partial differential equations. Particular emphasis on techniques of solving unsteady three-dimensional Navier/Stokes problems. Topics include spectral representation formulas and transforms, Fourier transform, etc. Letter grading.

250F. Hypersonic and High-Temperature Gas Dynamics. (4) Lecture, four hours; outside study, eight hours. Designed to provide graduate-level understanding of molecular and chemical description of equilibrium and nonequilibrium hypersonic and high-temperature gas flows, chemical thermodynamics and statistical thermodynamics for calculating equilibrium and nonequilibrium flows of real gases, vibrational and chemical rate


C250P. Aircraft Propulsion Systems. (4) Lecture, four hours; discussion, two hours; outside study, six hours. Requires: courses 150A, 150A. Thermodynamic properties of gases, aircraft jet engine cycle analysis and component performance, component matching, advanced aircraft engine topics. Concurrently scheduled with course C150P. Letter grading.

C250R. Rocket Propulsion Systems. (4) Lecture, four hours; discussion; two hours; outside study, six hours. Enforced requisites: courses 103, 105A. Rocket propulsion including chemical rocket engine (liquid, gas, and solid propellants), hybrid rocket engines, electric (ion, plasma) rockets, nuclear rockets, and solar-powered vehicles. Current issues in launch vehicle technologies. Concurrently scheduled with course C150R. Letter grading.

252A. Stability of Fluid Motion. (4) Lecture, four hours; outside study, eight hours. Requires: course 150A. Mechanisms by which laminar flows can become unstable (turbulence) and the consequences of motions. Linear stability theory; thermal, centrifugal, and shear instabilities; boundary layer instability. Nonlinear aspects; sufficient criteria for stability, subcritical instabilities, transition to turbulence. Letter grading.


252D. Combustion Rate Processes. (4) Lecture, four hours; outside study, eight hours. Requires: course 252C. Basic concepts in chemical kinetics: molecular collisions, distribution functions and averaging, semiregularities, potential surfaces, trajectory calculations, statistical reaction rate theories. Practical examples of large-scale chain mechanisms from combustion chemistry of several elements, etc. Letter grading.

252P. Plasma and Ionized Gases. (4) Lecture, four hours; outside study, eight hours. Requires: courses 82, 102, 150A, 182B. Neutral and charged particle motion, magnetohydrodynamics, two-fluid plasma treatments; ion and electron diffusion, gas diffusion, Child/Langmuir law, basic plasma devices, electron emission and work function, thermal distributions, vacuum and vacuum systems, space-charge, particle collisions and ionization, plasma discharges, sheaths, etc. Letter grading.

254A. Special Topics in Aerodynamics. (4) Lecture, four hours; outside study, eight hours. Enforced requisites: courses 82, 150A, 150B, 182B, 182C. Special topics of current interest in advanced aerodynamics. Examples include transonic flow, hypersonic flow, sonic booms, and unsteady aerodynamics. Letter grading.

254B. Special Topics in Aircraft Propulsion Systems. (4) Lecture, four hours; study, eight hours. Advanced study in various fields of solid mechanics on topics which may vary from term to term. Topics include dynamics, elasticity, plasticity, and stability of solids. Letter grading.

260. Current Topics in Mechanical Engineering. (2 to 4) Lecture, two to four hours; outside study, four to eight hours. Designed for graduate mechanical and aerospace engineering students. Lectures, discussions, and student presentations and projects in areas of current interest in mechanical engineering. May be repeated for credit. S/U grading.


261B. Finite Element Analysis for Solids and Structures. (4) Lecture, four hours; outside study, eight hours. Requires: course 156A or M256A, or consent of instructor. Strongly recommended requisites: courses M182B, M256B. Application of finite element method to classical and state-of-art modeling and design problems for solids and structures. Introduction of commercial mainstream finite element packages, ABAQUS—and how to use it in advanced way. Topics include review of finite element method, static and dynamic linear elasticity, finite deformation of hyperelastic materials, instability analysis, fracture, and model-based formulations of subroutines in ABAQUS. Term projects using computers. Letter grading.

262. Mechanics of Intelligent Material Systems. (4) Lecture, four hours; outside study, eight hours. Recommended requisites: courses M182A, M256B. Constitutive relations for electro-magneto-mechanical materials. Fiber-optic sensor technology. Micro/macron analysis, including classical lamination theory, shear lag theory, composite cylinder analysis, higher order models, and homogenization techniques as they apply to active materials. Active systems design, inch-worm, and biomorph. Letter grading.

263A. Kinematics of Robot Systems. (4) Lecture, four hours; discussion, two hours; outside study, six hours. Recommended requisites: courses 155, 171A. Kinematical models of serial robotic manipulators, including special descriptions (Euler angles, Denavit-Hartenberg/DH parameters, equivalent angle vector), frame assignment procedure, direct kinematics, inverse kinematics (geometric and algebraic approaches), mechanical design topics. Letter grading.

263B. Dynamics of Robot Systems. (4) Lecture, four hours; discussion, two hours; outside study, six hours. Enforced requisite: course 263A. Recommended: course 258A. Dynamics models of serial and parallel robotic manipulators, including review of spa-
283C. Control of Robotic Systems. (4) Lecture, four hours; discussion, two hours; outside study, six hours. Enforced requisite: course 263B. Sensors and actuators, feedback control, and control schemes for robotic systems, including computed torque control, linear feedback control, impedance control, and advanced control topics from nonlinear and adaptive control, hybrid control, nonholonomic systems, vision-based control, and perception. Letter grading.

283D. Advanced Topics in Robotics and Control. (4) Lecture, four hours; outside study, eight hours. Enforced requisite: course 283C. Current and advanced topics in robotics and control, including kinematics, dynamics, control, mechanical design, advanced sensors and actuators, flexible links, manipulability, redundant manipulators, human-robot interaction, teleoperation, haptics. Letter grading.


M269D. Aeroelastic Effects in Structures. (4) Lecture, four hours; outside study, eight hours. Requisite: course M269A. Presentation of field of aeroelasticity from unified viewpoint applicable to flight structures, suspension bridges, buildings, and other structures. Derivation of aeroelastic operators and unsteady airloads from governing variational principles. Flow-induced instability and response of structural systems. Letter grading.

M270A. Linear Dynamic Systems. (4) (Same as Chemical Engineering M252A) Lecture, four hours; laboratory, two hours; outside study, eight hours. Requisite: course M269A. Presentation of field of aeroelasticity from unified viewpoint applicable to flight structures, suspension bridges, buildings, and other structures. Derivation of aeroelastic operators and unsteady airloads from governing variational principles. Flow-induced instability and response of structural systems. Letter grading.


M270C. Optimal Control. (4) (Same as Chemical Engineering M280C and Electrical and Computer Engineering M240C.) Lecture, four hours; outside study, eight hours. Requisite: course 270B. Applications of variational methods, Pontryagin maximum principle, Hamilton/Jacob/Bellman equation (dynamic programming) to optimal control of dynamic systems modeled by nonlinear ordinary differential equations. Letter grading.

C271A. Probability and Stochastic Processes in Dynamical Systems. (4) Lecture, four hours; outside study, eight hours. Enforced requisites: courses 82, 107. Probability spaces, random variables, stochastic processes and sequences, expectation, conditional expectation, minimum mean variance estimator (Kalman filter) with applications. Concurrently scheduled with course C175A. Letter grading.

C271B. Stochastic Estimation. (4) Lecture, four hours; outside study, eight hours. Enforced requisite: course C271A. Linear and nonlinear estimation theory, orthogonal projection lemma, Bayesian filtering theory, conditional mean and risk estimators. Letter grading.


C271D. Seminar: Special Topics in Dynamic Systems Control. (4) Seminar, four hours; outside study, eight hours. Seminar on current research topics in dynamic systems modeling, control, and applications. Topics selected from process control, nonlinear systems, adaptive filtering, industrial and aerospace structures, and robotics. Letter grading.


C275A. System Identification. (4) Lecture, four hours; outside study, eight hours. Requisite: course 171A, M270A. Graduate-level introduction to analysis and design of multivariable control systems. Multivariable loop-shaping, performance requirements, model uncertainty representations, and robustness covered in detail from frequency domain perspective. Structured singular value and its application to controller synthesis. Letter grading.

C275B. State Model Identification. (4) Lecture, four hours; outside study, eight hours. Requisite: course 171A, M270A. Graduate-level introduction to analysis and design of multivariable control systems. Multivariable loop-shaping, performance requirements, model uncertainty representations, and robustness covered in detail from frequency domain perspective. Structured singular value and its application to controller synthesis. Letter grading.


C277. Advanced Digital Control for Mechatronic Systems. (4) Lecture, four hours; laboratory, two hours; outside study, six hours. Requisites: courses 171B, M270A. Digital signal processing and control analysis of mechatronic systems. State-space and multivariable feedback control. Digital control algorithms and robustness properties, Youla parameterization of stabilizing controllers, prewielded optimal feedback compensator, repetitive control, and output-feedback control. Real-time control investigation of topics to selected mechatronic systems. Letter grading.

C279. Dynamics and Control of Biological Oscillations. (4) Lecture, four hours; outside study, eight hours. Requisites: courses 107, M270A. Analysis and design of dynamical mechanisms underlying biological control systems that generate coordinated oscillations. Topics include modeling, analysis, and control of periodic processes through action potentials (spike train), central pattern generator, coupled nonlinear oscillators, optimal gait (periodic motion) for animal locomotion, and entrainment to natural oscillations via feedback control. Letter grading.

M280B. Microelectromechanical Systems (MEMS) Fabrication. (4) (Same as Bioengineering M250B and Electrical and Computer Engineering C286.) Lecture, three hours; discussion, one hour; outside study, eight hours. Enforced requisite: course M183B. Strong discussion of micromachining processes used to construct MEMS. Coverage of many lithographic, deposition, and etching processes, as well as their combination in process integration. Materials issues such as chemical resistance, corrosion, mechanical properties, and thermal/inntrinsic stress. Letter grading.

C281. Microprocessors. (4) Lecture, four hours; outside study, eight hours. Requisites: courses 102, 103, 105D. Fundamental issues of being in microscopic world and mechanical engineering of microscale devices. Topics include scaling, superhydrophobic surfaces and applications, and electrowetting and applications. Letter grading.

M282. Microelectromechanical Systems (MEMS) Device Physics and Design. (4) (Same as Bioengineering M252 and Electrical and Computer Engineering M252.) Lecture, four hours; discussion, one hour; outside study, seven hours. Introduction to MEMS design. Design methods, design rules, sensing and actuation mechanisms, microsensors, and microactuators. Designing MEMS to be produced with both foundry and nonfoundry processes. Computer-aided design for MEMS. Design project required. Letter grading.


C285. Interfacial Phenomena. (4) Lecture, four hours; outside study, eight hours. Enforced requisites: courses 82, 103, 105A, 105D. Introduction to fundamental physical phenomena occurring at interfaces and application of their knowledge to engineering problems. Fundamental concepts of interfacial thermodynamics, including surface tension, surfactants, interfacial thermodynamics, interfacial forces, interfacial hydrodynamics, and dynamics of triple line. Presentation of various approaches (including wetting and dewetting, boiling, condensation), forms and emulsions, microelectromechanical systems, and biological systems. Letter grading.


M287. Nanoscience and Technology. (4) (Same as Electrical and Computer Engineering M242A) Lecture, four hours; outside study, eight hours. Introduction to fundamentals of nanoscale science and technology. Basic physical principles, quantum mechanics, chem-
M297B. Material Processing in Manufacturing. (4) (Same as Materials Science M297B.) Lecture, four hours; outside study, eight hours. Enforced requisite: course 183A. Thermodynamics, principles of material processing, current intellectual imperatives, and transitions to transport mechanisms of heat and mass, nucleation and growth of microstructure. Applications in casting/solidification, forming, powder technology, chemical vapor deposition, infiltration, composites. Letter grading.

M297C. Composites Manufacturing. (4) (Same as Materials Science M297C.) Lecture, four hours; outside study, eight hours. Requisites: course 166C, Materials Science 151, Matrix materials, fibers, fiber pre-forms, elements of processing, autoclave/compression molding, filament winding, pultrusion, resin transfer molding, automation, material removal and assembly, metal and ceramic matrix composites, quality assurance. Letter grading.

298. Seminar: Engineering. (2 to 4) Seminar, to be arranged. Limited to graduate mechanical and aerospace engineering students. Presentations of research topics by leading academic researchers from fields of systems, dynamics, and control. Students who work in these fields present their papers and results. S/U grading.

299A. Seminar: Systems, Dynamics, and Control Topics. (2) (Same as Chemical Engineering M297 and Electrical and Computer Engineering M248S.) Seminar, two hours; outside study, six hours. Limited to graduate engineering students. Presentations of research topics by leading academic researchers from fields of systems, dynamics, and control. Students who work in these fields present their papers and results. S/U grading.

375. Teaching Apprentice Practicum. (1 to 4) Seminar, to be arranged. Preparation: apprentice personnel employment as teaching assistant, associate, or fellow. Teaching apprenticeship under active guidance and supervision of regular faculty member responsible for curriculum and instruction at UCLA. May be repeated for credit. S/U grading.

495. Teaching Assistant Training Seminar. (2) Seminar, to be arranged. Limited to graduate mechanical and aerospace engineering students. Presentations of research or other scholarly work), three hours supervised research or other scholarly work), three hours. Preparation: request enrollment may be obtained from advisor. S/U grading.

599. Research for and Preparation of PhD Dissertation. (2 to 16) Tutorial, to be arranged. Limited to graduate mechanical and aerospace engineering students. Usually taken after students have been advanced to candidacy. S/U grading.
Upper-Division Courses

M160A. Health Outreach and Education for At-Risk Populations. (4) (Same as Public Health M160A.) Lecture, four hours; possible field observations. First in a series of courses exploring prevention of disease in at-risk populations, clinical services and referrals for disadvantaged, and effects of low socioeconomic status on academic achievement, career, and family. Lectures by faculty and practitioners, with field visits. P/NP or letter grading.

M160B. Health Outreach and Education for At-Risk Populations. (4) (Same as Public Health M160B.) Lecture, two hours; discussion, two hours. Requisite: course M160A. Second in series of courses to explore prevention of disease in at-risk populations, clinical services and referrals for disadvantaged, and effects of low socioeconomic status on academic achievement, career, and family. Lectures by faculty and practitioners, with field visits. P/NP or letter grading.

160C. Health Outreach and Education to At-Risk Populations. (4) (Same as Public Health M160C.) Lecture, five hours; fieldwork, six to eight hours. Requisites: courses M160A, M160B. Processes involved with designing, delivering, and assessing community health education programs, under supervision of professional staff. P/NP or letter grading.

180. Special Topics in Medicine. (4) Lecture, four hours; discussion, one hour. Medical topics of special interest to undergraduate students. Specific subjects may vary each term depending on particular interest of instructors and students. Topics may include East-West medicine and global medicine. May be repeated for credit with topic or instructor change. P/NP or letter grading.

185. Integrative East-West Medicine for Health and Wellness. (4) Lecture, five hours. Introduction to integrative health care and wellness, particularly therapeutic approaches originating from traditional Chinese medicine. Study of theoretical underpinnings of integrative medicine and traditional Chinese medicine, management of personal well-being through experiential learning of various therapeutic modalities, and evidence-based research and clinical applications of integrative medicine. Topics include integrative East-West medicine and its role in prevention and health cultivation. Lecture, discussion, and potential self-help techniques, including nutrition and exercise, sleep, stress management, herbal therapies, and complementary medical practices.

Graduate Courses


M256. Interdisciplinary Response to Infectious Disease Emergencies: Medicine Perspective. (4) (Same as Community Health Sciences M256, Nursing M258, and Oral Biology M256.) Lecture, three hours; discussion, one hour. Designed to instill in professional trainees the ability to synthesize emergent health problems and coordinated response, with specific attention to bioterrorism. Examination of tools to help prevent, detect, and intervene in infectious disease emergencies. Interdisciplinary sessions led by faculty members of Schools of Medicine, Nursing, and Public Health during weeks two through five. Letter grading.

M250A-M260B. Methodology in Clinical Research I, II. (4) (Same as Biostatistics M250A-M250B and M260A-M260B.) Lecture, four hours. Recommended preparation: MD, PhD, or dental degree. Requisites: Biostatistics M170A, 265A. Course M260A is requisite to M260B. Preparation in principles and practices of major disciplines underlying clinical research methodology, such as biostatistics, epidemiology, pharmacokinetics. S/U or letter grading.

M260C. Methodology in Clinical Research III. (4) (Same as Biostatistics M260C.) Discussion, four hours. Recommended preparation: MD, PhD, or dental degree. Presentation of principles and practices of major disciplines underlying clinical research methodology, such as biostatistics, epidemiology, pharmacokinetics. S/U or letter grading.

M261. Responsible Conduct of Research Involving Humans. (2) (Same as Biostatistics M261.) Lectures, discussion; two hours. Preparation: completion of one basic course in protection of human research subjects through Collaborative Institutional Training Initiative. Discussion of current issues in responsible conduct of clinical research, including reporting of research, basis for authorship, issues in genetic research, principles and practice of research on humans, conflicts of interest, Institutional Review Board (IRB), and related topics. S/U or letter grading.

M263. Clinical Pharmacology. (2) (Same as Biostatistics M263 and Psychiatry M263.) Lecture, two hours. Preparation: completion of professional health sciences degree (MD, DDS, DNP, or PhD). Overview of principles of clinical pharmacology, essentially as they relate to clinical and translational medicine and to advances in contemporary medicine such as targeted, gene therapy, and genomics. Letter grading.

M270C. Advanced Modeling Methodology for Dynamic Biomedical Systems. (4) (Same as Bioengineering M270C and Computer Science M270C.) Lecture, four hours; outside study, eight hours. Recommended: Electrical Engineering M142 or M245B, M245C, M245D and Mechanical Engineering M115A or Mechanical and Aerospace Engineering 171A. Development of dynamic systems modeling methodology for physiological, biomedical, pharmacological, chemical, and related systems. Control system, multicomponental, noncompartmental, and input/output models, linear and nonlinear. Emphasis on model applications, limitations, and relevance in biomedical sciences and other limited data environments. Problem solving in PC laboratory. Letter grading.

M270D. Optimal Parameter Estimation and Experimental Design for Biomedical Systems. (4) (Same as Bioengineering M270D and Computer Science M270D.) Lecture, four hours; outside study, eight hours. Requisite: course M270C or Bioengineering CM270C or CM296. Estimation methodology and model parameter estimation algorithms for fitting dynamic system models to biomedical data. Model discrimination methods. Theory and algorithms for designing optimal experiments for developing and quantifying models, with special focus on optimal sampling schedule design for kinetic models. Exploration of PC software for model building and optimal experimental design via applications in physiology and pharmacology. Letter grading.


Microbiology, Immunology, and Molecular Genetics / 583

Jeffery F. Miller, PhD (Fred Kavli Professor of Nanosystems Sciences)
Robert L. Modlin, MD
Manuel L. Penichet, MD, PhD
Stephen T. Smale, PhD
Maureen A. Su, MD
Owen N. Witte, MD (President, President of Developmental Immunology, University Professor)
Otto O. Yang, MD
Jerome H. Zack, PhD
Zhong Hong Zhou, PhD

Professors Emeriti
Arnold J. Berk, MD (President, President of Molecular Cell Biology)
Benjamin Bonavida, PhD
Frederick A. Eiserling, PhD
Lawrence T. Feldman, PhD
C. Fred Fox, PhD
Robert P. Ginsalus, PhD
Rafael J. Martinez, PhD
James N. Miller, PhD
Jeffrey H. Miller, PhD
Sherie L. Morrison, PhD
Debi P. Nayak, BVSc, PhD
Dan S. Ray, PhD
Larry Simpson, PhD
Ronald H. Stevens, PhD
Fuyuhiko Tamanoi, PhD
Otto O. Yang, MD
Christel H. Uittenbogaart, MD
F. Regis, PhD
Oliver I. Fregoso, PhD
Imke Schroeder, PhD
April D. Pyle, PhD
Larry Simpson, PhD
Debi P. Nayak, BVSc, PhD
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Dan S. Ray, PhD
Larry Simpson, PhD
Oliver I. Fregoso, PhD
Imke Schroeder, PhD
April D. Pyle, PhD

Plan I—Research Immersion Laboratory
Required: Ten courses as follows: (1) Five foundation courses: Chemistry and Biochemistry 134A, 153B or Microbiology, Immunology, and Molecular Genetics 132, Life Sciences 107, Microbiology, Immunology, and Molecular Genetics 101, C185A, (2) two courses from one of the following groups: (a) Microbiology, Immunology, and Molecular Genetics 103AL and 103BL or (b) 109AL and 109BL, (3) two focus elective courses selected from Chemistry and Biochemistry 133L, Microbiology, Immunology, and Molecular Genetics 102, 105, 106, 107, 132, CM156, 158, 169, CM256, Molecular, Cell, and Developmental Biology 138, 165A, and (4) one general elective course selected from any course under item 3 above, Biomedical Engineering 100, CM145, CM178, Biostatistics 100A, Chemistry and Biochemistry 103, 110A, M117, 130A, 153B, 135C, 153L, 154, 156, CM160A, 171, 172, C181, Computer Science CM122, CM122, CM124, Ecology and Evolutionary Biology 121, 125, 137, 162, Epidemiology 100, Human Genetics C144, Microbiology, Immunology, and Molecular Genetics C122, 174, 185B, 189H, 198C, 199 (may be taken once), Molecular, Cell, and Developmental Biology 100, 104AL, 138, M140, C141, 143, 144, C150, 165A, 168, 172, M175A, M175B, M175C, 187AL, Neuroscience M101A, M101B, M101C, Physiological Science 121, 124, 125, 128, Statistics 100A, 100B.

Preparation for the Major
Life Sciences Core Curriculum
Required: Chemistry and Biochemistry 14A, 14B, 14BL, 14C, and 14D, or 20A, 20B, 20L, 30A, 30AL, and 30B; Life Sciences 30A, 30B, and 40 or Statistics 13, or Mathematics 3A, 3B, 3C, 3D, and Statistics 13, or 3A, 3B, 32A, 32B, and Statistics 13; Physics 1A, 1B, 1C, 4AL, and 4BL, or 5A, 5B, and 5C.

Students must also complete one of two life sciences sequences—or either Life Sciences 1, 2, 3, 4, and 23L, or 7A, 7B, 7C, and 23L. They may not substitute courses in either sequence. Each core curriculum course must be passed with a grade of C– or better, and all courses must be completed with an overall grade-point average of 2.0 or better. Students receiving a grade of D or lower in two core curriculum courses, either in separate courses or repetitions of the same course, are subject to dismissal from the major.

Transfer Students
Transfer applicants to the Microbiology, Immunology, and Molecular Genetics major with 90 or more units must complete the following introductory courses prior to admission to UCLA: one year of general biology with laboratory for majors, preferably equivalent to Life Sciences 1 or 2, or 7A, 7B, and 7C; one year of calculus, one year of general chemistry with laboratory for majors, and one semester of organic chemistry with laboratory. A second semester of organic chemistry or one year of calculus-based physics is strongly recommended but not required for admission.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission. Students intending to major in Microbiology, Immunology, and Molecular Genetics may seek counseling and petition to enter the Student Affairs Office, 16028 Molecular Sciences.

The Major
Two plans are offered by the department.

Plan II—Advanced Independent Research
Required: Twelve courses as follows: (1) five foundation courses: Chemistry and Biochemistry 134A, 153B or Microbiology, Immunology, and Molecular Genetics 132, Life Sciences 107, Microbiology, Immunology, and Molecular Genetics 101, C185A, (2) two focus elective courses selected from Chemistry and Biochemistry 133L, Microbiology, Immunology, and Molecular Genetics 102, 105, 106, 107, 132, CM156, 158, 169, CM256, Molecular, Cell, and Developmental Biology 138, 165A, and (4) one general elective course selected from any course under item 3 above, Biomedical Engineering 100, CM145, CM178, Biostatistics 100A, Chemistry and Biochemistry 103, 110A, M117, 130A, 153B, 135C, 153L, 154, 156, CM160A, 171, 172, C181, Computer Science CM122, CM122, CM124, Ecology and Evolutionary Biology 121, 125, 137, 162, Epidemiology 100, Human Genetics C144, Microbiology, Immunology, and Molecular Genetics C122, 174, 185B, 189H, 198C, 199 (may be taken once), Molecular, Cell, and Developmental Biology 100, 104AL, 138, M140, C141, 143, 144, C150, 165A, 168, 172, M175A, M175B, M175C, 187AL, Neuroscience M101A, M101B, M101C, Physiological Science 121, 124, 125, 128, Statistics 100A, 100B.

No more than 4 units of course 199 or a combination of 198C and 199 may be applied toward the general electives under Plan I.
Microbiology, Immunology, and Molecular Genetics

Lower-Division Courses


6. Microbiology for Nonmajors. (4) Lecture, four hours. Not open for credit to students with credit for course 101. Designed for nonscience students; introduction to biology of microorganisms (bacteria, viruses, protoplasts, algae, fungi), their significance as model systems for understanding fundamental cellular processes, and their role in human affairs. P/NP or letter grading.

10. Medical Microbiology for Nursing Students. (4) Lecture, three hours; discussion, one hour. Requisites: Life Sciences 30A or 30B or Mathematics 3A or 31A. Limited to Nursing majors. Introduction to biology of microbial pathogens, their role in development of human immune response, and presentation of symptoms and disease caused by microbial infections. Letter grading.

15. Nanoscale Microscopy Laboratory. Lecture, 26 hours; laboratory, nine hours. Recommended requisites: high school biology, chemistry, and physics. Designed as one-week summer course for high school students. Exploratory introduction to three key microscopy techniques for nanoscale research: fluorescence microscopy, scanning probe microscopy, and electron microscopy. Nanoscale is umbrella term that encompasses one diverse interdisciplinary branch of modern science research, including molecular sciences, biotechnology, material science, chemistry, biochemistry, and various fields of engineering. Offered in summer only. P/NP grading.

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

89. Honors Seminars. (1) Seminar, three hours. Limited to students who have completed a lower-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

89HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed to allow transfer of credit to lower-division lecture course. Involves discussion with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Contract and honors contract required. Honors content noted on transcript. Letter grading.

99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contracts required. Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Courses

100L. Microbiology Laboratory for Professional Schools. (3) Lecture, two hours; laboratory, four hours. Requisites: Life Sciences 3 and 4, or 7A, 7B, and 23L with grades of C– or better. Recommended prerequisite: course 101. Limited to nonmajors. Experimental techniques of microbiology with emphasis on cultivation and characterization of bacteria. Laboratory exercises include light microscopy, quantitative techniques, and identification methods. Students learn to work effectively in groups to perform experiments, record observations, and analyze results. Letter grading.

101. Introductory Microbiology. (4) Lecture, three hours; discussion, one hour. Requisites: Life Sciences 3 and 4, or 7A, 7B, and 23L. Historical foundations of microbiology; introduction to bacterial structure, physiology, biochemistry, genetics, and ecology. Letter grading.

102. Introductory Virology. (4) Lecture, three hours; discussion, one hour. Requisites: course 101, Life Sciences 3, or 7A, 7B, and 23L. Credit is given for course 101 or 102. Limited to majors in Microbiology, Immunology, and Molecular Genetics and Molecular, Cell, and Developmental Biology majors. Research-oriented laboratory experience designed to promote discovery of new bacterial viruses (phages). Working in teams, students conduct research projects that incorporate techniques in microbiology, virology, and molecular biology and involve use of bioinformatics tools and computational analysis software in reading and understanding scientific literature as well as improving critical thinking skills such as ability to evaluate hypotheses or experimentally address scientific questions. Critical aspects of research process, including record keeping, ethics, laboratory safety and citizenship, mechanics of scientific writing, and project responsibilities and ownership. Letter grading.

103AL. Research Immersion Laboratory in Virology. (5) Lecture, two and one half hours; laboratory, eight hours. Requisites: course 101, Life Sciences 3, 4, and 23L, or 7A, 7B, and 23L. Course 103AL is required to complete major coursework in Microbiology, Immunology, and Molecular Genetics and Molecular, Cell, and Developmental Biology majors. Research-oriented laboratory experience designed to promote discovery of new bacterial viruses (phages). Working in teams, students conduct research projects that incorporate techniques in microbiology, virology, and molecular biology and involve use of bioinformatics tools and computational analysis software in reading and understanding scientific literature as well as improving critical thinking skills such as ability to evaluate hypotheses or experimentally address scientific questions. Critical aspects of research process, including record keeping, ethics, laboratory safety and citizenship, mechanics of scientific writing, and project responsibilities and ownership. Letter grading.

Graduate Study

Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Division website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Graduate Degrees

The Department of Microbiology, Immunology, and Molecular Genetics offers Master of Science (M.S) and Doctor of Philosophy (Ph.D) degrees in Microbiology, Immunology, and Molecular Genetics. Applicants interested in studying with faculty in the department are encouraged to apply to an appropriate home area in Graduate Programs in Bioscience.

Honors Program

Overall grade-point averages of 3.2 and 3.5 in the preparation for the major and major respectively are required to apply for departmental honors. In addition students must have junior standing and the sponsorship of a faculty adviser from the department. The core of the program consists of Microbiology, Immunology, and Molecular Genetics 198A, 198B, and 198C research, culminating in a thesis. If the thesis is accepted by the honors committee and students complete all major requirements with a GPA of at least 3.5, they are awarded the bachelor’s degree with departmental honors. The department also offers an honors seminar course each winter quarter that is required for the honors program. For more information, contact the Student Affairs Office, 16028 Molecular Sciences.

CM156, 158, 168, CM256, Molecular, Cell, and Developmental Biology 138, 165A, and (5) one general elective course selected from any course under item 3 above, Bioengineering 100, CM145, CM178, Biostatistics 100A, Chemistry and Biochemistry 103, 110A, M176, 134, 134B, 135C, 156, CM160A, 171, 173, 178, Computer Science CM121, CM122, CM124, Ecology and Evolutionary Biology 121, C135, 137, 162, Epidemiology 100, Human Genetics CI44, Microbiology, Immunology, and Molecular Genetics 103AL, 103BL, 109AL, 109BL, C122, 174, CI5SB, 191H, 198C, 199, Molecular, Cell, and Developmental Biology 100, 104AL, 138, M140, CI41, 143, 144, CI50, 165A, 168, 172, M175A, M175B, M175C, 187AL, Neuroscience M101A, M101B, M101C, Physiological Science 121, 124, 125, 128, Statistics 100A, 100B. No more than 4 units of course 198C or 199 may be applied toward the general electives under Plan II.

Plan II requires submission and approval of an admissions application. Detailed information may be obtained at the Student Affairs Office, 16028 Molecular Sciences.

Each major course must be taken for a letter grade of C– or better, and students must have a minimum overall grade-point average of 2.0 or better in the major. Students receiving a grade of D or below in any major course are required to apply for departmental honors. In addition, students must have junior standing and the sponsorship of a faculty adviser from the department. The core of the program consists of Microbiology, Immunology, and Molecular Genetics 198A, 198B, and 198C research, culminating in a thesis. If the thesis is accepted by the honors committee and students complete all major requirements with a GPA of at least 3.5, they are awarded the bachelor’s degree with departmental honors. The department also offers an honors seminar course each winter quarter that is required for the honors program. For more information, contact the Student Affairs Office, 16028 Molecular Sciences.

Graduate Study

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Graduate Degrees

The Department of Microbiology, Immunology, and Molecular Genetics offers Master of Science (M.S) and Doctor of Philosophy (Ph.D) degrees in Microbiology, Immunology, and Molecular Genetics. Applicants interested in studying with faculty in the department are encouraged to apply to an appropriate home area in Graduate Programs in Bioscience.
CM156, Human Genetics and Genomics, (5) (Same as Molecular, Cell, and Developmental Biology CM156.) Lecture, three hours; discussion, one hour. Requisites: Life Sciences 3, 4, and 23L, or 7A, 7B, and 23L. Course 109AL is enforced requisite to 109BL. Limited to Microbiology, Immunology, and Molecular Genetics majors and majors in Molecular, Cell, and Developmental Biology majors. Research-oriented laboratory experience designed to promote discovery of novel microorganisms. Working in teams or biomedical individual studies courses, students will learn corporate techniques in microbiology and molecular biology and involve use of bioinformatics tools and phyllogenetics software for data analysis. Emphasis on reading and understanding scientific literatures as well as improving critical thinking skills such as ability to create and evaluate hypotheses or experimentally address scientific questions. Critical aspects of research process, including record keeping, ethics, laboratory safety and citizenry, mechanics of scientific writing, and project responsibilities and ownership. Letter grading.

109AL, Advanced Research Analysis in Microbiology, (4) Laboratory, six hours. Requisites: course 109AL, Life Sciences 40 or Statistics 13. Limited to Microbiology, Immunology, and Molecular Genetics premajors and majors. Exclusively designed to provide students with authentic, discovery-based research experience in life sciences. Investigation to be primarily computational in nature whereby students use bioinformatics or mathematics software to interpret, explore, or refine datasets. Use of graphics software to prepare figures and illustrations for presentations, posters, reports, and websites (database entries). Research accomplishment in weekly seminar or research meetings in which student groups create PowerPoint slides and formally present results to class. Production of team poster and final report describing entire research project; letter grading.

C122, Mouse Molecular Genetics, (2) Seminar, two hours. Requisites: Life Sciences 4, or 7A, 7B, and 7C. Designed for students doing research with mice. During past 25 years, molecular revolution has greatly increased our knowledge of mouse genetics, today mouse is primary experimental model in virtually all fields of biology and biomedicine. Seminar forum for in-depth discussion of tools and technologies of mouse genetics and their application to functional genomics, complex traits, stem cell biology, development biology, epigenetics, and genetic dissection of diseases. Concurrently scheduled with course C222. P/NP grading.

123. Advanced Annotation and Comparative Genomics, (4) Lecture, two and one half hours; computer laboratory, six hours. Requisite: course 103AL or Molecular, Cell, and Developmental Biology 187AL with grade of B– or better. Participation in bioinformatics-based research experience, working as research team to analyze microbial genomes using bioinformatics techniques involving variety of online databases. Investigation of cellular pathways and structures as means to discover novel genes and unusual variations in classical systems. Results of high-quality annotation efforts may lead to publication in peer-reviewed science journal. Part of DOE Joint Genome Institute Undergraduate Research in Microbial Genome Annotation education program. Offered in summer only. Letter grading.

C134. Ethics and Accountability in Biomedical Research, (2) Seminar, two hours. Designed for graduate students and undergraduates who have credit for life sciences or biomedical individual studies 199 course. Responsibilities and ethical conduct of investigators in research, data management, mentorship, grant applications, and publications. Responsibilities to peers, sponsoring institutions, and society. Conflicts of interest, disclosure, animal subject welfare, human subject protection, and areas in which investigational goals and certain societal values may conflict. Concurrently scheduled with course C234. P/NP grading.

CM156, Human Genetics and Genomics, (5) (Same as Molecular, Cell, and Developmental Biology CM156.) Lecture, three hours; discussion, one hour. Requisites: Life Sciences 3, 4, and 23L, or 7A, 7B, and 7C. Application of genetic principles in human populations with emphasis on genetics of family studies, potential cloning, Mendelian and common diseases, cancer genetics, animal models, cytogenetics, pharmacogenetics, population genetics, and genetic counsel- ling. Focus on current questions in fields of medical and human genetics and methodologies appropriate to answer such questions. Concurrently scheduled with course CM156. Letter grading.

158. Microbial Genomics, (4) Lecture, three hours; discussion, one hour. Requisite: course 101, Chemistry 153A. Evolution, biodiversity, and sequencing of genomes; bacterial and viral genomes; bioenergetics; gene knockouts; genomics of antibiotic resistance; proteomics. Guest lecturers from department and related departments who discuss key papers with focus on topics of area. Letter grading.

168. Molecular Parasitology, (4) Lecture, three hours; discussion, one hour. Requisites: Life Sciences 3 and 4, or 7A, 7B, and 23L. Survey of parasitic protozoa not only as parasites that interact with host, but also as model systems for basic biological phenomena such as gene regulation, molecular development, cell-cell interactions, molecular evolution, and novel biochemical pathways. Letter grading.

174, Advanced Topics in Molecular Parasitology, (2) Seminar, two hours. Concurrent with course 188, Life Sciences 3 and 4 or 7A, 7B, and 23L. Examination of recent advances in molecular biology of parasites and host-parasite relationship. Specific topics include parasite development and invasion in the host, proteomics, RNA editing, prospects for parasitic vaccines. Letter grading.

180A. Scientific Analysis and Communication I, (2) Seminar, two hours. Enforced corequisite: course 180A or 189A. Seminar-style discussion of scientific articles and give presentations, introducing research topics using relevant primary literature. Critical aspects of research process, including record keeping, ethics, laboratory safety and citizenry, mechanics of scientific writing, diverse approaches to research, and project responsibilities and ownership. Acquisition of in-depth and broad knowledge about student research projects and written communication skills, and full appreciation of process of doing good science and becoming skilled researchers. Letter grading.

180B. Scientific Analysis and Communication II, (2) Seminar, two hours. Enforced requisites: course 180A, and Life Sciences 40 or Statistics 13. Enforced corequisite: course 189B or 189B. Students give presentations similar to those in research symposium talk in which speakers discuss project goals, methodological approaches, results, and conclusions. How to write research papers as well as prepare and present scientific posters. Production of deliverables that demonstrate research achievements and creation of sense of pride for work accomplished as skilled researchers. Letter grading.

C185A, Immunology, (5) (Formerly numbered 185A.) Lecture, three hours; discussion, 90 minutes. Requisites: Chemistry 153A, Life Sciences 3, 4, and 23L, or 7A, 7B, 7C, and 23L. Not open for credit to students with credit for course 281. Comprehensive study of experimental immunobiology and immunomicroscopy; cellular and molecular aspects of humoral and cellular immune reactions. Concurrently scheduled with course C285B. Letter grading.

C185B, Advanced Immunology and Applications, (2) (Formerly numbered 185B.) Lecture, 90 minutes. Requisite: course C185A. Covers similarities and differences between host immune reactions to bacterial and viral infections as mediated by both specific and nonspecific immune responses. Discussion of various strategies to enhance our immune system against invasion by pathogens or cancer cells without triggering overwhelming immune disorders, including new cancer immunotherapies. Concurrently scheduled with C285B. Letter grading.

158A, Special Courses in Microbiology, Immunology, and Molecular Genetics, (4) Seminar, four hours. Requisites: Life Sciences 3 and 4, or 7A, 7B, and 23L. Departmentally sponsored experimental or temporary courses, such as those taught by visiting faculty members, who make repeated for credit with topic change. P/NP or letter grading.

188B, Special Courses in Microbiology, Immunology, and Molecular Genetics. (2) Seminar, two hours. Requisite: Life Sciences 3, or 7A, 7B, and 23L. Departmentally sponsored experimental or temporary courses, such as those taught by visiting faculty members. May be repeated for credit with topic change. P/NP or letter grading.

188SA, Individual Studies for USIE Facilitators. (1) Tutorial, to be arranged. Enforced corequisite: Honors Collegium 101E. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to discuss selected USIE seminar topic, conduct preparatory research, and begin preparation of syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.


188SC, Individual Studies for USIE Facilitators. (2) Tutorial, to be arranged. Enforced requisite: course 188SB. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor while facilitating U SIE course. Individual contract with faculty mentor required. May not be repeated. Letter grading.

199, Advanced Honors Seminars, (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

189HC, Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to upper-division lecture course. Individual study with lecture course instructor to explore topics of interest to students in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

191H, Honors Research Seminars: Microbiology, Immunology, and Molecular Genetics, (2) Seminar, two hours. Requisite or corequisite: course 190A or 190B. Limited to senior/microbiology, immunology, and molecular genetics honors program students. Discussion of current research literature, with focus on thesis topics/areas that students are working on as part of their requirements. One hour presentation of student thesis research and current literature associated with it. May be repeated for credit. Letter grading.

192. Undergraduate Practicum in Microbiology, Immunology, and Molecular Genetics, (2) Seminar, six hours. Limited to junior/senior departmental majors. Training and supervised practicum for advanced undergraduate students. Students assist in preparation of materials and development of innovative programs under guidance of faculty members in small course settings. Consult Student Affairs Office for further information. May not be applied toward course requirements for departmental majors. May be repeated for credit. P/NP or letter grading.

193A, Journal Club Seminars: Microbiology, Immunology, and Molecular Genetics, (1) Seminar, one hour. Limited to undergraduate students. Discussion of recent selected articles in microbiology, immunology, and molecular genetics. P/NP grading.
Graduate Courses

C222. Mouse Molecular Genetics. (2) Seminar, two hours. Requisites: Life Sciences 4, or 7A, 7B, and 7C. Designed for students doing research with mice. During past 25 years, molecular revolution has greatly increased power of mouse genetics, and today mouse is primary experimental model in virtually all fields of biology and biomedicine. Seminar forum for in-depth discussion of tools and technologies of molecular genetics and their application to functional genomics, complex traits, stem cell biology, developmental biology, epigenetics, and genetic dissection of diseases. Concurrently scheduled with course C122. S/U or Letter grading.

M229. Molecular Mechanisms of Host/Pathogen Interaction. (4) Same as Pathology M229.) Lecture, two hours; discussion, two hours. Enforced requisites: Molecular Biology 254A through 254D. Molecular mechanisms of molecular interactions with eukaryotic host cells that result in disease or pathogen survival. Topics include pathogenesis of common viruses, bacteria, fungi, and parasites, basis of toxin-mediated cellular damage, and immune suppression of microbial tissue damage. Letter grading.

C234. Ethics and Accountability in Biomedical Research. (2) Seminar, two hours. Designed for graduate students. Preparation: students must have credit for life sciences or biomedical individual studies 199 course. Responsibilities and ethical conduct of investigators in research, data management, mentorship, grant application, and professional responsibilities. Preparation: seminars, workshops, seminars, apprentice teaching, and peer observation. S/U grading.

298. Current Topics in Microbiology, Immunology, and Molecular Genetics. (1 to 4) Seminar, two hours. Requisites: Life Sciences 3, 4, and 23L, or 7A, 7B, and 23L, 3.0 premajor and/or major grade-point average, and at least one term of prior experience in same laboratory in which 198A is research to be conducted. Enforced requisite: course 198A. Course 196A is enforced requisite to 198B. Designed for undergraduate students who are interested in pursuing inquiry-based and hypothesis-driven research experiences in departmental faculty mentor. Guided research course to be conducted in conjunction with course 198A, followed by continuation research course 198B. Technical aspects vary depending on specific laboratory; however, all students learn how to apply scientific method; propose hypothesis, identify experiments to address hypothesis, perform experiments, and analyze results. How to record information and prepare laboratory notebooks and write research proposals. Letter grading.

196B. Research Apprenticeship II in Microbiology, Immunology, and Molecular Genetics. (4) Tutorial, 12 hours. Enforced requisite: course 196A. Enforced corequisite: course 180A. Expansion of scope, increasing depth, and implementation of independence in research to be performed in same laboratory as course 196A to facilitate learning and implementation of goals stated previously. Technical aspects vary depending on specific laboratory; however, all students use scientific method to discover something new. They teach. In odd weeks, a discussion of developments in teaching microbiology, including workshops, seminars, apprentice teaching, and peer observation. S/U grading.

197. Individual Studies in Microbiology, Immunology, and Molecular Genetics. (4-4) Tutorial, 12 hours. Course 198A is requisite to 198B, which is requisite to 198C. Limited to junior/senior microbiology, immunology, and molecular genetics honors program students. Directed individual research for departmental honors; students must have faculty sponsor. Progress report must be submitted to faculty sponsor at end of each of first two terms, with honors thesis submitted at end of final term. Maximum of 8 units may be applied toward major, with honors thesis counted toward BS degree requirements. Individual contract required. Letter grading.

198A-198B-198C. Honors Research in Microbiology, Immunology, and Molecular Genetics. (4-4-4) Tutorial, 12 hours. Enforced requisite: 198B, which is requisite to 198C. Limited to junior/senior microbiology, immunology, and molecular genetics honors program students. Directed individual research for departmental honors; students must have faculty sponsor. Progress report must be submitted to faculty sponsor at end of each of first two terms, with honors thesis submitted at end of final term. Maximum of 8 units may be applied toward major, with honors thesis counted toward BS degree requirements. Individual contract required. Letter grading.

199. Directed Research in Microbiology, Immunology, and Molecular Genetics. (4) Tutorial, 12 hours. Preparation: minimum 2.5 grade-point average in major and major. Supervised individual research project under guidance of departmental faculty mentor. Completing research must be filed with Student Affairs Office by end of term. May be repeated for credit. Individual contract required. Letter grading.

Military Science — Army ROTC

College of Letters and Science

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Military Science — Army ROTC
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Scope and Objectives

In accordance with the National Defense Act of 1920 and with the concurrence of the Regents of the University of California, a unit of the Army Senior Divi-
tion Reserve Officers’ Training Corps (ROTC) was established on the Los Angeles campus of in July 1920. Navy and Air Force units were established in 1938 and 1949 respectively.

This voluntary training in the Army ROTC program allows students to qualify for an officer’s commission in the Army while completing their college education. The ROTC curricula are not considered academic majors, but ROTC courses may be taken as free electives and applied toward the total course requirements of a major. For students contracted in the Military Science Department, 26 units of military science credit may be applied toward the requirements for the bachelor’s degree. The ROTC program is also available through UCLA Extension.

All three ROTC departments offer voluntary four- and three-year programs for freshmen and sophomores. The Army and Navy/Marine Corps also offer a two-year program for current and transfer students. All have leadership laboratories that teach leadership and management skills.

All commissions are reserve commissions. Active duty obligation following commissioning varies depending on branch of service and designated career field or occupational specialty. The Army offers both active- and reserve-duty opportunities directly after commissioning.

Scholarships

ROTC scholarships are awarded on a competitive basis to U.S. citizens regardless of parents’ income. Scholarships cover full tuition or housing (on or off campus) up to $10,000, a $1,200 allowance for books and fees, and a tax-free monetary allowance of $420 per month during the academic year. Applications for four-year scholarships may be obtained online. Completed four-year applications should be submitted by January 10 of the year preceding college matriculation. Two- and three-year scholarship applications may be obtained from the Military Science Department by e-mail or by calling 310-825-7381, and are considered when received.

Army ROTC Program

Army ROTC is a program that enables students to become officers in the U.S. Army, Army Reserves, or Army National Guard while earning a college degree. The curriculum supplements students’ academic majors by offering elective courses ranging from leadership and management to military law. Courses are augmented with leadership laboratories that stress practical skills such as first aid, land navigation, survival techniques, rappelling, military tactics, and scenario-driven leadership reaction courses. Non-ROTC students may enroll in many of the military science courses without enrolling in the ROTC program.

Additionally, students who decide to become Army officers can receive summer training in military parachuting (Airborne School at Fort Benning, GA), helicopter operations that include rappelling from a hovering helicopter (Air Assault School in Hawaii), and mountaineering operations (Northern Warfare School in Alaska).

Scholarships are available for two, three, and four years of academic study and are awarded on a competitive basis. Army scholarships pay for full tuition and mandatory fees or housing, up to $10,000, and provide a stipend of $4,200 per year and a $1,200 book allowance. Nonscholarship, contracted ROTC cadets also receive the stipend of $4,200 per year. Students in the program also compete for over $50,000 in merit-based scholarships provided annually by various private organizations that support the Army ROTC program. Additionally, students may work part-time as officer trainees in local Army Reserves or National Guard units through the simultaneous membership program (SMP). Contracted students can fly free on military aircraft within the continental U.S. on a space-available basis.

Students may select a branch of the Army in which to be commissioned from 16 specialty fields, including military intelligence, aviation, signal communications, finance, logistics, nursing, and engineering. Prior to completion of the ROTC program, students may request to go on active duty or serve part-time in the Army Reserves or National Guard.

Undergraduate Study

Students aspiring to become Army officers follow prescribed course sequences with the Military Science Department and a physical fitness program. Generally, the courses consist of one 2- to 4-unit course per term and physical fitness sessions one to three times per week, depending on the participation-level requirements.

The military science curriculum is divided into two parts: (1) the Basic Course, two years of lower-division study during which students must complete six military science courses and (2) the Advanced Course, two years of upper-division study consisting of six military science courses, one military history course, and a five-week summer camp.

Army ROTC students must satisfy the military history requirement by completing Military Science 110 or another history course approved by the chair. Transfer students and others who were unable to enroll in the Basic Course can receive equivalent credit in several different ways (see Two-Year Program below).

Admission to the Advanced Course is limited to selected students who meet all academic and physical requirements. Students in this course receive a subsistence allowance of $420 per month for 10 months during each of the two academic years, plus military science uniforms. After completion of the Advanced Course and graduation, students have the opportunity to be commissioned as second lieutenants in one of the Army’s 16 specialty areas in either the Army National Guard, Reserves, or Active Army. Students’ preferences are a major factor in determining which specialty is awarded.

Students selected for Advanced ROTC must attend a five-week leadership development and assessment course between their Military Science III and IV years. Cadets receive an allowance for travel expenses and are paid for attendance.

To earn the active duty obligation for those students selected to enter the Reserves or National Guard is for initial training, and only for a period of several months. The active duty obligation for those students commissioned into the Active Army is three years. Students who accept ROTC scholarships and enter the Active Army serve one additional year. ROTC students wishing to obtain certain advanced degrees may be granted a delay in reporting to their initial assignment.

Four-Year Program

Students are enrolled in the Basic Course (freshman and sophomore years) on a voluntary basis. After completion of the Basic Course and before entrance into the Advanced Course (junior and senior years), students are required to execute a contract with the Department of the Army agreeing to complete the Advanced Course and accept a commission if offered.

Two-Year Program

The two-year program is designed for students who receive placement credit for two years of ROTC and directly enter the Advanced Course. Placement credit may be given for completing three years of high school. Junior ROTC, attending a paid ROTC Leader’s Training Course, membership in the Army Reserves or National Guard, completing two years of college-level Air Force or Navy ROTC, or previous active duty military service. The Army also allows enrollment in the two-year program while students attend graduate school.

Commissioning

Successful completion of the Advanced Course program and a bachelor’s degree may lead to a commission as a second lieutenant in the Army Reserves, National Guard, or Active Army.

Military Science

Lower-Division Courses

2. Leadership Laboratory. (No credit) Laboratory, three hours (lower-division cadets) or four hours (upper-division cadets). All cadets must be concurrently enrolled in a military science course. Upper-division cadets must also be under a contracted obligation with department. Designed to allow cadets to apply leadership techniques and military skills taught in classroom and to develop their confidence as future military officers. No grading.

11. Foundations of Officerhood. (2) Lecture, one hour. Introduction to issues and competencies that are central to commissioned officer’s responsibilities. Framework established to understand officerhood, leadership, military customs, briefings, and life skills such as physical fitness, nutrition, and time management. P/NP or letter grading.

12. Basic Military Leadership. (2) Lecture, one hour. Requisite: course 11. Introduction to fundamentals of leadership, Army leadership values, ethics, and counseling techniques. Foundation of basic leadership fundamentals central to commissioned officer’s responsibilities established. P/NP or letter grading.


19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.
21. Individual Leadership Development. (3) Lecture, two hours. Introduction to various individual leadership personality types, in combined lecture, discussion, and experiential learning, to assist students in development of their own individual leadership style. Additional emphasis on military factors and principles of leadership, goal setting, basic communication, and consideration of others. P/NP or letter grading.

22. Leadership Development and Military Planning. (3) Lecture, two hours. Requisite: course 21. Discussion of various methods of communication, planning, and decision making, through combined lecture, discussion, and experiential learning, with focus on written communication and group communication essential for leadership development. Introduction to and application of military planning process in developing operations orders. P/NP or letter grading.

23. Subordinate Development and Army Organization. (3) Lecture, two hours. Requisite: course 22. Discussion/application of team-building techniques and subordinate development, through combined lecture, discussion, and experiential learning, with additional focus on commissioned officers, branches, and Army organization. Application of counseling techniques, motivation, and consideration of ethics and values for modern leaders. P/ NP or letter grading.

Upper-Division Courses

110. U.S. Military History. (3) Lecture, three hours; discussion, one hour. Survey of American military history from 1600 to the present. Causes of war, strategy, tactics, and technological developments set against economic, political, and diplomatic concerns. Impact of warfare on society.

131. Tactical Planning and Analysis. (4) Lecture, three hours; laboratory, four hours. Introduction to leadership development process used to evaluate military leadership performance. Examination of how to conduct individual and small unit training as well as introduction to basic principles of tactics. Emphasis on study of reasoning skills, troop leading procedures, and military orders process. P/ NP or letter grading.

132. Army Officership and Communication. (4) Lecture, three hours; laboratory, four hours. Examination of officership that culminates in detailed case study. Interpersonal communication, with focus on general communication theory as well written and spoken communication skills. Presentation of information briefing to receive feedback from both instructor and fellow students. P/ NP or letter grading.

133. Leadership and Problem Solving. (4) Lecture, three hours; laboratory, four hours. Examination of role communications, values, and ethics play in effective leadership, including ethical decision making, consideration of others, transactional and transformational leadership, and survey of Army leadership doctrine. Emphasis on improving oral and written communication abilities and leadership development and assessment. P/ NP or letter grading.

141. Leadership and Management. (4) Lecture, three hours; laboratory, four hours. Interactive course to develop student proficiency in planning and executing complex training operations. Counseling techniques and development of skills needed to lead various organizations. Exploration of training management, leadership skills, and developmental counseling techniques. P/ NP or letter grading.

142. Leadership, Ethics, and Military Law. (4) Lecture, three hours; laboratory, four hours. Interactive course to enhance student understanding of organizational culture, leadership, and ethics. Understanding and enhancement of leader-member relations, assessment of organizational culture and ethics, and how to effect change in organizations. Exploration of foundations of military law and law of war. P/ NP or letter grading.

143. Officership: Professional Military Leadership. (4) Lecture, three hours; laboratory, four hours. Capstone interactive leadership course to prepare students for challenges of being commissioned officers in U.S. Army by discussing various leadership challenges and case studies. Study of military units, with specific emphasis on joint operations involving Army, Navy, Air Force, and Marine Corps assets, military operations other than war, and global war on terror. Other topics include personnel administration, maintenance management, and financial planning. P/ NP or letter grading.

188SA. Individual Studies for USIE Facilitators. (1) Tutorial, to be arranged. Enforced corequisite: Honors College 101E. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to discuss selected USIE seminar topic, conduct preparatory research, and begin preparation of syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.

188SB. Individual Studies for USIE Facilitators. (1) Tutorial, to be arranged. Enforced corequisite: course 188SA. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to finalize course syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.

188SC. Individual Studies for USIE Facilitators. (2) Tutorial, to be arranged. Enforced corequisite: course 188SB. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor while facilitating USIE 885 course. Individual contract with faculty mentor required. May not be repeated. Letter grading.

197. Individual Studies in Military Science. (2 to 4) Tutorial, four hours. Limited to juniors/seniors. Individual intensive study, with scheduled meetings to be arranged between faculty member and student. Assigned reading and tangible evidence of mastery of subject matter required. May be repeated for credit. Individual contract required. P/ NP or letter grading.

Molecular and Medical Pharmacology

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Professors

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Edythe D. London, PhD, in Residence (Thomas P. and Katherine P. Pike Professor of Addictive Studies)
John C. Mazzotta, MD, PhD
William P. Meleaga, PhD, in Residence
Michael E. Phelps, PhD (Norton Simon Professor of Biophysics)
Robert M. Prins, PhD, in Residence
Caius G. Radu, MD
Srinivasa T. Reddy, PhD, in Residence
Antoni Ribas, MD
Orian Shirinini, MD, PhD
Desmond Smith, MD, PhD
Ren Sun, PhD
Yi E. Sun, PhD, in Residence
Hsiang-Rong Tseng, PhD
R. Michael van Dam, PhD
Owen N. Witte, MD (Presidential Professor of Developmental Immunology)
Lily Wu, MD, PhD

Professors Emeriti

Jorge R. Barrio, PhD
Arthur K. Cho, PhD
Cameron B. Gundersen, PhD
Sherreil G. Howard, PhD
Sung-Cheng (Henry) Huang, DSc
Louis J. Ignarro, PhD (Nobel laureate, Jerome J. Belzer Professor Emeritus of Medical Research)
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Nagichettiar Satyamurthy, PhD
Heinrich R. Schelbert, MD, PhD
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Marc Liesa-Roig, PhD, in Residence
Jennifer M. Murphy, PhD
Hans David S. Ulmer, MD, PhD, in Residence

Adjunct Professors

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James R. Heath, PhD
Meisheing Jiang, PhD
Jide Tian, MD
Hong Wu, MD, PhD

Adjunct Associate Professors

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G. Ken Hermann, MD, MBA
Saman Sadeghi, PhD
Joy A. Umbach, PhD

Adjunct Assistant Professors

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Daniel Braas, PhD
Giuseppe Carluccio, PhD
Katharina M. Lückerath, PhD
Christine E. Mona, PhD
Roger J. Slavik, PhD
Shiili Xu, PhD
Shaojun S. Zhu, PhD

Scope and Objectives

The Department of Molecular and Medical Pharmacology offers an opportunity for gifted students to...
work with accomplished faculty members toward making novel discoveries in basic and clinical research.

Departmental research interests span a broad range of studies by integrating biological, physical, engineering, and medical sciences to explore mechanisms of disease in biological systems from in silico through a single cell to the whole organism level, while encompassing patient studies. Faculty members strive to understand basic biological systems and disease states and, where appropriate, to use these observations to develop both new molecular diagnostic technologies and new molecular therapeutics.

With the department as home to the Crump Institute for Molecular Imaging; and the Ahmanson Translational Imaging Division—with its nuclear medicine and positron emission tomography (PET) imaging research and clinical service—students have access to state-of-the-art science and technology, and the opportunity to make a direct impact on patient care. In addition, the department is home to the Business of Science Center. This program supplies education, experience, and industry mentorship to graduate students in the department and in other academic programs to prepare them for professional careers.

Graduate Study

Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Division website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Graduate Degrees

The Department of Molecular and Medical Pharmacology offers Master of Science (MS) and Doctor of Philosophy (PhD) degrees in Molecular and Medical Pharmacology, but does not admit applicants who seek only an MS degree.

The department also offers two MD/PhD programs concurrently with the Geffen School of Medicine. One is the Medical Scientist Training Program (MSTP) in which candidates are medical students that have been accepted into MSTP by the School of Medicine in order to qualify. The second is the Specialty Training and Advanced Research (STAR) program in which candidates are post-MD housestaff (interns, residents, or fellows) who have been accepted into the STAR Program by its selection committee in order to qualify.

The department, together with the Division of Laboratory Animal Medicine, offers PhD or postdoctoral training combined with residency training for veterinarians (with DVM or DVM/PhD degrees) in the Veterinary Investigator in Scientific Training and Advancement (VISTA) program.

Note: There is no degree program in pharmacy at UCLA.

Molecular and Medical Pharmacology

Lower-Division Courses

19. Fiat Lux Freshman Seminars. (1 Seminar), one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.


30. Directed Research in Molecular and Medical Pharmacology. (1 to 12) Tutorial, three hours per week. Independent research in the fields of pharmacology and drug design. Undergraduate credit only. P/NP grading.

31. Lecture and discussion, two hours. Exploration of current topics in pharmacology. Letter grading.

32. Mentoring:är. (2) Tutorial, one hour. Introduction to the concept of mentorship to graduate students in the department. May be repeated for credit. P/NP grading.

33. Seminar in Molecular and Medical Pharmacology. (1 Seminar), one hour. Special topics in molecular and medical pharmacology. May be repeated for credit. P/NP grading.

Upper-Division Courses

194. Group Seminars and Discussions: Cross-Disciplinary Scholars in Science and Technology Project. (4) Seminar, two hours; discussion, two hours. Limited to Cross-Disciplinary Scholars in Science and Technology (CSSST) students. Communication and collaboration skills, specifically in interdisciplinary settings and introduction to research project design and proposal process. Students submit written CSSST project proposal and give oral presentations of scientific proposals. May be repeated for credit. Letter grading.

199. Directed Research in Molecular and Medical Pharmacology. (2 to 6) Tutorial, three hours per week. Limited to juniors/seniors. Supervised individual research under guidance of faculty mentor. Special studies in pharmacology, including either reading assignments or laboratory work or both, designed for proper training of students. Culminating paper or project required. May be repeated for credit. Individual contract required. P/NP or letter grading.

Graduate Courses

200. Introduction to Laboratory Research. (8) Laboratory, eight to 20 hours. Individual projects in laboratory research for beginning graduate students. At end of each term students submit to their supervisor reports covering research performed. Pharmacology graduate students must take this course three times during their first two years in residence. Letter grading.

M205A. Introduction to Chemistry of Biology. (4) (Same as Chemistry CM205A.) Lecture, three hours; discussion, one hour. Introduction to chemical biology. Topics include computational chemical biology, utility of synthesis in biochemical research, peptidomics, designed reagents for cellular imaging, natural products, and systemic toxicology, basic mechanisms of toxicology. Letter grading.

M205B. Issues on Chemistry/Biology Interface. (2) (Same as Chemistry CM205B.) Seminar, one hour. Required of all chemistry and biology graduate students. Irregular class schedule. Letter grading.


288. Gene Therapy. (4) Lecture, three hours; discussion, one hour. Introduction to basic concepts of gene therapy, wherein treatment of human disease is based on transfer of genetic material into an individual. Discussion of molecular basis of disease, gene delivery vectors, and animal models. Letter grading.

291. Special Topics in Pharmacology. (4) Lecture, four hours. Examination in depth of topics of current importance in pharmacology. Emphasis on recent contributions of special interest to advanced PhD candidates and faculty. Letter grading.

292. Research Projects, Proposals, and Presentations. (6) Lecture, four hours; discussion, four hours. Limited to departmental majors. Introduction to format and requirements of research proposals, so students can critically read primary papers and give formal scientific presentations, ask new questions, formulate new hypotheses, and construct research projects, understand balance of importance, novelty, and feasibility, and develop ability to think independently, creatively, and comprehensively. Letter grading.


M248. Introduction to Biological Imaging. (4) (Same as Bioengineering M248 and Physics in Biology in Medicine M248.) Lecture, three hours; laboratory, one hour; outside study, seven hours. Exploration of role of biological imaging in modern biology and medicine, including imaging physics, instrumentation, image processing, and applications of imaging for range of modalities. Practical experience provided through series of laboratory sessions. Letter grading.


M257. Introduction to Toxicology. (4) (Same as Pathology M257.) Requisite: course M241. Biochemical and systemic toxicology, basic mechanisms of toxicology, and interaction of toxic agents with specific organ systems. S/U or letter grading.

M258. Pathologic Changes in Toxicology. (4) (Same as Pathology M258.) Designed to give students experience in learning normal histology of tissues which are major targets of toxin and the range of pathologic changes that occur in these tissues (liver, bladder, lung, kidney, nervous system, and vascular system). S/U or letter grading.

267. Business of Science. (2) Lecture, two hours. Designed for graduate students. Undergraduate students may enroll with consent of instructor. Introduction to principles of business and entrepreneurship in technology sectors. Basic business skills taught to effectively perform in commercial environment and within academic environment. Application of course material by performing feasibility studies that have potential to receive funding and become actual companies. Exploration of entrepreneurship, particularly formation and operation of new business ventures. Presentations by and questioning of successful technology entrepreneurs, identifying and evaluating new venture opportunities, development of financing, and entry and exit strategies. S/U or letter grading.

286. Gene Therapy. (4) Lecture, three hours; discussion, one hour. Introduction to basic concepts of gene therapy, wherein treatment of human disease is based on transfer of genetic material into an individual. Discussion of molecular basis of disease, gene delivery vectors, and animal models. Letter grading.

291. Special Topics in Pharmacology. (4) Lecture, four hours. Examination in depth of topics of current importance in pharmacology. Emphasis on recent contributions of special interest to advanced PhD candidates and faculty. Letter grading.

292. Research Projects, Proposals, and Presentations. (6) Lecture, four hours; discussion, four hours. Limited to departmental majors. Introduction to format and requirements of research proposals, so students can critically read primary papers and give formal scientific presentations, ask new questions, formulate new hypotheses, and construct research projects, understand balance of importance, novelty, and feasibility, and develop ability to think independently, creatively, and comprehensively. Letter grading.


Molecular Biology
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Hilary A. Collier, PhD (Molecular, Cell, and Developmental Biology)
Feng Guo, PhD (Biological Chemistry)
Jeffrey A. Long, PhD (Molecular, Cell, and Developmental Biology)

Scope and Objectives
The PhD in Molecular Biology is offered under the supervision of an interdepartmental committee. The Molecular Biology Institute serves this committee and the various departments concerned in support of faculty research and teaching associated with the PhD program. Staff members are from participating departments and from the Molecular Biology Institute. Areas for study include cell biology, developmental biology and neurobiology, nucleic acid biochemistry, gene regulation, immunobiology, microbiology/virology and pathogenesis, molecular evolution and paleobiology, oncogenes and signal transduction, plant molecular biology, protein and enzyme structure and function, genomics, bioinformatics, and structural biology.

Graduate Study
Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Division website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Graduate Degrees
The Molecular Biology Program offers the Master of Science (M.S) and Doctor of Philosophy (Ph.D) degrees in Molecular Biology.

Molecular Biology

Lower-Division Courses
19. Fiat Lux Freshman Seminars. (1 Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise, and including many paths of discovery at UCLA. P/NP grading.

99. Student Research Program. (1 to 2) Tutorial, supervised research or other scholarly work, three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Graduate Courses
252. Writing for Science (1 Seminar, one hour. Corequisite: Biological Chemistry 251A or 251B or 251C. Limited to first-year Molecular Biology PhD students. Development of specific skills in scientific writing within context of one advanced course on mechanics of gene transcription. Letter grading.

254A. Concepts in Molecular Biosciences. (3 Lecture, three hours; discussion, two hours. Limited to human genetics and molecular biology graduate students. Five-week course covering four basic experimental approaches of biochemistry and molecular biology in context of various specific topics, including (1) structural biology, with protein and nucleic acid structure and molecular recognition, (2) use of cell-free and purified in vitro systems to dissect reaction mechanisms, (3) biochemical approaches to dissecting complex reactions/pathways in cells, and (4) enzymology and protein chemistry. Letter grading.

254B. Concepts in Molecular Biosciences. (3 Five-week course. Lecture, three hours; discussion, two hours. Enforced requisite: course 254A. Important biological problems that have been genetically analyzed in different organisms or small number of related problems. Major genetic approaches used in relevant organisms, including both forward and reverse genetic approaches, genetic interactions between genes (genetic enhancers and suppressors), transgenic technology, and systematic genomic strategies. Letter grading.

254C. Concepts in Molecular Biosciences. (3 Five-week course. Lecture, three hours; discussion, two hours. Enforced requisite: courses 254A, 254B. Molecular mechanisms underlying complex problems in cell biology. Experimental approaches used to define mechanisms involved in protein targeting, cell structure and subcellular organization, cell communication, and intracellular signaling. Analysis of pathways that connect these cellular processes. Letter grading.

254D. Concepts in Molecular Biosciences. (3 Five-week course. Lecture, three hours; discussion, two hours. Enforced requisite: courses 254A, 254B, 254C. Application of biochemical, molecular biological, genetic, and cell biological approaches to understand specialized topics in life and biomedical sciences, including developmental disease, stem cell biology, synaptic transmission in nervous system, cancer, and heart disease. Letter grading.

255. Scientific Writing. (3 Lecture, two hours; discussion, one hour. Limited to first-year Molecular Biology PhD students. Improvement of academic literacy through development of specific skills in scientific writing. Review of principles of effective writing using practical examples and exercises. Topics include principles of good writing, tricks for writing faster and with less anxiety, format of scientific manuscripts, art of editing, and issues in publication and peer review. Letter grading.

288. Current Topics in Molecular Biology. (2 Student presentation/seminar, two hours. Students present oral critiques and participate in discussions on assigned topics. S/U grading.

300. Entering Mentoring Training Program. (1 Seminar/discussion, 90 minutes. Limited to 25 graduate students. Offers formal training on effective mentoring of undergraduate students in science laboratories. Priority given to those who either have prior experience as mentor or are currently mentoring undergraduates; however, all are encouraged. Exploration of mentoring strategies through lecture, collaborative learning, and case studies. Topics include maintaining effective communication, aligning expectations, addressing equity and inclusion, fostering independence, cultivating ethical behavior, and articulating mentoring philosophy. S/U grading.


596. Directed Individual Studies. (2 to 12) Tutorial, to be arranged. Directed individual research or study. May be repeated for maximum of 12 units. S/U grading.

599. PhD Dissertation Research and Writing. (2 to 12) Tutorial, to be arranged. Directed individual studies for students who have advanced to candidacy. May be repeated for maximum of 12 units. S/U grading.

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Jesse R. Zamudio, PhD

Lecturers
Katie J. Gallagher, PhD
Mitra J. Hooshmand, PhD
Pei-Yun Lee, PhD
**Scope and Objectives**

The revolution in modern biology that began with the elucidation of the structure of DNA by Watson and Crick in the 1950s has had a profound effect not only on biological research, but on the way biology is taught as a subject. The field of biology spawned by this discovery, generally called molecular biology, has provided an entirely new framework within which to approach questions in cell and developmental biology. The specializations, both technical and conceptual, demanded by this field have led to the growth of molecular biology and its related disciplines into an essentially separate branch of scientific inquiry.

Students who complete the requirements for the Bachelor of Science degree in the Department of Molecular, Cell, and Developmental Biology are expected to pursue careers in cellular and subcellular biological research, biomedical research, or medicine or allied health fields. The degree combines essential background studies in mathematics, chemistry, and physics with a general introduction to all of the biological subjects, as well as in-depth exposure to key topics in molecular, cell, and developmental biology. The PhD degree offers opportunity for advanced concentrated study and requires independent and innovative research that ultimately results in publishable dissertation materials.

**Undergraduate Study**

**Molecular, Cell, and Developmental Biology BS**

The Bachelor of Science degree in Molecular, Cell, and Developmental Biology (MCDDB) is designed especially for students who intend to go on to postgraduate work in biology or medicine and for students aiming for entry-level positions in biotechnology-related fields. Students are exposed to basic biological and molecular concepts underlying recent technical advances in molecular, cell, and developmental biology of animals and plants. Areas of emphasis include cell biology, immunology, molecular biology, plant biology, developmental biology, and neurobiology, among others.

**Learning Outcomes**

- Broad knowledge of the fundamental tenets of molecular, cell, and developmental processes
- Through use of the scientific method, demonstrated ability to test questions and solve problems using quantitative and inquiry-related skills
- Demonstrated ability to ask questions about primary scientific literature within the discipline
- Demonstrated analytical skills to evaluate primary scientific literature within the discipline
- Effective written and oral communication of laboratory findings
- Demonstrated appropriate awareness of issues associated with responsible conduct of research

**Preparation for the Major**

**Life Sciences Core Curriculum**

Required: Chemistry and Biochemistry 14A, 14B, 14BL, 14C, and 14D, or 20A, 20B, 20L, 30A, 30AL, and 30B; Life Sciences 30A, 30B, and 40 or Statistics 13, or Mathematics 3A, 3B, and 3C, or 31A, 31B, and 32A; Physics 1A, 1B, 1C, 4AL, and 4BL, or 5A, 5B, and 5C.

Students must also complete one of two life sciences sequences—either Life Sciences 1, 2, 3, 4, and 23L, or 7A, 7B, 7C, and 23L. They may not substitute courses in either sequence.

Each core curriculum course must be passed with a grade of C– or better, and all courses must be completed with an overall grade-point average of 2.0 or better. Students receiving grades below C– in two core curriculum courses, either in separate courses or repetitions of the same course, are subject to dismissal from the major.

**Transfer Students**

Transfer applicants to the Molecular, Cell, and Developmental Biology major with 90 or more units must complete the following introductory courses prior to admission to UCLA: one year of general biology with laboratory for majors, preferably equivalent to Life Sciences 1 and 2, or 7A, 7B, and 7C, one year of calculus, one year of general chemistry with laboratory for majors, and one semester of organic chemistry with laboratory. A second semester of organic chemistry or one year of calculus-based physics is strongly recommended but not required for admission.

Refer to the [UCLA transfer admission guide](#) for up-to-date information regarding transfer selection for admission.

**The Major**

**Required Courses:** Chemistry and Biochemistry 132A, Life Sciences 107, Molecular, Cell, and Developmental Biology 138, 144, 165A, and one laboratory course from Molecular, Cell, and Developmental Biology 104AL, 150AL, 187AL, or 196B.

**Electives:** A total of 20 upper-division elective units must be completed. At least 10 units must be taken from molecular, cell, and developmental biology (except 100, 104AL, 138, 144, 150AL, 165A, 187AL, 192A, 192B, 192C, 192D, 194A, 194B, or 199), Chemistry and Biochemistry C100, 152C, 153L, C159, C160A, Computer Science CM124, CM186, Microbiology, Immunology, and Molecular Genetics 100L, 101, 102, 105, 158, 168, 174, C185A, Physiological Science 121, 125, or 174, of which at least 5 units must be molecular, cell, and developmental biology courses. The remaining 10 units may be taken from the above courses or from Biostatistics 100A or Statistics 100A, Ecology and Evolutionary Biology 110, 121, 162, Human Genetics C144, or Physiological Science 166.

Credit for a maximum of two upper-division developmental biology courses from Molecular, Cell, and Developmental Biology 138, C141, and 143 may be applied toward the major.

A maximum of 4 units of approved seminar course credit may be applied toward the electives requirement. A maximum of 12 units of upper-division independent research courses from Molecular, Cell, and Developmental Biology 196A and 196B, 198A through 198D or 199A through 199D may be applied toward the major. Credit for 199 courses from other departments may not be applied to the major requirements.

Any single course may be applied toward only one category of the major, and must be taken for a letter grade.

Majors are required to earn at least a 2.0 (C) overall grade-point average in all courses applied toward the major.

**Honors Program**

**Admission**

The honors program provides exceptional Molecular, Cell, and Developmental Biology majors with the opportunity to do research culminating in an honors thesis. Junior and senior majors who have completed all university-level coursework, including all preparation courses and requirements for the major with an overall grade-point average of 3.0 or better and a 3.5 GPA or better in the required major courses, may apply for admission to the honors program. Students must have the sponsorship of an approved faculty adviser.

For more information and application forms, students should contact the Student Affairs Office, 128 Hershey Hall, early in their educational planning. Completed applications should be submitted at least two weeks prior to the term in which students plan to begin the honors program.

**Requirements**

The core of the program consists of at least one approved undergraduate seminar course from Molecular, Cell, and Developmental Biology 191 and three research courses (12 units minimum) from 198A, 198B, and 198C, culminating in a thesis.

To qualify for graduation with honors, students must satisfactorily complete all requirements for the honors program and the major and obtain at least an overall 3.0 grade-point average and a 3.5 GPA or better in coursework required for the major. On recommendation by the faculty sponsor and with approval of the thesis by the departmental honors committee, students are awarded no honors, departmental honors, or highest departmental honors.

At the discretion of the departmental honors committee, students who have (1) a GPA of 3.6 or better, both overall and in the major and (2) demonstrated exceptional accomplishment on the research thesis are awarded highest departmental honors.

**Computing Specialization**

Majors in Molecular, Cell, and Developmental Biology may select a specialization in Computing by (1)
Graduate Degrees

The Department of Molecular, Cell, and Developmental Biology offers Master of Arts (MA), Candidate in Philosophy (CPhil), and Doctor of Philosophy (PhD) degrees in Molecular, Cell, and Developmental Biology. Applicants interested in studying with faculty in the department are encouraged to apply to an appropriate home area in Graduate Programs in Bioscience.

Molecular, Cell, and Developmental Biology

Lower-Division Courses

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

30H. Collaborative Undergraduate Research Laboratory in Yeast, Genetics, and Molecular Biology. (5) Lecture, two hours; laboratory, six hours. Limited to 24 students in Collaborative Undergraduate Research Laboratory (CURL), sponsored by Howard Hughes Medical Institute Professors Program. Basic training in biological research, covering topics in molecular genetics, molecular biology, model organism biology, and data analysis. Letter grading.

50. Stem Cell Biology, Politics, and Ethics: Teasing Apart Issues. (5) Lecture, three and one half hours; discussion, one hour. Examination of the conceptual, empirical, ethical, and political aspects of stem cell research. Letter grading.

60. Biomedical Ethics. (5) Lecture, three hours; discussion, one hour. Examination of the conceptual, empirical, ethical, and political aspects of stem cell research. Letter grading.

C150. Plant Communication. (4) Lecture, three hours; discussion, one hour. Requisites: Life Sciences 3, 4, or 23L, or 7A, 7B, 7C, 23L, and 107. Communication of plants as static organisms, yet they live in world of symbiosis and community. Plants change atmosphere, enrich soil, and communicate with insects, bacteria, and other -Earth's ultimate symbiote. Just as science has revealed over time misconceptions about how things work at deeper level, scientists and economists now recognize that beyond obvious need to grow above-ground biomass for fuel production, we must better understand how to make that biomass in sustainable manner. Introductory course in chemical ecology and how natural compounds function in communication. Emphasis on roles of natural compounds in plant/plant, plant/herbivore interactions; synopsis of principles of plant defense mechanisms and responses to microbial infections. Laboratory sessions with schedule with course C250, P/NP or letter grading.

150AL. Research Immersion Laboratory in Plant-Microbe Ecology. (5) Lecture, two hours; laboratory, eight hours. Enforced requisites: Life Sciences 7A, 7B, 7C, 23L, or 7A, 7B, 7C. Laboratory is enforced concurrent with course 150BL. Limited to Molecular, Cell, and Developmental Biology majors. Introductory plant-microbe biology laboratory to give students hands-on experience doing biological research. Students present their own observations about plants and microbiome. Letter grading.

CM156. Human Genomics and Genetics. (5) (Same as Microbiology CM156.) Lecture, three hours; discussion, one hour. Requisites: Life Sciences 3, 4, and 23L, or 7A, 7B, and 7C. Application of genetic principles in human populations, with emphasis on genomics, family studies, positional cloning, Mendelian and common diseases, cancer genetics, animal models, cytogenetics, pharmacogenetics, population genetics, and genetic counseling. Lectures and readings in literature, with focus on current questions in fields of medical and human genetics and methodologies appropriate to these investigations. Concurrently scheduled with course CM256. Letter grading.

160. Principles of Light Microscopy. (4) Lecture, three hours; laboratory, two hours. Requisites: Life Sciences 3, 4, or 23L, or 7A, 7B, and 7C. Application of microscopic techniques currently used in research laboratories. Basic principles of light microscopy (image formation, magnification, resolution, contrast), widefield and fluorescence microscopy, optical sections (confocal, multiphoton, light sheet and total internal reflection fluorescence microscopy), and super-resolution microscopy. Laboratory sessions include setting up and using simple, railed microscope; hands-on time and demonstrations on brightfield/epifluorescence, confocal, light-sheet and super-resolution microscopes. Letter grading.

165A. Biology of Cells. (5) Lecture, three hours; discussion, one hour. Requisites: Chemistry 14D or 30B, Life Sciences 3, 4 or 23L, or 7A, 7B, 7C, and 107. Not open for credit to students with credit for course 100. Molecular basis of cellular structure and function, with focus on individual cellular organelles, as well as interaction of cells with extracellular environment and with other cells. Material presented in context of experimental questions and answers to incorporate concept of scientific method and recent advances in cellular biology research. Emphasis on understanding recent scientific articles that directly relate to information examined in lectures. Letter grading.

165B. Molecular Biology of Cell Nucleus. (5) Lecture, three hours; discussion, two hours. Requisite: course 165A. Continuation of course 165A. Molecular biology of eukaryotic cell nucleus, with focus on structure, organization, replication, and repair of eukaryotic genome. Topics include chromatin, cellular mRNA transport, transcription, translation, and transport; cell cycle and cancer. Study of advanced specialized topics to allow integrated approach to molecular cell biology. Material presented in context of current research questions and answers to incorporate concept of scientific method and recent advances in cell biology research. Exposure in discussions to current literature that directly relates to information examined in lectures. Letter grading.

168. Stem Cell Biology. (5) Lecture, three hours; discussion, one hour. Requisites: courses 138, 165A. State-of-art education of embryonic and adult stem cells and how they pluripotent/multipotent cells can be used to treat congenital defects, diseases, or injury in humans. Review of current knowledge of human and mouse embryonic stem cells and how they develop into various tissue types. Discussion of adult stem cells in hematopoietic, nervous, and other organ systems to provide examples of tissue-specific stem cells role in disease. Emphasis on role of various model organisms as examples of how model organisms have helped to discover fundamental principles in stem cell biology. How advances in cell biology and tissue engineering can be applied to stem cells in regenerative medicine. Ethical and legal issues related to stem cell research. Letter grading.


C171A. Advanced Topics in Cell and Molecular Biology: Molecular Evolution. (2) Lecture, two hours. Requisites: courses 100 or 165A, 144, Life Sciences 4 or 107. Recent developments in fields of molecular, cell, and developmental biology. Current developments in field of molecular evolution. Constructing evolutionary trees at molecular level; formal testing of evolutionary hypotheses. Emphasis on experiments and transcription. Letter grading.

bioinformatics tools. Students are provided fragments of genome from relatively poorly studied organism that has been sequenced at UCLA. May not be repeated for credit. Letter grading.

188. Special Courses in Molecular, Cell, and Developmental Biology. (2) Seminar, two hours. Departmentally sponsored experimental or temporary courses, such as those taught by visiting faculty members. May be repeated for credit with topic change. Letter grading.

188A. Individual Studies for USIE Facilitators. (1) Tutorial, to be arranged. Enforced corequisite: Honors Collegeium 101E. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to discuss selected USIE seminar topic, conduct preparatory research, and begin preparation of syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.


188SC. Individual Studies for USIE Facilitators. (2) Tutorial, to be arranged. Enforced prerequisite: course 188B. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor while facilitating USIE 88S course. Individual contract with faculty mentor required. May not be repeated. Letter grading.

189. Advanced Honors Seminars. (1) Tutorial, three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth through specialized readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

189HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to upper-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

191. Variable Topics Research Seminars: Molecular, Cell, and Developmental Biology. (4) Seminar, two hours. Designed for junior/senior departmental majors. Intended for students with strong commitment to pursue graduate studies in molecular, biochemical, physiological, and biophysical fields. Weekly variable topics course with reading, discussion, and presentation of paper selected from current literature. May be repeated once for credit. P/NP or letter grading.

192A. Undergraduate Practicum in Molecular, Cell, and Developmental Biology. (4) Seminar, three hours. Limited to junior/senior Molecular, Cell, and Developmental Biology majors. Training and supervised practicum for advanced undergraduate students. Students assist in preparation of materials and development of innovative programs under guidance of faculty members in small course settings. Consult Undergraduate Office for further information. May not be applied toward course requirements for Molecular, Cell, and Developmental Biology major. May be repeated once for credit. Letter grading.

192B. Undergraduate Practicum: CityLab. (2) Seminar, two hours. Limited to juniors/seniors in any life sciences major. CityLab training and supervised practicum for advanced undergraduate students. Students assist in preparation of materials and development of innovative programs under guidance of faculty members in small course settings. May not be applied toward course requirements for Molecular, Cell, and Developmental Biology major. May be repeated once for credit. P/NP or letter grading.

193. Journal Club Seminars: Molecular, Cell, and Developmental Biology. (1) Seminar, two hours. Corequisite: course 198A or 198B or 198C or 199A or 199B or 199C. Limited to juniors/seniors. Development of in-depth understanding of and ability to discuss current literature in field of students own research. May be repeated for credit. P/NP grading.

194A. Research Group Seminars: Molecular, Cell, and Developmental Biology. (1) Seminar, two hours. Corequisite: courses 198A or 198B or 198C or 199A or 199B or 199C. Limited to juniors/seniors. Involvement in laboratory's weekly research group meeting to encourage student participation in research endeavors and to stimulate research in specific research areas. Discussion of use of specific research methods and current literature in field or of research of faculty members or students. May be repeated for credit. P/NP or letter grading.

194B. Research Group Seminars: Current Topics in Biomedical Sciences. (2) Seminar, two hours. Limited to juniors/seniors in research traineeships or those who have strong commitment to pursue graduate studies in molecular, biochemical, physiological, and biophysical fields. Weekly presentation and discussion of paper selected from current literature. May be repeated for credit. Letter grading.

194A. Research Apprenticeship I in Molecular, Cell, and Developmental Biology. 12 hours. Requisites: Life Sciences 3, 4, or 4A, 7A, 7B, 7C, 23L, and 107, 3.0 premajor and/or major grade-point average, and at least one term of prior experience in same laboratory in which student is to be conducted. Corequisite: course 198A. Course 196A is required to 196B. Designed for undergraduate students who are interested in pursuing inquiry-based and hypothesis-driven research experience in laboratory of departmental or preapproved faculty mentor. Guided research course to be taken in conjunction with course 198A, followed by continuation research course 198B. Technical aspects vary depending on specific laboratory; however, all students learn how to apply scientific method: propose hypothesis, identify experiments to address hypothesis, perform experiments, and analyze results. How to record information from experimental activities into laboratory notebooks and to write research proposals. Letter grading.

194B. Research Apprenticeship II in Molecular, Cell, and Developmental Biology. (4) Tutorial, 12 hours. Enforced prerequisites: courses 198A, 196A. Enforced corequisite: course 180B. Technical aspects vary depending on specific laboratory; however, all students take course 196B. Course 196C is required to 196D, which is required to 196E. Limited to junior/senior Molecular, Cell, and Developmental Biology majors. Development and completion of comprehensive research project and honors thesis under direct supervision of approved faculty member to broaden and deepen students’ knowledge of some phase of molecular, cell, and developmental biology. Must be taken for at least three terms and for total of 12 units. Report on progress must be presented to undergraduate adviser each term or if course is taken. Individual contract required. Letter grading.

194C. Honors Research in Molecular, Cell, and Developmental Biology. (4) Tutorial, 12 hours. Requisites: course 198B, Life Sciences 3 and 4, or 7A, 7B, 7C, 23L, and 107. Limited to junior/senior Molecular, Cell, and Developmental Biology majors. Development and completion of comprehensive research project and honors thesis under direct supervision of approved faculty member to broaden and deepen students’ knowledge of some phase of molecular, cell, and developmental biology. Must be taken for at least three terms and for total of 12 units. Report on progress must be presented to undergraduate adviser each term or if course is taken. Individual contract required. Letter grading.
Individual contract, required. Letter grading. Students may elect to enroll in additional research through courses 199C and 199D (letter grading). Report on progress must be presented to department each term 199A through 199D course is taken. Individual contract required. Letter grading.

190D. Directed Research in Molecular, Cell, and Developmental Biology. (4) Tutorial, 12 hours. Prerequisites: minimum 3.0 grade-point average in major. Requisites: course 199B, Life Sciences 3 and 4, or 7A, 7B, 7C, 23L, and 107. Limited to juniors/seniors. Department majors may enroll with sponsorship from department faculty members or preapproved outside faculty members. Other junior/senior life sciences majors may enroll only for research projects in laboratories with department faculty sponsors. Supervised individual research under guidance of faculty mentor. Culuminating research project designed to broaden and deepen students’ knowledge of some phase of molecular, cellular, and developmental biology. Must be taken for at least two terms and for total of at least 8 units. Students may elect to enroll in additional research through courses 199C and 199D. Report on progress must be presented to department each term 199A through 199D course is taken. Individual contract required. Letter grading.

Graduate Courses


224. Molecular Basis of Vascular Biology. (4) Lecture, four hours. Requisites: Life Sciences 3, 4, Developmental and pathological aspects of vascular biology. Presentation and discussion of key questions of vascular biology with mechanistic viewpoint. Major emphasis on experimental approaches and current research in field. Introduction to several model systems along with presentation of specific topic. Basic information provided as to how this knowledge is obtained in laboratory using various of experimental approaches and model organisms. Letter grading.


C228B. Structural Molecular Biology. (4) (Same as Chemistry M230B.) Lecture, three hours; discussion, one hour. Requisites: Mathematics 3C, Physics 6C. Selected topics from principles of biological structure: structure of biological macromolecules and their interactions with nucleic acids, proteins, lipids, lipoproteins, ligands, and other biological molecules. Functional and structural organization of cells, tissues, organisms, and populations. Emphasis on experimental approaches in study of DNA replication, organization, transcription, and translation. S/U or letter grading.

M230D. Structural Molecular Biology Laboratory. (2) (Same as Chemistry M230D.) Laboratory, 10 hours. Corequisite: course C228B. Methods in structural molecular biology, including methods for visualizing molecular structures: optical microscopy, electron microscopy, X-ray crystallography, and NMR spectroscopy. Emphasis on analysis of original papers. May be repeated for credit. Letter grading.

M234. Genetic Control of Development. (4) (Same as Biological Chemistry M234.) Lecture, four hours. Topics at forefront of molecular developmental biology, including topics in molecular and cell biology, genetics, development, and evolution. Emphasis on quantitative analysis of these processes in context of normal development and disease. S/U or letter grading.

C239. Molecular Basis of Plant Differentiation and Development. (5) Lecture, three hours; discussion, one hour. Requisites: Life Sciences 1, 3, 4, and 23L, or 7A, 7B, 7C, 23L, and 107. In-depth study of basic processes of growth differentiation and development in plants and molecular mechanisms underlying these processes. Discussion of variety of plant systems, with focus on developing critical understanding of current experimental basis of research in this field. Concurrently scheduled with course C141. Preparation and presentation of term paper, in addition to other coursework, required of graduate students. Letter grading.

242. Topics in Neurobiology. (4) Lecture, three hours. Requisite: course 171. Selected current problems in neurobiology discussed in depth, with emphasis on analysis of original papers. May be repeated for credit. Letter grading.

C250. Plant Communication. (4) Lecture, three hours; discussion, one hour. Requisites: Life Sciences 3, 4, and 23L, or 7A, 7B, 7C, 23L, and 107. Most people think of plants as static organisms, yet they live in world of symbiosis and community. Plants change atmosphere, enrich soil, and communicate with insects, bacteria, and other—Earth’s ultimate symbiote. Just as science has revealed over time misconceptions about how things work at deeper level, scientists and economists now recognize that beyond obvious need to grow above-ground biomass for fuel and food, plants do much more to make biomass in sustainable manner. Introductory course in chemical ecology and how natural compounds affect gene expression. Emphasis on role of natural compounds in human health, and plant/herbicide interactions; synopsis of principal models of plant defense mechanisms and responses to microbial infections. Concurrently scheduled with course C150. S/U or letter grading.

254. Seminar: Plant Morphogenesis. (2) Seminar, two hours. S/U or letter grading.

255. RNA Editing. (4) Lecture, two hours; discussion, one hour. Preparation: knowledge of molecular biology and molecular genetics. Discussion of diverse set of RNA modification phenomena known as RNA editing. Topics include U insertion/deletion type of editing in trypanosome mitochondria, C to U substitution editing in apo B mRNA and plant mitochondria, C insertion editing in Physarum mitochondria, etc. Discussion of mechanism, function, and evolution of these phenomena. S/U grading.

CM256. Human Genetics and Genomics. (5) (Same as Microbiology CM256.) Lecture, three hours; discussion, two hours. Requisites: Life Sciences 3, 4, and 23L, or 7A, 7B, and 7C. Approaches to understanding human populations, with emphasis on genomics, family studies, population, Mendelian and common diseases, cancer genetics, animal models, computational biology, pharmacogenetics, and medical genetics, and genetic counseling. Lectures and readings in literature, with focus on current questions in fields of medical and human genetics and genomics approaches to such questions. Concurrently scheduled with course CM156. Independent research project required of graduate students. Letter grading.

265A–265B–265C. Seminars: Development, Stem Cells, and Disease Mechanisms. (2–2–2) Seminar, two hours. Limited to graduate students. Advanced courses based on research papers on fundamental cellular mechanisms governing development and disease. Disease results from genetically determined or acquired defects in cell and molecular processes; analysis of these processes in context of normal development indicates ways of dealing with corresponding disease. S/U grading.

M272. Stem Cell Biology and Regenerative Medicine. (4) (Same as Pathology M272.) Lecture, two hours; discussion, two hours. Designed for graduate students. Presentation of current knowledge of embryonic and adult cell stem cells and factors that regulate their growth and development. Major emphasis on how advances in cell and molecular biology and tissue engineering may be applied to use of stem cells in regenerative medicine. Biological and ethical issues related to stem cell research. S/U or letter grading.

276. Seminar: Molecular Genetics. (2) Seminar, two hours. Topics vary each term. S/U or letter grading.


278. Seminar: Molecular Genetics of Development. (2) Seminar, two hours. Designed for graduate students. Topics vary from year to year, with focus on establishment of position and pattern during embryogenesis by interactions of signal transduction systems and transcription factors. S/U or letter grading.


283. Seminar: Topics in Cell Biology. (2) Seminar, two hours. Discussion of recent experimental biology of eukaryotic cells. Topics vary from year to year and include bioenergetics, motility, organelle DNA, membrane structure and function, oncogenic transformation, nuclear organization and function. S/U or letter grading.

284. Seminar: Structural Macromolecules. (2) Seminar, one hour; discussion, three hours. Presentation and discussion of current topics in extracellular active structural macromolecules—their synthesis, structure, and roles in cell and developmental biology. Letter grading.

286. Seminar: Plant Development. (2) Seminar, one hour; discussion, two hours. Preparation: one plant physics or course and at least one advanced undergraduate or graduate plant development or biochemistry course. Seminar on specific topics in plant development. Content varies each term. S/U grading.

289. Current Topics in Plant Molecular Biology. (2) Discussion, one hour. Recent research developments in field of plant molecular biology. Opportunities for graduate students to discuss individual research work. S/U grading.


295. Seminar: Molecular, Cell, and Developmental Biology. (2) Seminar, two hours. In-depth surveys of recent developments in molecular, cell, and developmental biology research. Reading and presentation of
Molecular, Cellular, and Integrative Physiology

Interdepartmental Program
College of Letters and Science and David Geffen School of Medicine

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James G. Tidball, PhD (Integrative Biology and Physiology, Pathology, and Laboratory Medicine)

Yibin Wang, PhD (Anesthesiology and Perioperative Medicine, Medicine, Physiology)
Xia Yang, PhD (Integrative Biology and Physiology)

Scope and Objectives
Physiology is the study of the functional processes that collectively constitute life. The studies usually employ quantitative analyses of normal life processes, of pathological defects in normal life processes, of model systems to clarify and test basic physiological principles, and of functional specializations of organisms that have evolved under the influence of differing selective forces. Thus, physiology contributes importantly to advances in knowledge both in the basic biological sciences and in biomedical sciences and provides an essential foundation for the practice of medicine.

The primary objective of the interdepartmental Molecular, Cellular, and Integrative Physiology Program is to train a new generation of physiologists who apply modern knowledge in molecular and cellular biology and systems physiology to important questions in organismic function. Students learn to conceptualize physiological questions across several levels of organization and to understand how research strategies incorporating each of the levels of analysis can be formulated. This approach to physiology education is responsive to the need for physiologists who can intellectually and technically span disciplines related to physiology that are typically separated.

Coursework consists of formal instruction in the most current information in molecular biology, cell biology, and the molecular and cellular foundations of physiology. In addition, students identify an area of emphasis in biophysics, cellular and molecular biology, or integrative/comparative physiology in which additional studies are pursued. The heart of the program, however, is the research that leads to the dissertation, which is performed under the guidance of a faculty mentor. The program faculty includes more than 115 professors in the Geffen School of Medicine and College of Letters and Science. Collectively they have been recently ranked by the National Research Council in the top five in the U.S. for their quality as an academic faculty.

Graduate Study
Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Division website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Graduate Degree
The Molecular, Cellular, and Integrative Physiology Program offers the Doctor of Philosophy (PhD) degree in Molecular, Cellular, and Integrative Physiology.

Molecular, Cellular, and Integrative Physiology
Lower-Division Courses

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illustrating many paths of discovery at UCLA. P/NP grading.

90. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Graduate Courses

214. Research Grant Writing in Biomedical Sciences. (4) Lecture, three hours. Designed for Molecular, Cellular, and Integrative Physiology program students. Training in designing, writing, and evaluating research project and fellowship grants. How grant applications are structured and what features contribute to grant application success. How individual research project grants (R01) and exploratory/development research grants (R21) to National Institutes of Health (NIH) are structured and differ. How applications for predoctoral fellowships from NIH (F31) and American Heart Association (AHA) are organized. Development and writing of students’ own R01, R21, F31, or AHA grant application. Letter grading.


249. Seminar: Pathogenic Mechanisms in Muscle Disease. (2) Seminar, two hours. Recent advances have been made in genetic identification of molecular basis of muscle disease, and some mechanisms involved have been elucidated. Focus on muscle diseases in which substantial mechanistic information has been obtained, including particular cellular locations and diseases associated with those locations. Topics include Duchenne muscular dystrophy, congenital muscular dystrophy, limb girdle dystrophy, Ullrich myopathy, and other forms of genetically inherited muscle disease. S/U grading.


251. Integrative Genomics for Studying Complex Diseases. (2) Seminar, two hours. Requisite: course 252A. Lectures and supervised student presentations to offer graduate students opportunity to acquire deep understanding of advanced integrative genomic approaches and how these approaches can be applied to help understand molecular basis of diverse complex diseases. Topics include transcriptomics, genomics, functional genomics, network biology, and high-level integration. Letter grading.

252. Molecular Mechanisms of Human Diseases I. (4) Formerly numbered 252). Lecture, four hours; discussion, two hours. Preparation: prior satisfactory knowledge of molecular and cell biology coursework. Fundamental concepts and methodologies in modern biology and medicine, with emphasis on systems-based research and mechanistic understanding to human diseases and therapies as they apply to neural, immune, cardiovascular, and metabolic systems. Reading, review, and discussion of primary research literature ad-
Molecular Toxicology

Interdepartmental Program Jonathan and Karin Fielding School of Public Health
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Los Angeles, CA 90095-1772

Molecular Toxicology 310-206-1619 E-mail contact
Oliver Hankinson, PhD, Chair

Faculty Committee
Patrick Allard, PhD (Society and Genetics) Jesus A. Araujo, MD, PhD (Environmental Health Sciences, Medicine) Michael D. Collins, PhD (Environmental Health Sciences)

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Scope and Objectives
Faculty from 19 departments from six schools at UCLA, including chemistry and biochemistry, environmental health sciences, epidemiology, medicine, molecular and medical pharmacology, and pathology and laboratory medicine, have joined forces to create an interdisciplinary PhD program in Molecular Toxicology that is administered through the Fielding School of Public Health.

Specialties within the program include, but are not limited to, neurotoxicology, developmental toxicology, genetic toxicology, and carcinogenesis. There is a particular emphasis on mechanisms of toxicity, since it is now widely accepted that understanding mechanisms will provide the means for accurately determining risk.

New chemicals have been the basis for most of the technological developments during the past century, and there is no question that society has reaped enormous benefits from the creation and growth of the chemical industry. However, major health and environmental problems have also been the legacy of the synthesis of new chemical species. The discipline of toxicology, which seeks to characterize and elucidate the mechanisms of the problems related to exposure of chemical agents, has also developed from a purely descriptive to a mechanistic science whose objective is to understand the basis of toxin action, predict the toxicity of new chemical entities, and protect organisms from them. Toxicology has used the basic disciplines of chemistry, biochemistry, and cell biology to advance understanding of toxicological phenomena, and the growth of the sophistication of toxicology has paralleled the increase in knowledge derived from the basic chemical and biological sciences.

Graduate Study
Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Division website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Graduate Degree
The Molecular Toxicology Program offers the Doctor of Philosophy (PhD) degree in Molecular Toxicology.

Molecular Toxicology
Lower-Division Courses
19. Fiat Lux Freshman Seminars. (1) Seminar. One hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Course
197. Individual Studies in Molecular Toxicology. (2 to 4) Tutorial. Four hours. Limited to juniors/seniors. Individual intensive study, with scheduled meetings to be arranged between faculty member and student. Assigned reading and tangible evidence of mastery of subject matter required. May be repeated for credit. Individual contract required. P/NP or letter grading.

Graduate Courses
211A-211B-211C. Molecular Toxicology Seminars. (1–1–1) Seminar, one hour twice per month. Seminar series which alternately features outside speakers and members of UCLA molecular toxicology community (graduates, postdoctoral fellows, and faculty) and deals with topics relevant to molecular toxicology. In Progress (211A, 211B) and S/U (211C) grading.

M242. Toxicodynamics. (2) Seminar. (Same as Environmental Health Sciences M242.) Lecture, one hour; seminar, one hour. Preparation: undergraduate biology and chemistry courses. Requires: Environmental Health Sciences C240. Examination of recent literature on mechanisms of toxicity or toxicodynamics. Student presentation of papers selected by instructor on various aspects of toxic mechanisms, including free radical mechanisms, mechanisms of cell death, metal toxicity/ion homeostasis, intracellular pH and calcium regulation, stress and adaptive pathways, DNA repair/mutagenesis, carcinogenesis, and teratogenesis. Discussion of various papers. S/U or letter grading.

M247. Advanced Concepts in Gene-Environment Interactions. (4) Same as Environmental Health Sciences M241.) Lecture, three hours; discussion, one hour. Comprehensive and practical examination of emerging science of gene-environment interaction. Discussion of primary components of field, including role of metabolic pathways in modifying environmental responses and importance of environmental influences in human disease. Exploration of selected hot topics infeld, such as importance of epigenetics and of microbiome. S/U or letter grading.

296B-296F. Research Topics in Molecular Toxicology. (2–2) Research group meeting, two hours. Directed and supervised reading and literature in research specialty of faculty member teaching course. S/U grading: 296B, Molecular Carcinogenesis. 296F. Genetic Toxicology.

596. Directed Individual Study or Research. (2 to 12) Tutorial, to be arranged. Individual guided studies under direct faculty supervision. May not be applied toward degree course requirements. May be repeated for credit. S/U or letter grading.

597. Preparation for PhD Qualifying Examinations. (2 to 10) Tutorial, to be arranged. May not be applied toward PhD course requirements. May be repeated for credit. S/U grading.

599. Research for PhD Dissertation. (2 to 10) Tutorial, to be arranged. May not be applied toward PhD course requirements. May be repeated for credit. S/U grading.

99. Graduate Teaching Apprentice Practicum. (1 to 4) Tutorial, two hours. Discussion, analysis, and critique of original research literature. Letter grading.

296. Research Seminar. (2) Seminar, four hours. Preparation: prior satisfactory completion of Molecular Toxicology (262B). Seminar, two hours. Preparation: prior satisfactory completion of Molecular Toxicology (262B).

290A. Molecular Toxicology Seminar. (4–4–4) Seminar, four hours. Preparation: prior satisfactory completion of Molecular Toxicology (262B).

290B-290C. Tutorials. (4–4–4) Tutorial, to be arranged. Preparation: apprentice permitted. Teaching apprenticeship under active guidance and supervision of regular faculty member responsible for curriculum and instruction at UCLA. May not be applied toward PhD course requirements. May be repeated for credit. S/U grading.

290D. Molecular Toxicology Seminar. (4–4–4) Seminar, four hours. Preparation: prior satisfactory completion of Molecular Toxicology (262B).

290E-290F. Research Topics in Molecular Toxicology. (4) Research group meeting, two hours. Preparation: prior satisfactory completion of Molecular Toxicology (262B).

290G. Review of Literature, Discussion of Original Research, Search Literature. (1–1–1) Seminar, one hour. Preparation: prior satisfactory completion of Molecular Toxicology (262B).

290H. Letter-grading. (3) Seminar, three hours. Preparation: prior satisfactory completion of Molecular Toxicology (262B).

290I. Teaching Apprentice Practicum. (1 to 4) Tutorial, four hours. Preparation: prior satisfactory completion of Molecular Toxicology (262B).
Music

Herb Alpert School of Music

2539 Schoenberg Music Building
Box 951616
Los Angeles, CA 90095-1616

Music
310-825-4761

Travis J. Cross, DM, Chair

Professors

James K. Bass, DMA
Terence O. Blanchard (Kenny Burrell Professor of Jazz Studies)
Che-Yen Chen, MM
Lily Chen-Halteck, PhD
Vladimir Chernov, MM
Travis J. Cross, DM
Richard D. Danielpour, DMA
Michael E. Dean, MM
Inna Faliks, DMA
Juliana K. Gondekk, MM
Gordon Henderson, MME
Frank Heuser, PhD
Peter D. Kazarass, JD
William A. Kinderman, PhD (Leo M. Klein and Elaine Krown Klein Endowed Professor of Performance Studies)

Emeritus

Ian Krouse, DMA
David S. Leftowitiz, PhD
Jens H. Lindemann, MM
Antonio Lysy, PDip
Arturo O’Farrill, MM
Movses Pogossian, DMA
Neal H. Stulberg, MA

Professors Emeriti

Elaine R. Barkin, PhD
Roger Bourland, PhD
Kenneth E. Burrell, BA
Paul S. Chihara, PhD
Maurice Gerow, PhD
Gary G. Gray, MM
Frederick F. Hammond, PhD
Mark Kaplan, BA
D. Thomas Lee, DMA
Susan K. McClary, PhD
Donald Neuen, MA
James W. Newton, BM
Walter Ponce, DMA
Paul V. Reale, PhD
Jon Robertson, DMA
Robert Walser, PhD
Robert S. Winter, PhD (Presidential Professor Emeritus of Music and Interactive Arts)

Assistant Professors

Joscelin H. Ho, DMA
David Kaplan, DMA
Kay K. Rieh, DMA

Senior Lecturers SOE

John L. Hall, MM, Emeritus
Sheridan W. Stokes, Emeritus

Lecturer SOE

Maureen D. Hooper, EdD, Emerita

Lecturers

Boris V. Allakhtverdyan, MM
Sumner M. Arano, MM
Denis Bouriakov, PGDip
Erik Bouriakov, PGDip
David A. Brennan, DMA
Wendy L. Caldwell, BM
James E. Darrah, MFA
Jonathan D. Davis, DMA
Maria Fortuna Dean, MM
Dante L. De Silva, PhD
Cheryl L. Fielding, DMA
Theresa A. Dimond, DMA
Margaret M. Flanagan Lysy, PGDip
Paul G. Floyd, DMA
Aubrey D. Foard, MM
Peter R. Golub, PhD
Gregory S. Goodall, MFA
Rakefet R. Hak, MM
Victoria H. Kirsch, MA
James D. Lent, DMA
Iris Malkin, MM
Varty H. Manouelian, MM
Kevin O. McKeown, MM
Noah G. Meites, DMA
Dwayne S. Milburn, PhD
James T. Miller, MM
Lou Anne Neill, MA
Hitomi M. Oba, MA
Benjamin J. Phelps, PhD
Joshua H. Ranz, MM
Jean-Louis Rodrigue, MFA
Amy M. Sanchez, MM
Michele M. Scanlon, BA
John A. Steinmetz, MA
Meghan E. Turner, DMA
Lucy T. Yates, MM
Mildred H. Yi, EdD

Adjunct Professors

Christoph Bull, DMA
Gloria C. Cheng, DMA
Don E. Franzen, JD
Herbert J. Hancock, DFA
Christopher Hanulik, BM
Wayne Shorter, BME
Peter F. Yates, DMA

Adjunct Associate Professor

S. Daniel Szabo, DMA

Scope and Objectives

The Department of Music offers undergraduate and graduate training in Western classical music, with specialized undergraduate programs in music composition, education, and performance. Jazz performance is also offered at the graduate level. The department is aligned with the Departments of Ethnomusicology and Musicology and the interdepartmental program in Global Jazz Studies, and aspires to promote productive collaboration between performance and scholarship, a cross-cultural global understanding of the art of music, and preparatory training for a broad range of careers in music after students graduate.

The department offers four-year bachelor’s degrees in music, music composition, music education, and music performance. The curriculum for all four degrees balances a classically oriented program of practical, theoretical, and historical studies with related performance and academic studies in non-Western music. Designed for students who want to combine fine musicianship with academic excellence, all four degrees are based on a core curriculum of theory, history, analysis, and individual and group performance. The music education major additionally offers preparation in pedagogical skills and innovative insights into theories and practice essential to teach music to the diverse student population of California and offer leadership in the field of arts education.

At the graduate level, specialized studies leading to the degrees of Master of Arts and Doctor of Philosophy are offered in composition; specialized studies leading to the degrees of Master of Music and Doctor of Musical Arts are offered in all classical solo instruments, voice, and conducting. Jazz performance is offered at the master’s degree level. Students interested in a concentration in music history and literature should consider the major in Musicology, and those interested in a concentration in world music should consider the major in Ethnomusicology.

Undergraduate Study

The music majors are designated capstone majors. Through preparation for and execution of their senior capstone projects or recitals, students demonstrate mastery of program learning outcomes as well as a level of proficiency appropriate for their role in the recitals and their understanding of performance practices appropriate to the repertory being performed, as acquired in previous coursework and through research. Students also display their ability to assemble an effective program in terms of pacing and variety and demonstrate requisite stage presence along with an ability to communicate with their audience in performance.

Music BA

Capstone Major

Learning Outcomes

The Music major has the following learning outcomes:

• Proficiency appropriate for role in the recital
• Understanding of performance practices, as acquired through coursework and research, appropriate to the repertory being performed
• Ability to assemble an effective program in terms of pacing and variety
• Requisite stage presence and ability to communicate with audience in performance

Admission

Applications for the Music BA are not being accepted at this time.

Preparation for the Major

All entering freshmen are required to take the Music Theory Assessment Examination either during New Student Orientation or during zero week of fall quarter. The examination score is used to determine eligibility and placement in first-year music core courses (Music M6A, M6B, M6C, and 20A, 20B, 20C). Examination results may require enrollment in Music 3 as a requisite to both courses M6A and 20A. Entering transfer students with fewer than 15 units of prior music theory must take the Music Theory Assessment Examination.

Required: Music M6A, M6B, M6C, with grades of C− or better, 20A, 20B, 20C, with grades of C or better, 12 units from courses 60A through 61A, and two years (12 units) of performance organizations utilizing students’ major instruments (courses 185A through 185H and 186A through 186C), as assigned by the chair or designated faculty member.
The Major
Required: Music 120A, 120B, 120C, 140A, 140B, 140C, with grades of C or better, and six theory courses selected in consultation with a faculty adviser.

Music Composition BA
Capstone Major
Learning Outcomes
The Music Composition major has the following learning outcomes:

• Demonstrated artistic proficiency on a primary instrument or in voice
• Demonstrated excellent aural musicianship skills and a working knowledge of music theory and music history
• Composition of vocal, instrumental, and/or electronic music in varied genres and forms
• Demonstrated knowledge and application of vocal, instrumental, and electronic performance techniques and acoustical properties to scoring and orchestration, including proficiency with notation and sequencing software
• Demonstrated knowledge of counterpoint and polyphonic styles and textures in Renaissance, Baroque, Classical-Romantic, and/or contemporary practice
• Composition of at least one substantial piece of music and presentation of it in a concert setting, such as a senior recital

Admission
For new and change-of-major applicants, students must submit a portfolio of compositions prior to the required audition and interview with the composition faculty.

Preparation for the Major
All entering freshmen are required to take the Music Theory Assessment Examination either during New Student Orientation or during zero week of fall quarter. The examination score is used to determine eligibility and placement in first-year music core courses (Music M6A, M6B, M6C and 20A, 20B, 20C). Examination results may require enrollment in Music 3 as a requisite to both courses M6A and 20A. Entering transfer students must take the Music Theory Assessment Examination to determine placement in the appropriate music theory sequence.

Required: (1) Musicanship—Music M6A, M6B, M6C, with grades of C– or better; (2) Theory—Music 20A, 20B, 20C, with grades of C or better; (3) Instrumental studio—12 units from Music 60A through 60U in one instrument; (4) Composition studio—6 units of Music 66; (5) Large conducted ensembles—12 units from Music C185A through 185H using the student’s major instrument, as assigned by the chair or designated faculty member.

The Major
Required: (1) Theory—Music 120A, 120B, 120C, with grades of C or better; (2) History—Musicology 125A, 125B, 125C, with grades of C or better; (3) Advanced composition studio—10 units of Music 166; (4) Advanced composition concepts and techniques—Music 164A or 164B, 165A, 165B, 165C, 164A or 164B or 124C, C176; (5) Electives—at least 4 units selected from all upper-division ethnomusicology, global jazz studies, music, music industry, or musicology courses; (6) Capstone composition recital—Music 169. In senior year, each student must present a senior recital as part of the capstone course to be preceded by a scoring course (Music 124A or 124B or 124C); the 30-minute recital includes a printed program with notes. All recitals are videotaped and archived. Performances are evaluated by a jury.

Music Education BA
Capstone Major
Learning Outcomes
The Music Education major has the following learning outcomes:

• Demonstrated artistic proficiency on a primary instrument or in voice
• Demonstrated excellent aural musicianship skills and a working knowledge of music theory and music history
• Demonstrated knowledge of a varied repertory of music that includes Western, non-Western, and popular musical genres
• Development of pedagogical skills, assessment strategies, and musical leadership abilities in classroom, instrumental, and choral settings
• Development of the flexibility necessary to teach music in traditional and non-traditional settings

Admission
Applicants are required to audition in their primary performance medium and interview with the music education faculty.

Preparation for the Major
All entering freshmen are required to take the Music Theory Assessment Examination either during New Student Orientation or during zero week of fall quarter. The examination score is used to determine eligibility and placement in first-year music core courses (Music M6A, M6B, M6C and 20A, 20B, 20C). Examination results may require enrollment in Music 3 as a requisite to both courses M6A and 20A. Entering transfer students must take the Music Theory Assessment Examination to determine placement in the appropriate music theory sequence.

Required: (1) Musicanship—Music M6A, M6B, M6C, with grades of C– or better; (2) Theory—Music 20A, 20B, 20C, with grades of C or better; (3) Instrumental or vocal studio—12 units from Music 60A through 60U for instrumentalists of 15 units of Music 61A and 61C for vocalists; (4) Large conducted ensembles—18 units from Music C185A through 185H, as assigned by the chair or music education faculty member.

The Major
Required: (1) Theory—Music 120A, 120B, 120C, with grades of C or better; (2) History—Musicology 125A, 125B, 125C, with grades of C or better; (3) Music education—Music 110A, 110B, 110C, 118A, 118B, 114C, 114D, 114J, 115A, 115B, 115C, 116, 117, 119; (4) Advanced instrumental or voice studio—4 units from Music 160A through 160U for instrumentalists or 5 units of Music 161A and 161C for vocalists; (5) Public recital—2 units from Music 163A through 163V (vocalists must also enroll in Music 161C as corequisite to 163V) taken in the primary performance area; students must consult and receive approval from the assigned music education faculty member before scheduling recital, which may be scheduled as early as fall quarter of the junior year; and (6) Capstone project—Music 110D. All capstone projects in music education take the form of an electronic portfolio demonstrating mastery of program learning outcomes. The student’s portfolio must be submitted before Music 110D is completed.

Music Performance BM
Capstone Major
Learning Outcomes
The Music Performance major has the following learning outcomes:

• Demonstrated artistic proficiency on a primary instrument or in voice
• Demonstrated excellent aural musicianship skills and a working knowledge of music theory and music history
• Demonstrated artistic proficiency and flexibility as performer and collaborator in varied settings, including chamber ensembles and large conducted ensembles
• Demonstrated knowledge of history and performance repertoire for a primary instrument or voice and representative works for chamber and large conducted ensembles from the majors periods of Western classical music, including contemporary compositions
• Demonstrated ability to apply knowledge of compositional form, historical context, performance practices, extended techniques, nontraditional notation, and current issues to performance of Western classical music
• Demonstrated knowledge about genres other than Western classical music or the scholarly study of music and/or the business practices associated with the music industry
• Conception, preparation, and performance of a public solo recital of Western classical music, including a printed program and program notes

Admission
Applicants are required to audition in their principal performance medium and interview with the music performance faculty.
Preparation for the Major

All entering freshmen are required to take the Music Theory Assessment Examination either during New Student Orientation or during zero week of fall quarter. The examination score is used to determine eligibility and placement in first-year music core courses (Music M6A, M6B, M6C and 20A, 20B, 20C). Examination results may require enrollment in Music 3 as a requisite to both courses M6A and 20A. Entering transfer students must take the Music Theory Assessment Examination to determine placement in the appropriate music theory sequence.

Required: (1) Musicianship—Music M6A, M6B, M6C, with grades of C- or better; (2) Theory—20A, 20B, 20C, with grades of C or better.

Based on instrument or voice, one concentration selected below:

Brass, percussion, and woodwinds: (1) Instrumental studio—12 units from Music 60A through 60J; (2) Chamber ensembles—4 units from Music C175A through C175G; (3) Large conducted ensembles—12 units from Music C185D through 185H.

Keyboard: (1) Instrumental studio—12 units from Music 60S, 60T, or 60U; (2) Chamber ensembles, keyboard literature, and accompanying—8 units from Music C175A through C175G, C171, or C188A; (3) Large conducted ensembles—6 units from Music C185A through 185H.

Strings: (1) Instrumental studio—12 units from Music 60K through 60L; (2) Chamber ensembles—6 units from Music C175A through C175G; (3) Large conducted ensembles—12 units from Music C185D or C185E.

Voice: (1) Voice studio and voice coaching—18 units of Music 61A and 61B; (2) Singing diction—Music 74A, 74B, 74C; (3) Large conducted ensembles—12 units from Music C185A through C185C; (4) Language—one college year—or at least one course at level three—of French, German, Italian, or Spanish, which may be used to fulfill the school language requirement.

The Major

Required: (1) Theory—Music 120A, 120B, 120C, with grades of C or better; (2) History—140A, 140B, 140C, with grades of C or better.

Based on instrument or voice, one concentration selected below:

Brass, percussion, and woodwinds: (1) Advanced instrumental studio—10 units from Music 160A through 160J; (2) Chamber ensembles—4 units from Music C175A through C175G; (3) Large conducted ensembles—12 units from Music C185D through 185H; (4) Electives—at least 8 units of upper division electives from ethnomusicology, global jazz studies, music, music industry, or musicology; (5) Capstone instrumental recital—one course from Music 167S, 167T, or 167U. In senior year, each student must present a senior recital as part of the capstone course; the 45–55-minute recital will include a printed program with notes. All recitals are videotaped and archived; performances are evaluated by a jury.

Strings: (1) Instrumental studio—10 units from Music 160K through 160L; (2) Chamber ensembles—6 units from Music C175A through C175G; (3) Large conducted ensembles—6 units from Music C175A through C175G; (4) Electives—at least 12 units of upper division electives from ethnomusicology, global jazz studies, music, music industry, or musicology; (5) Capstone instrumental recital—one course from Music 167K through 167L. In senior year, each student must present a senior recital as part of the capstone course; the 45–55-minute recital will include a printed program with notes. All recitals are videotaped and archived; performances are evaluated by a jury.

Voice: (1) Advanced voice studio and advanced voice coaching—15 units of Music 161A and 161B; (2) Advanced vocal repertoire, diction, and interpretation—4 units from Music C185A through C185G; (3) Large conducted ensembles—12 units from Music C185B, C185B, or C185C; (4) Electives—at least 4 units of upper division electives from ethnomusicology, global jazz studies, music, music industry, or musicology; (5) Capstone voice recital—Music 161B and 161C. In senior year, each student must present a senior recital as part of the capstone course; the 45–55-minute recital will include a printed program with notes. All recitals are videotaped and archived; performances are evaluated by a jury.

Graduate Study

Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Division website.

Graduate Degrees

The Department of Music offers the Master of Music (MM) degree, Doctor of Musical Arts (DMA) degree, and Master of Arts (M.A.) Candidate in Philosophy (CPhil), and Doctor of Philosophy (PhD) degrees in Music.

Music

Lower-Division Courses

3. Preparatory Music Theory. (4) Lecture, four hours; laboratory, one hour. Course in music fundamentals, including musicianship, theory, and terminology. Letter grading.

M6A-M6B-M6C. Introduction to Musicianship. (2–2) (Same as Ethnomusicology M6A-M6B-M6C and Musicology M6A-M6B-M6C.) Laboratory, four hours. Preparation: placement examination. Course M6A is enforced requisite to M6B, which is enforced requisite to M6C. Students must receive grade of C- or better to proceed to next course in sequence. Introduction to musicianship through in-depth exploration of basic common musical elements and training in aural recognition, sight singing, dictation, and keyboard skills. Focus on topics such as tonal and modal harmony, rhythm, improvisation, composition, notation, and ear training to prepare students for later theory courses, participation in music ensembles, advanced study in music, and professional careers. Letter grading.

7. Understanding Movie Music. (4) Lecture, four hours; outside study, eight hours. Musical experience helpful but not required. Brief historical survey of film music, with strong emphasis on recent development: Japanese animation, advertising, and MTV, as well as computer tools and digital scoring methods. Designed to inspire and inform those interested in movie music. Offered in summer only, P/NP or letter grading.

15. Art of Listening. (5) Seminar, three hours; discussion, one hour; outside study, 11 hours. Acquisition of listening skills through direct interaction with live performance, performers, and composers. Relationship of listening to theoretical, analytical, historical, and cultural frameworks. Music as aesthetic experience and cultural practice. P/NP or letter grading.


19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

20A. Music Theory I. (3) Lecture, four hours. Prepara-tion: passing score on departmental examination. Course 20A is enforced requisite to 20C. Students must receive grade of C or better to proceed to next course in sequence. Theory: species counterpoint through fifth species; description of triads and inversions. P/NP or letter grading.

20B. Music Theory II. (3) Lecture, four hours. Enforced requisite: course 20A with grade of C or better. Theory: diatonic harmony through secondary domi-nants and diminished sevenths; modulations to domi-nant and relative keys; writing of four-part chorales; style composition in baroque dance forms; introduc-tion to figured bass notation. P/NP or letter grading.

20C. Music Theory III. (3) Lecture, four hours. Enforced requisite: course 20B with grade of C or better. Theory: chromatic harmony including development of tonality, 1800 to 1850; appropriate analysis and style composition. P/NP or letter grading.


50. Alexander Technique. (2) Formerly numbered 940P. Lecture, four hours; outside preparation and practice, two hours. Limited to Ethnomusicology, Music, and Musicology majors. Introduction to prin-ciples of Alexander technique. Study of musician’s pos-ture and attitude at instrument, and keyboard move-ment as application of theory. Designed to help instru-mentalists and vocalists prevent injuries and performance anxiety. May be repeated with consent of instructor. Letter grading.

60A-60U. Instrumental Studio. (2 each) Studio, one hour; outside practice, six to eight hours. Limited to freshman/sophomore Music Performance majors and junior Music Education and Composition ma-jors. Students must perform in one instrument each during academic year. Grades are assigned by applied in-structor in fall and winter quarters and by jury exami-nation in spring quarter. May be repeated for max-
atorium. In-depth exploration of polyphonic styles and techniques since 1750, with emphasis on late-19th and 20th-century modes of expression, through writing and analysis. Letter grading.

106A. Orchestration I. (4) Discussion, three hours. Requisites: courses 120A, 120C (accelerated section), 123C. Ranges and characteristics of instruments, with exercises in scoring. P/NP or letter grading.

106B. Orchestration II. (4) Discussion, three hours. Requisites: courses 106A, 120C (accelerated section), 123C. Scoring and analysis for ensembles and full orchestra. P/NP or letter grading.

C109A. Oboe Reed Making. (1) Activity, one hour; outside study, two hours. Enrollement by consent of instructor. Introduction and overview of oboe reed making, including tools and techniques necessary to develop and maintain oboe reeds. May be repeated for credit. May be concurrently scheduled with course C209B. P/NP or letter grading.

C109B. Bassoon Reed Making. (1) Activity, one hour; outside study, two to three hours. Enrollement by consent of instructor. Introduction, overview, and hands-on training with tools and techniques necessary to develop and maintain bassoon reeds. May be repeated for credit. May be concurrently scheduled with course C209B. P/NP or letter grading.

110A. Learning Approaches in Music Education. (4) Lecture, two hours; activity, two hours; outside study, eight hours. Enrollement by consent of course 20A. Introduction to music education by development of concepts, attitudes, and skills necessary to teach music and philosophical, historical, cultural, and psychological foundations of music education, with emphasis on learning theories and psychology of music learning. Contextualization of concepts by engaging in nonno-tional modes of music learning, including systematicaural transmission and informal learning. Letter grading.

110B. Musicality and Creativity in Childhood. (4) Lecture, two hours; activity, two hours; outside study, eight hours. Requisites: courses 20B, 110C, 116B, 120A, 120B, 120C. Preparation of music education students for teaching music at preschool and elementary school levels. Development of understanding of developmental characteristics of young children, and the learning needs of children and design of effective instructional strategies that are age-appropriate and responsive to children’s background. Focus on practice of student-centered curriculum where students are active learners and teachers are facilitators to become proficient in providing children with music learning environment that is conducive to optimal growth in their musicality and creativity. Frequent field visits. Letter grading.

110C. Comparative Study of Choral Music Education. (4) Lecture, two hours; activity, one hour; fieldwork, one hour; outside study, eight hours. Requisites: courses 20A, 20B, 20C, 116A, 116B, 120A, 120B, 120C. Preparation of music education students for teaching choral music at middle and high school levels. Development of understanding of developmental and characteristical characteristics, and the learning needs of adolescents and design of effective instructional strategies that are age-appropriate and responsive to students’ background. Emphasis on practices, processes in the world of choral music of American and world serve as basis of comparative study, with emphasis on comprehensive music education through performance. Frequent field visits. Letter grading.

110D. Comparative Study of Instrumental Music Education. (4) Lecture, two hours; activity, one hour; fieldwork, one hour; outside study, eight hours. Enrollement by consent of courses 20A, 20B, 20C, 110A, 120A, 120B, 120C. Critical study and analysis of philosophy,
history, organization, curriculum, and literature of music programs for elementary and secondary instrumental music instruction in traditional and nontraditional settings. Development of strategies and techniques to teach music in group settings. Completion of capstone projects in the form of electronic portfolios demonstrating mastery of program learning outcomes. Frequent field visits. Letter grading.

112. Guided Field Experiences in Music Education.
(1) Field studies, three hours. Initial field experiences for students to function successfully in general music, instrumental ensemble, and choral ensemble classes. Letter grading.

114A-114B. Study of Instrumental Techniques. (1–2) Studio, three hours. Requisite or corequisite: course 20A. Applied studies in basic performance techniques and tutorial materials. Each course may be repeated once for credit. Letter grading. 114A. High Strings. 114B. Low Strings.

114C-114D. Vocal Techniques for Music Education I, II, (1–2) Study, three hours; outside study, one hour. Letter grading. 114C. Introduction to basic vocal techniques, breath and body, vocal mechanism, health and care of voice, and instructional techniques. 114D. Requisites: corequisite 114C. Introduction to the art of teaching voice, focusing on vocal instruction in choral classroom. Focus on application of vocal techniques to choral music teaching at K-12 school settings. Letter grading.

114J. Piano Skill in Classroom. (1) Activity. Two hours. Designed for Music Education majors. Development of piano skills and competencies that enable students to function successfully in general music, instrumental ensemble, and choral ensemble classes. Letter grading.

115A-115B-115C. Study of Instrumental Techniques. (2–2–2) Studio, four hours; outside study, two hours. Application of music performance techniques and tutorial materials designed to give music education students knowledge to teach basic instrumental concepts. Letter grading. 115A. Woodwinds. 115B. Brass. 115C. Percussion.


117. Study and Conducting of Instrumental and Choral Literature. (2) Lecture, three hours. Requisite: course 116. Study and practice of conducting both instrumental and choral repertoire. In addition to further development of conducting skills, focuses on conducting technique, rehearsal techniques, style, and interpretation as applied to choral and instrumental repertoire. Letter grading.

C118A. Advanced Choral Conducting. (2) Lecture, one hour; studio, two hours. Requisites: courses 116, 117. Conducting basics, baton technique, beat patterns, dynamics, score preparation and analysis. May be repeated once for credit. Concurrently scheduled with course C218A. P/NP or letter grading.

C118B. Choral Techniques and Methods. (2) Lecture, one hour; studio, two hours. Requisites: courses 116, 117, 118A. Vocal and choral pedagogy, vocalizing and counting, diction, rehearsal techniques, and audition techniques. May be repeated once for credit. Concurrently scheduled with course C218B. P/ NP or letter grading.

118. Jazz and Technology Pedagogy. (3) (Formerly numbered 100C.) Lecture, two hours; activity, two hours; outside study, five hours. Enforced requisites: courses 20A, 20B, 20C, 110A, 120A, 120B, 120C. Foundations for teaching jazz by development of understanding of diction, rhythm, improvisation, and uses of technology in jazz education. Technology understanding includes basic concepts of sequencing, composition, ensemble performance, and creation of multimedia presentations using iPad technology. Letter grading.

120A. Music Theory IV. (4) Lecture, four hours; discussion, four hours. Preparation: passing score on departmental first-year examination. Requisite: course 20C with grade of C (2.0) or better. Theory: baroque counterpoint including chorale prelude; two-part invention and exposition and first modulation of three-part invention; canon; principles; analysis of inversions, canons, and fugues. Musician ship: singing of extended chromatic melodies; advanced harmonic dictation; applied dictation; keyboard harmonization of modulating melodies; elementary score reading. P/ NP or letter grading.

120B. Music Theory V. (4) Lecture, four hours; discussion, four hours. Requisite: course 120A. Theory: advanced chromatic harmony including development of harmony from 1850; analytical projects; style composition. Musician ship: advanced score reading; advanced harmonic dictation; preparation for departmental examination. P/NP or letter grading.

120C. Music Theory VI. (4) Lecture, four hours; discussion, two hours; listening, two hours. Requisite: course 120B with grade of C (2.0) or better. Theory: 20th-century history, including nonfunctional harmony, polytonality, free atonality, serialism, and minimalism. P/NP or letter grading.

121. Special Topics in 20th-Century Music. (4) Lecture, four hours; discussion, four hours. Requisites: courses 106B, 120C (accelerated section), 120A, 120B, 120C. In-depth study of certain aspects of 20th-century music ranging from individual composers and schools to ideological or stylistic concerns. May be repeated once for credit. P/NP or letter grading.


123A. Scoring for Symphony Orchestra. (4) Discussion, three hours. Requisites: courses 106B, 120C (accelerated section), 123C. Practical applications in scoring for choral ensembles. Preparation and production of parts and full scores. At least one reading by UCLA Philharmonia Orchestra scheduled. Letter grading.

124B. Scoring for Wind Ensemble. (4) Discussion, three hours. Requisites: courses 106B, 120C (accelerated section), 123C. Practical applications in scoring for large wind ensembles. Preparation and production of score and parts. May include percussion. At least one reading by UCLA Wind Ensemble scheduled. Letter grading.

124C. Scoring and Arranging for Choral Ensemble. (4) Discussion, three hours. Requisites: 106B, 120C (accelerated section), 123C. Practical applications in scoring and arranging for choral ensembles, including a capella as well as chorus with instruments. Preparation and production of score and parts. At least one reading by UCLA Chorale or other choral group scheduled. Letter grading.

M131. Development of Latin Jazz. (4) (Same as Ethnomusicology M131 and Global Jazz Studies M131) Lecture, four hours; discussion, one hour. Survey of historical and stylistic development of musical style referred to today as Latin jazz. P/NP or letter grading.

M134A. Introduction to Armenian Music. (4) (Same as Armenian M134 and Ethnomusicology M134) Lecture, four hours; discussion, one hour. Survey of Western music; examination of representative compositions within their cultural contexts and historical and stylistic development of musical style. Letter grading.


160A-160U. Advanced Instrumental Studio. (2 each) Studio, one hour; outside practice, six to eight hours. Requisite: enrollment in a music performance major and Junior Music Education and Music Composition majors. Students must perform in noon concert once during their junior year. Grades are assigned by applied instructor in fall and winter quarters and by jury examination in spring quarter. May be repeated for maximum of 10 units. P/NP or letter grading. 160A. Flute. (Formerly numbered 161A.) 160B. Oboe. (Formerly numbered 161B.) 160C. Bassoon. (Formerly numbered 161D.) 160D. Clarinet. (Formerly numbered 161C.) 160E. Saxophone. (Formerly numbered 161E.) 160F. French Horn. (Formerly numbered 160G.) 160G. Trumpet. (Formerly numbered 162A.) 160H. Trombone. (Formerly numbered 162C.) 160I. Tuba/Euphonium. (Formerly numbered 162D.) 160J. Percussion. (Formerly numbered 162E.) 160K. Violin. (Formerly numbered 160A.) 160L. Viola. (Formerly numbered 160B.) 160M. Cello. (Formerly numbered 160C.) 160N. String Bass. (Formerly numbered 160D.) 160O. Harp. (Formerly numbered 160E.) 160P. Guitar. (Formerly numbered 160F.) 160Q. Lute. (Formerly numbered 160K.) 160R. Viola da Gamba. (Formerly numbered 160G.) 160S. Piano. (Formerly numbered 164A.) 160T. Organ. (Formerly numbered 164B.) 160U. Harpsichord. (Formerly numbered 164C.)

161A. Advanced Voice Studio. (2) (Formerly numbered 165.) Studio, one hour; outside practice, six to eight hours. Corequisite: course 161B or 161C. Limited to music performance majors specializing in voice. Voice techniques and health, including breath control, pitch accuracy, range, resonance, and flexibility. May be repeated for credit for a maximum of 10 units. P/NP or letter grading.

161B. Advanced Vocal Coaching. (1) Studio, one hour; outside practice, three hours. Corequisite: course 161A. Limited to upper-division Music Performance majors specializing in voice. Emphasis on repertoire and improving performance. Grades are assigned by studio instructor in conjunction with student’s vocal coach for fall and winter quarters and by jury examination in spring quarter. May be repeated for maximum of 6 units. P/NP or letter grading.
161C. Advanced Vocal Coaching for Music Education Specialists. (5) Studio, 30 minutes; outside practice, 90 minutes. Corequisite: course 161A. Limited to upper-division Music Education majors. Emphasis on repertoire and improving performance. Grading: pass/no pass. Enforced requisites: studio instructor in conjunction with student's vocal coach for fall and winter quarters and by jury examination in spring quarter. May be repeated for maximum of 1.5 units. P/NP or letter grading.

163A-163C. Recital for Music Education Majors. (2 each) Studio, one hour; outside practice, six to eight hours. Limited to junior/senior Music Education majors. Performance preparation and recital comprising 30 minutes of music, including printed program. Recital is videotaped, archived, and evaluated by jury; written feedback is provided to student within two weeks of recital. Letter grading. 163A. Flute. 163B. Oboe. 163C. Bassoon. 163D. Clarinet. 163E. Saxophone. 163F. French Horn. 163G. Trumpet. 163H. Trombone. 163I. Tuba/Euphonium. 163J. Percussion. 163K. Violin. 163L. Viola. 163M. Cello. 163N. String Bass. 163O. Harp. 163P. Guitar. 163Q. Lute. 163R. Viola da Gamba. 163S. Piano. 163T. Organ. 163U. Harpsichord. 163V. Voice. Corequisite: course 161C.

166. Advanced Composition Studio. (2) Studio, one hour; outside study, five hours. Enforced requisite: course 66 (6 units). Limited to junior/senior music composition students. One-on-one composition lessons with studio instructor to follow student progress and level of achievement. Lessons address counterpoint, voice-leading, harmonic and melodic construction, orchestration, form, texture, style, musical coherence and musicality. May be repeated for credit. P/NP or letter grading.


168. Capstone Voice Recital. (2) Studio, one hour; outside practice, six to eight hours. Corequisite: courses 167A-167U. Senior Music Performance majors. Planning and completion of senior capstone recital comprising 45 to 55 minutes of music, including printed program. Preparation for capstone recital, as well as individual and group lessons. Recital is videotaped, archived, and evaluated by jury; written feedback is provided to student within two weeks of recital. Letter grading.

169. Capstone Composition Recital. (2) Studio, one hour; outside study, five hours. Enforced requisite: courses 124A or 124B or 124C, and 166 (at least 15 units). Limited to senior Music Composition majors. Planning and completion of senior capstone recital comprising 45 to 55 minutes of original music. Performance preparation for capstone recital, as well as composition lessons. Recital is videotaped, archived, and evaluated by jury; written feedback is provided to student within two weeks of recital. Letter grading.

171. Selected Topics in Keyboard Literature. (2) (Formerly numbered C167) Lecture, two hours. Enforced corequisite: one course from 60S, 60T, 60U, 160S, 160T, 160U. In-depth study of selected topics in keyboard literature, concentrating on problems of performance through analysis, historical and comparative studies, and actual performances by participants. May be repeated for credit, but may be repeated for credit and concurrently scheduled with course 271, P/NP or letter grading.


175C. Chamber Ensembles. (2) (Formerly numbered C175C) Activity, four hours. Preparation: audition. Performance experience in chamber music of all periods appropriate for concert choral ensemble. May be repeated for credit without limitation. May be concurrently scheduled with course C480A. P/NP or letter grading.

175D. Percussion Ensemble. (2) (Formerly numbered 209C) Activity, four hours. Preparation: audition. Emphasis on study of original music with emphasis on repertoire, stage movement and following the director's instructions. May be repeated for credit without limitation. May be concurrently scheduled with course C480B. P/NP or letter grading.

175E. Opera Workshop. (2) (Formerly numbered 209D) Activity, six hours. Preparation: audition. Large mixed ensemble performing choral music of all periods appropriate for concert choral ensemble. May be repeated for credit without limitation. May be concurrently scheduled with course C480B. P/NP or letter grading.

175F. Symphony Orchestra. (2) (Formerly numbered C175E) Activity, three hours. Preparation: audition. Group performance of symphonic orchestra literature. May be repeated for credit without limitation. May be concurrently scheduled with course C480D. P/NP or letter grading.

185C. Philharmonia. (2) Activity, six hours. Preparation: audition. Designed primarily for Music Performance majors. Group performance of symphonic orchestra literature, as well as orchestral accompaniment for operatic and major choral works. May be repeated for credit without limitation. May be concurrently scheduled with course C480E. P/NP or letter grading.

185F. Band. (2) (Formerly numbered 90F) Activity, two hours. Preparation: audition. Large mixed ensemble, including wind, percussion, strings, guitar, piano, and keyboard. May be repeated for credit without limitation. May be concurrently scheduled with course C480F. P/NP or letter grading.


185H. Marching and Varsity Bands. (2) (Formerly numbered 90H) Activity, six hours. Preparation: audition. Group performance of special band arrangements for football and basketball games as well as special events. May be repeated for credit without limitation. P/NP or letter grading.

C186A. Piano/Keyboard Accompanying. (2) (Formerly numbered C90Q) Activity, four hours; outside study, two hours. Collaboration with large ensembles, instrumentalists, and vocalists. Performance includes, but is not limited to, recitals. Includes special studio projects, master classes, concerts, auditions, juries, and recitals. May be repeated for maximum of 12 units. Concurrently scheduled with course C484A. P/NP or letter grading.

C186B. Guitar Accompanying. (2) (Formerly numbered C90S) Activity, four hours; outside study, two hours. Collaboration with instrumentalists and/or vocalists in role of accompanists. Performance includes, but is not limited to, recitals. Includes special studio projects, master classes, concerts, auditions, juries, and recitals. May be repeated for credit without limitation. Concurrently scheduled with course C484C. P/NP or letter grading.

C186C. Harp Accompanying. (2) (Formerly numbered C90U) Activity, four hours; outside study, two hours. Collaboration with instrumentalists and/or vocalists in role of accompanists. Performance includes, but is not limited to, recitals. Includes special studio projects, master classes, concerts, auditions, juries, and recitals. May be repeated for credit without limitation. Concurrently scheduled with course C484C. P/NP or letter grading.

188A. Individual Studies for USIE Facilitators. (1) Tutorial, to be arranged. Enforced corequisite: Honors Collegium 101E. Limited to senior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to fulfill USIE seminar topic, conduct preparatory research, and begin preparation of syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.

188B. Individual Studies for USIE Facilitators. (1) Tutorial, to be arranged. Enforced requisite: course 188A. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to fulfill USIE seminar topic, conduct preparatory research, and begin preparation of syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.

188C. Individual Studies for USIE Facilitators. (2) Tutorial, to be arranged. Enforced requisite: course 188B. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to fulfill USIE seminar topic, conduct preparatory research, and begin preparation of syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.

189. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

195. Community or Corporate Internships in Music. (2 to 4) Tutorial, six hours. Limited to juniors/seniors. Internship in supervised setting in community agency or business. Students meet on regular basis with supervising instructor and submit periodic reports of their work experiences. May be repeated for maximum of 8 units. Individual contract with supervising faculty member required. P/NP grading.

197. Individual Studies in Music. (2 to 4) Tutorial, one hour. Preparation: 3.0 grade-point average, limited to seniors. Individual intensive study in music, with scheduled meetings to be arranged between faculty member and student. Evidence of mastery of a subject matter (project) required. May be repeated for maximum of 8 units. Individual contract required. P/NP or letter grading.
Graduate Courses

M201. Repertory and Analysis. (2) Same as Musicology M201.) Seminar, two hours. Requisite or corequi-
site: Musicology 200A. Exploration of defined reper-
tory through readings and analysis. Specific topics vary. May be repeated for credit. S/U grading.

202. Analysis for Performers. (4) Lecture, three hours; outside study, nine hours. Designed for grad-
eduate students. Survey of analytical techniques and ap-
proaches required for professional performers, in-
cluding phrase structure, harmonic rhythm and pro-
longation, small and large forms, theories of musical coherence, and understanding of styles. Letter grading.

203. Notation and Performance. (4) Lecture, three hours; outside study, nine hours. Designed for grad-
eduate music students. Survey of analysis evidence per-
formers use to make their interpretive decisions in per-
formance of vocal and instrumental music of Euro-
pean tradition. Topics include editions, treatises, tempo indications, expressive notation, use and influ-
ence of recordings, composer-performer relationship, and nonstandard notation: orchestration.

204. Music Bibliography for Performers. (4) Lecture, three hours; outside study, nine hours. Designed for graduate music performance students. Survey of general bibliographic techniques in music, with em-
phasis on materials for performing musicians. Letter grading.

C209A. Oboe Reed Making. (1) Activity, one hour; outside study, two hours. Enrollment by consent of in-
structor. Introduction and overview of oboe reed making, including hands on training with tools and tech-
niques necessary to develop and maintain oboe reeds. May be repeated for credit. May be con-
currently scheduled with course C209B. S/U or letter grading.

C209B. Bassoon Reed Making. (1) Activity, one hour; outside study, two to three hours. Enrollment by consent of in-
structor. Introduction, overview, and hands-on training with tools and tech-
niques necessary to develop and maintain bassoon reeds. May be repeated for credit. May be concurrently scheduled with course C109B. S/U or letter grading.

C218A. Advanced Choral Conducting. (2) Lecture, one hour; studio, two hours. Requisites: courses 116, 117. Conducting basics, baton technique, beat pat-
tterns, dynamics, score preparation and analysis. May be repeated once for credit. Concurrently scheduled with course C118A. S/U or letter grading.

C218B. Choral Techniques and Methods. (2) Lecture, one hour; studio, two hours. Requisites: courses 116, 117, C218A. Vocal and choral pedagogy, vocal-
izing and warm-up techniques, dictation, and rehearsal and auditions. May be repeated once for credit. Concurrently scheduled with course C118B. Letter grading.

C226. Electronic Music Composition. (4) Lecture, three hours; laboratory, three hours. Preparation: an ad-
vanced experience and accomplishment in serious composition (art music), two years of music theory. Designed for graduate students. Limited enrollment. Exercises in methods of composition written for fixed instru-
ments. Letter grading.

254. Advanced Music Analysis: Pre-Tonal Music. (4) Seminar, three hours. Designed to provide grade-
uate composition students with in-depth exposure to complex and rich works of middle Ages through dawn of baroque era. Exploration of analytical tech-
niques and methods in analysis of works of tonal and post-tonal periods, and ap-
proaches to musical structures used by composers before modern tonal harmonic syntax had fully devel-
oped. Letter grading.

255. Advanced Music Analysis: Tonal Music. (4) Seminar, three hours. Discussion of theoretic ap-
proaches to and analysis of selected works of common-practice. Analysis of assigned pieces using various theoretic approaches discussed and presentation of analyses in class. Letter grading.


260A. Seminar: Composition for Picture and Television. (8) Seminar, three hours; laboratory, three hours. Practical experience in composing for commercial movies. Difference between underscore and source music; realistic vs. surrealistic effect when they merge, as in MTV, dream sequences, or montages. Study of three principal areas of film-
making—preproduction, production (shooting), and postproduction. Emphasis on methods of scoring of classical movies and discussion of their scores. Composition of actual cues for acoustic instruments coordinated to picture to be term project. Separate cues involve dialogue, melo-
drama, comedy, chase, memory montage, and ten-
sion. Letter grading.

260B. Seminar: Composition for Picture and Television. (8) Seminar, three hours; laboratory, three hours. Focus on task of completing entire score for television. Soundtracks for classical student film. Discussion of recent television shows. Composition of one original title song and short cues to some new song required. Term assignment involves stu-
dent orchestra recording to picture, designed to ap-
proximate actual conditions of completing profes-
sional Hollywood assignment, from spotting to scoring.

261A-261J. Problems in Performance Practices. (4 each) Seminar, three hours; outside study, nine hours. Limited to graduate performance students. Investiga-
tion of primary source readings in performance prac-
tices and historical aspects of period and tech-
ical aspects of performance practice. Limited to graduate performance students. Limited to graduate performance students. Limited to graduate performance students. May be repeated for credit. Letter grading.


266. Graduate Composition Studio. (4) Studio, one hour arranged with instructor; outside study, 11 hours. Limited to graduate composition students. One-on-
one composition lessons, with assignments and com-
positions tailored to each student’s progress and level of achievement, addressing counterpoint, voice-
leading, harmonic and melodic construction, orches-
tration, form, texture, style, notation, and performance feasibility in composition at the advanced level. Presentation of at least one composition com-
piled during course in graduate composition concert during academic year. May be repeated for credit with the consent of instructor. Letter grading.

270A-270G. Seminars: Music Education. (6 each) Seminar, three hours. May be repeated for credit with the consent of instructor. S/U or letter grading.

270A. History. 270B. Non-Western Music. 270C. Curriculum Informa-
tions; 270D. Tests and Measurements; 270E. Choral Literature; 270F. Instrumental Literature; 270G. Gen-
eral Topics.

C271. Selected Topics in Keyboard Literature. (2) Formerly numbered C287.) Lecture, two hours. En-
forced corequisite: course 460S or 460L or 460U. In-
depth study of selected topics in keyboard literature, concentrating on problems of performance through analysis, historical and comparative studies, and ac-
tual performances by participants. May be repeated for credit. May be concurrently scheduled with course C171. S/U or letter grading.

C282. Music Industry. (4) Same as Ethnomusi-
cology C288 and Musicology C288.) Lecture, four hours; discussion, five hours; outside study, seven hours. Studied the Ethnomusicology of music indus-
tory on way music is created, performed, listened to, evaluated, and used today. Historical approach taken, beginning with music published in 18th century and continuing through development of audio record-
ngs and popular music today. Concurrently scheduled with course CM182. Letter grading.

C283. Composition Forum. (2) Seminar, two hours. Weekly forum to present professional composers of range of mediums, including large ensemble vocal and/or instrumental works, chamber music, electronic music, and film/television, as guest lecturers. Letter grading.

292. Seminar: Special Topics in Music. (4) Seminar, three hours. Exploration of topics in music through va-
riety of approaches that may include projects, perfor-
mances, readings, discusssions, research papers, and oral presentations. Topics announced in advance. May be repeated for credit. S/U or letter grading.

330. Introduction to Orff Schulwerk. (2) Lecture, 10 hours; discussion, five hours; laboratory, 15 hours. In-
troduction to techniques and methods of Orff Schulwerk, and music therapists who have had little or no previous ex-
prience with Orff Schulwerk. Introduction to Orff Schulwerk, including history, philosophy, and teaching processes of this approach to music instruction for children. Offered in summer only. S/U or letter grading.

331A-331B-331C. Orff Schulwerk Training Courses. (4—4—4) Formerly numbered S331A-S331B-S331C.) Lecture, four hours; discussion, one hour. Requisite: course 330. Course 331A is requisite to 331B, which is requisite to 331C. In-depth courses in teaching of Orff Schulwerk approach to music instruction for children. May be repeated for credit without limitation. S/U or letter grading.

331A. Level I (Beginning); 331B. Level II (Intermediate); 331C. Level III (Advanced).
technical skills for solving real challenges in choral conducting and teaching. Topics include innovative choral methods, choral conducting, vocal pedagogy, voice classification, and survey of standard and current choral literature. S/U or letter grading.

350B. Introduction to Computer-based Instruction of Music. (2) Lecture, one hour; laboratory, two hours. Introduction to instructional uses of computers in music classroom, with emphasis on practical information necessary to intelligently purchase and implement music instruction software in schools. Courseware is to be experienced and reviewed, jargon defined and illustrated, and practical hands-on experience obtained. May be repeated for credit without limitation. Offered in summer only. S/U or letter grading.

350B. Exploration of MIDI Computer Resources: Keyboards and Synthesizers. (2) Lecture; two hours, laboratory; three hours. Creative use of MIDI-based synthesizers in laboratory with exploration of available hardware resources allied with various software sequencing packages. Use of software for computer-based music printing, hands-on experience. May be repeated for credit without limitation. Offered in summer only. S/U or letter grading.

371. Marching Band in Secondary Education. (2) Lecture, two hours. Study of contemporary marching band as component of music curriculum in secondary education. In-depth approaches to practice and problems associated with marching bands, as well as historical perspective. S/U or letter grading.

375. Teaching Apprentice Practicum. (1 to 4) Seminars, to be arranged. Preparation: apprentice personnel employment as teaching assistant, associate, or fellow. Teaching apprenticeship under active guidance and supervision of regular faculty member responsible for curriculum and instruction at UCLA. May be repeated for credit. S/U grading.

401. New Music Forum. (2) Tutorial/laboratory, two hours. Preparation: one year of graduate study in music at UCLA. Interactive course in preparation and performance-experience, especially for graduate performer or graduates by performer composer at UCLA. Letter grading.

450. Keyboard Skills for Pianists. (2) Activity, two hours; outside study, four hours. Applied music course with focus on necessary skills for piano performance. Areas include sight playing, score reading, transposition, figured bass, harmonization, improvisation, score reduction, and ensemble issues. Concurrently scheduled with course 451A. Letter grading.

455. Instrumental and Piano Duo Repertoire. (2) Activity, two hours; outside study, four hours. Performance-based course that develops repertoire and experience in collaborative performance for pianists and instrumentalists. Involves weekly preparation, weekly rehearsals, regular coaching, and performances for lessons, juries, recitals, master classes, auditions, and other related activities. Regular coaching with faculty mentor weekly. Preparation of chamber music, workshop, and rehearsals. Concurrently scheduled with course C155. Letter grading.

C458A-C458G. Advanced Vocal Repertoire, Diction, and Interpretation. (2, 3, 4) Activity, two hours; outside study, four hours. Performance-based course that develops repertoire and experience in collaborative performance for pianists and vocalists. Topics include repertoire selection, diction, weekly rehearsals, regular coaching, and performances for lessons, juries, recitals, master classes, auditions, and other related activities. Intensive diction study incorporates techniques with faculty members, weekly performance class, and rehearsals. May be repeated for maximum of 8 units. Concurrently scheduled with courses C158A-C158G. Letter grading.

C459A. Violin. (Formerly numbered 459D.) Flute. (Formerly numbered 456A.) Oboe. (Formerly numbered 451B.) Violin. (Formerly numbered 460A.) Flute. (Formerly numbered 461G.) Snake. (Formerly numbered 461D.) Saxophone. (Formerly numbered 461E.) French Horn. (Formerly numbered 462B.) Trumpet. (Formerly numbered 462A.) Trombone. (Formerly numbered 462C.) Tuba. (Formerly numbered 462D.) Percussion. (Formerly numbered 463.) Drum. (Formerly numbered 464.) Violin. (Formerly numbered 460A.) Guitar. (Formerly numbered 460G.) Piano. (Formerly numbered 464A.) Organ. (Formerly numbered 464B.) Harpsi chord. (Formerly numbered 464C.) Fortepiano. (Formerly numbered 464D.)

461A. Graduate Vocal Studio. (6) Formerly numbered 465G.) Studio, one hour; performance laboratory/ outside study, 17 hours. Corequisite: course 461B. Limited to graduate vocal students. Voice techniques and health, including breath control, pitch accuracy, range, resonance, and flexibility. Letter grading.

461B. Graduate Vocal Coaching. (1) Studio, one hour; outside study, three hours. Corequisite: course 461A. Limited to graduate vocal students. Emphasis on repertoire and improving performance. Grades are assigned by studio instructor in conjunction with student’s vocal coach for fall and winter quarters and by jury examination in spring quarter. Letter grading.

466. Graduate Instruction in Performance: Jazz. (6) Studio, one hour; performance laboratory/outside study, 17 hours. Limited to graduate performance students. Individual instruction, intensive study and preparation of musical literature in area of specialization. May be repeated for credit. Letter grading.

469. Instrumental Pedagogy. (4) Lecture, three hours; outside study and preparation, nine hours. Preparation: acceptable audition, and technical, musical instrument. Designed for graduate music students. Study of art of teaching musical instruments, including discussions of philosophy of teaching, learning process itself, and teaching of musical interpretation. Individualized study of various considerations, such as physical/technical aspects and pedagogical repertoire, peculiar to teaching student’s primary instrument. Letter grading.

471. Vocal Pedagogy. (4) Lecture, three hours; discussion, one hour. Preparation: advanced proficiency in voice. Designed for graduate music students. Study of the techniques of teaching voice, including thorough investigation of vocal mechanism and its use, plus study of noted teachers of past and present. Further emphasis on practical teaching experience in class. Letter grading.

472. Master Class in Opera. (6) Studio, three hours; outside study, 15 hours. Limited to graduate performance students. Intensive study and preparation of opera literature. May be repeated for credit. S/U or letter grading.

475. Master Class in Conducting. (6) Studio, three hours; outside study, 15 hours. Limited to graduate performance students. Intensive study and preparation of musical literature in specialized field of conducting. May be repeated for credit. S/U or letter grading.

C480A. UCLA Chorale. (2) Formerly numbered 480G.) Activity, four hours. Preparation: audition. Large mixed chamber choir performing musical music of all periods appropriate for concert choral ensemble. May be repeated for credit without limitation. May be concurrently scheduled with course C185C. S/U or letter grading.

C480B. Chamber Singers. (2) Activity, four hours. Preparation: audition. Select mixed ensemble performing chamber choral music of all periods. May be repeated for credit without limitation. May be concurrently scheduled with course C185B. S/U or letter grading.

C480C. Opera Workshop. (2) Activity, six hours. Preparation: audition. Rehearsal and performance of scenes and complete operas, as well as repertoire, stage movement, and foreign language dictation coaching. May be repeated for credit without limitation. May be concurrently scheduled with course C185C. S/U or letter grading.

C480D. Symphony Orchestra. (2) Formerly numbered C481H.) Activity, four hours. Preparation: audition of graduate performers. Selection of graduate performers. Group performance of symphonic orchestral literature. May be repeated for credit without limitation. May be concurrently scheduled with course C185D. S/U or letter grading.

C480E. Philharmonia. (2) Activity, six hours. Preparation: audition. Group performance of symphonic orchestral literature, as well as orchestral accompaniment for operatic and major choral works. May be repeated for credit without limitation. May be concurrently scheduled with course C185E. S/U or letter grading.


C484A. Piano/Keyboard Accompanying. (2) Formerly numbered C484A.) Activity, four hours; outside study, two hours. Collaboration with large ensembles, instrumentalists, and/or vocalists in role of accompanists. Performance includes, but is not limited to, lessons, rehearsals, special studio performance projects, master classes, concerts, auditions, juries, and recitals. May be repeated for maximum of 12 units. Concurrently scheduled with course C186A. S/U or letter grading.

C484B. Guitar Accompanying. (2) Activity, four hours; outside study, two hours. Collaboration with instrumentalists and/or vocalists in role of accompanists. Performance includes, but is not limited to, lessons, rehearsals, special studio performance projects, master classes, concerts, auditions, juries, and recitals. May be repeated for credit without limitation. Concurrently scheduled with course C188B, S/U or letter grading.

C484C. Harp Accompanying. (2) Activity, four hours; outside study, two hours. Collaboration with instrumentalists and/or vocalists in role of accompanists. Performance includes, but is not limited to, lessons, rehearsals, special studio performance projects, master classes, concerts, auditions, juries, and recitals. May be repeated for credit without limitation. Concurrently scheduled with course C186C. S/U or letter grading.


495. Introductory Practicum for Teaching Apprentices in Music. (2) Eight weekly two-hour seminar sessions, plus intensive training session during Fall Quarter registration week. Preparation: appointment as teaching apprentice in Music Department. Required of all new teaching apprentices. Special course dealing with problems and practices of teaching music at college level. May not be applied toward degree requirements. S/U or letter grading.

496. Technology Seminar. (2) Seminar, two hours; laboratory, one hour; outside study, three hours. Introduction to departmental and campuswide technology resources, exploration of applicability of technology in education, and development of means of using technology to assess and document teaching competence. S/U grading.
Undergraduate Study

Music Industry Minor

The Music Industry minor is intended to provide students with an introduction to the history, theory, and practice of music as a calling and a business; and to provide opportunities for students to work with practitioners on real-world projects in the music industry.

To apply to the minor, transfer students must have completed a minimum of one term of residency at UCLA, and students admitted as freshman must have completed a minimum of three terms of residency at UCLA. Students must be in good academic standing with an overall grade-point average of at least 2.0.

In addition, students who are not enrolled in a major within the Herb Alpert School of Music must complete at least one performance or ensemble course selected from Ethnomusicology 91A through 91D, Global Jazz Studies 176A through 176G, Music 900T, C185A through C185C prior to application to the minor. The performance requirement may also be fulfilled through successful completion of Music Industry 111 or through an equivalent music industry course by petition.

Required Courses (28 units): Music Industry 101, 195 (8 units), and five additional courses (20 units) selected from Ethnomusicology M128, M25, 30, M33, C100, 105, 117, C185, Music C176b, Musiology 128, M137, 140, 164, 165, 177, 185, Music Industry 29, 55, 95, 102 through M181, M182, 188, 195, 197. A maximum of two lower-division courses may be counted toward the minor. Other UCLA upper-division courses may be applied to the minor by petition. A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor.

With the exception of Music Industry 95 and 195 (mandatory P/NP grading), each minor course must be taken for a letter grade. Successful completion of the minor is indicated on the transcript and diploma.

Music Industry

Lower-Division Courses

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

29. Music Documentary in History and Practice. (4) (Formerly numbered 109.) Lecture, three hours; discussion, one hour. Close analytical look at popular music documentaries and goals, methods, and challenges of making them. Almost all audio-visual material produced by music industry (whether distributed in theater, on television, from website, or through social media) aims to bring attention to music that artists make. General introduction to theory and practice of visual storytelling. Primary focus on screening and discussion of documentaries leading to development of culminating written project. Use of first quarter century of rock era (circa 1955–1980) as representative sample, but includes contemporary artists. P/NP or letter grading.

55. Songwriters on Songwriting. (4) (Formerly numbered 195.) Lecture, three hours; discussion, one hour. With special focus on songwriting renaissance of rock era, examination of work of important songwriters of post-World War II generation (circa 1952–1994) and those they have influenced. Practical industry guidance from current and noteworthy practitioners. Coverage of songwriting, arrangement and record production, music publishing, and record business in 20th and 21st centuries. Guest music industry professionals demonstrate individual creative processes and discuss their paths to songwriting and their place in world of music. Course is not workshop or tutorial on how to write songs. (See course 112.) P/NP or letter grading.

70. Apprenticeship in Music Industry. (2 or 4) Tutorial, 10 hours. Students work with UCLA faculty or staff in production of live concert events, in UCLA recording studio, or as part of media production team led by UCLA faculty and staff. P/NP grading.

89. Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjacent to lower-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

95. Introduction to Community or Corporate Internships in Music Industry. (4) Tutorial, eight hours. Entry-level community or corporate internship for low-division students who have completed 90 or fewer units. Internship in supervised setting in community agency or private business. Students meet on regular basis with instructor and provide periodic reports of their experience. P/NP grading.

99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Courses

101. Seminar in Music Industry. (4) Seminar, four hours; outside study, eight hours. Required of Music Industry minors. Introduction to intellectual and theoretical frameworks that form Music Industry minor and that scholars of music and music industry have developed to analyze, understand, and perhaps judge what happens out there, including how music business works in financial, legal, global, and artistic terms, how music technologies of recording, reproduction, and consumption operate, and how basic music science from acoustics to brain biology to music perception affects how music is produced and heard. Letter grading.

102. Music Industry Fundamentals. (4) Seminar, three hours; outside study, nine hours. Introduction to basic economics of creative industries, focusing on unique ways music works as industry in U.S. and abroad, how power has shifted but still is held in musical oligopolies, and where career opportunities for musicians and other industry professionals will be in next five to 10 years for students. Letter grading.

M103. Music and Brain. (4) (Formerly numbered 103.) Same as Neuroscience M170b. Seminar, three hours; outside study, nine hours. Multidisciplinary approach to understanding brain mechanisms mediating music perception, performance, and cognition. Students begin how brain is organized, how brain power has shifted but still is held in musical oligopolies, and where career opportunities for musicians and other industry professionals will be in next five to 10 years for students. Letter grading.

M102. Music and Technology. (4) (Formerly numbered 102.) Same as Computer Science M110. Seminar, three hours; outside study, nine hours. Multidisciplinary approach to understanding brain mechanisms mediating music perception, performance, and cognition. Students begin how brain is organized, how brain power has shifted but still is held in musical oligopolies, and where career opportunities for musicians and other industry professionals will be in next five to 10 years for students. Letter grading.

Music Scope and Objectives

The Music Industry minor is an interdisciplinary and interdepartmental series of courses designed to (1) introduce students to a critical perspective on the formative effects the music industry and music technology has had on musical practices around the world, (2) prepare students for employment in the music industry, including marketing and sales, artist management and intellectual property, sound recording and audio technology, songwriting and record production, and (3) contribute to improved communication and interaction between UCLA, the music industry, and the musical life of Los Angeles.
psychology research, and marketing research; and specific knowledge about brain mechanisms mediating music-related cognitive and emotional functions.

Letter grading.

104A. Music and Law. (4) Seminar, three hours; outside study, nine hours. Fundamentals of American law as it applies to the music business, with special attention to music and its use in film, television, and new media. Legal relationships in entertainment business and basic business practices. Exploration of legal and business aspects of producing works in entertainment field, from acquisition of rights and talent through production and distribution. Letter grading.

104B. Legal and Business Aspects of Sound Recordings. (4) Seminar, four hours; outside study, nine hours. Exploration of legal and business aspects of production and distribution of sound recordings. More detailed practical focus on legal aspects of recording process itself, from initial assembly of material to final distribution and collection of royalties, with material covered also relevant to audio-visual recordings. Introductory presentation on contract, copyright, and trademark law as background to step-by-step process of securing agreements necessary for production and commercial distribution of recordings. Letter grading.

107A. Audio Technology for Musicians I. (4) Studio, four hours; outside study, eight hours. Introduction to basic acoustic principles, practical techniques, and working procedures for equipment used in contemporary music production, including microphones, mixers, recorders, digital workstations, and sequencers. Basic sound processing operations (equalization, compression, distortion, reverberation). Operating principles of most popular systems of music production software and hardware. Letter grading.

107B. Audio Technology for Musicians II. (4) Studio, four hours; outside study, eight hours. Enforced requisites: course 107A. Examination of selected technological elements in greater depth than in course 107A, while allowing for greater focus on creative scenarios and applications. Basic familiarity with standard audio workstation software in use in music industry and music production. Letter grading.

108. Founding and Sustaining Performing Arts Organizations. (4) Seminar, four hours. Examination of processes and procedures in contemporary music industry. Musicians develop strategies for intermediate to advanced songwriting, focusing bylaws, and writing sample grant proposals. Letter grading.

110. Music Business Now. (4) Seminar, four hours; outside study, eight hours. Enrolled by consent of instructor. Workshop in contemporary songwriting practices for intermediate to advanced songwriters. Emphasis on collaboration, flexibility, and working within teams to master specific songwriting challenges. All genres and styles of music accommodated. Letter grading.

112. Music Supervision. (4) Seminar, three hours. Introduction to role of music supervisor and creative, logistical, and economic considerations. Exploration of the artistic and technical aspects of music supervision with emphasis on the creation of original music for commercials and film. Letter grading.

112B. Songwriter’s Workshop. (5) Seminar, four hours; outside study, eight hours. Enrolled by consent of instructor. Workshop in contemporary songwriting practices for intermediate to advanced songwriters. Emphasis on collaboration, flexibility, and working within teams to master specific songwriting challenges. All genres and styles of music accommodated. Letter grading.

113. Music Production. (4) Seminar, three hours. Introduction to role of music supervisor and creative, logistical, and economic considerations. Exploration of the artistic and technical aspects of music supervision with emphasis on the creation of original music for commercials and film. Letter grading.

122. Internet Marketing and Branding for Musicians. (4) Seminar, four hours; outside study, eight hours. Requisites: courses 107, 108, or by permission of instructor. Students create on paper one performing arts organization, including developing mission statement, preparing bylaws, and writing sample grant proposals. Letter grading.

124. Music Industry Entrepreneurship. (4) Seminar, four hours. Principles of entrepreneurship and fundamental business strategies approached through case studies and project-based group assignments. Students develop business plans, pitch them, and build out infrastructure for startups that focus on technology and innovation in music industry. Students are encouraged to make use of resources at MusicBiz, MBEA, and startup.ucla.edu. Letter grading.

131. DIY Punk as Organizational Practice. (5) Seminar, three hours. Recommended requisite or corequisite: Musicology 13. Do it yourself (DIY) as practical alternative of organization for social justice activism and nonprofit arts collectives. Ethical issues in capitalism, labor issues, politics. How to work with gender, class, race, and orientation. Students interface with existing radical social justice/art organizations in Los Angeles area, and strive to facilitate real change. Letter grading.

131B. Forensic Musicology. (4) Seminar, three hours. Survey of critical issues and recent developments in forensics musicology—application of musical analysis to law of music copyright. Instructors include professionals in music industry. Study of fundamentals of music analysis and copyright law, review of key music copyright infringement cases from both legal and musicological perspectives, outlining of procedural aspects of copyright case, and defining of working relationship between attorney and musicologist.

150. Special Topics in Music Industry. (4) Lecture, four hours; discussion, one hour; studio, two hours. Limited to students in Musicology CM182, Musicology CM186. Enrolled in 18th century and continuing through development of audio recordings to MTV and modern music today. Letter grading.

158. Forensic Musicology. (4) Seminar, four hours. Examination of influence of music industry on way music is created, performed, listened to, evaluated, and used today. Historical approach taken, beginning with music published in 18th century and continuing through development of audio recordings to MTV and popular music today. Letter grading.

160. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

195. Community or Corporate Internships in Music Industry and Technology. (4) Tutorial, six hours. Preference given to juniors/seniors in Music Industry minor with minimum cumulative 3.0 grade-point average. Internship in supervised setting in community agency or private business. Students meet on regular basis with instructor and provide periodic reports of their experience. May be repeated for maximum of 8 units. Individual contract with supervising faculty member required. P/NP grading.

197. Individual Studies in Music Industry and Technology. (2 to 4) Tutorial, six to 12 hours. Limited to juniors/seniors in Music Industry minor with minimum cumulative 3.0 grade-point average. Individual intensive study in music industry and technology, with scheduled meetings to be arranged between faculty member and student. May be repeated for maximum of 8 units. Individual contract with supervising faculty member required. Letter grading.

MUSICOLOGY

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Scope and Objectives
The Department of Musicology curricula allow students to gain a broad understanding of the history and culture of music, as well as a practical introduction to issues and skills relevant to the music and entertainment industries. Courses cover virtually every period, style, and genre, including jazz and...
other popular musics. The department is aligned with the departments of Ethnomusicality and Music, and shares curriculum with the free-standing minor in Music Industry. It aspires to promote productive collaboration between performance and scholarship, a cross-cultural global understanding of the art of music, and preparatory training for a broad range of careers in music and the music industry after students graduate.

The department offers two undergraduate degrees. The BA in Musicology appeals to undergraduate students with musical backgrounds whose interests and principal career goals lie in areas other than professional performance. This undergraduate program prepares students for graduate programs in music and related fields and offers training within the broader context of the humanities.

The BA in Music History and Industry is not a technical or business degree; it is a liberal arts degree in musicology whose subject is the music industry, combining the focus on music as an art form with practical training and experiential learning based in the music industry. It includes courses that help students develop their skills in popular music creation and production as well as practical skills appropriate to the fiscal, entrepreneurial, and legal needs of the contemporary music world. A required internship in the Los Angeles music industry is a distinctive feature.

The graduate program in Musicology offers courses leading to the MA and PhD degrees. It is designed to equip students to pursue careers not only in teaching but also in other areas that require bibliographical skills and training in research methodologies. The department offers teaching and research assistantships each year for qualified students.

Undergraduate Study

The Musicology and Music History and Industry majors are designated capstone majors. Undergraduate students must complete a senior thesis that demonstrates the skills and expertise they have acquired in earlier coursework. Musicology students are expected to conceive and execute a project that identifies and engages with a problem within a specialized topic, identify and analyze appropriate primary sources both textual and musical, and have a working knowledge of scholarly discourse relative to a specialized topic. Music History and Industry students are expected to conceive and execute a project that (a) identifies an issue, problem, or opportunity in the music industry and engages with it practically and critically, or (b) brings to fruition a substantial creative project in contemporary music with tangible results. While an extended essay is the default expectation for a completed project, students are encouraged to seek alternative formats, such as a lecture-recital, business or marketing plans, set of lesson plans, website, studio sound recording, or video/audio presentation. Students discuss and critique the work of their peers and present their work to other students and, if they choose, to the public as part of a student-organized live event and conference.

Musicology BA

Capstone Major

Learning Outcomes

The Musicology major has the following learning outcomes:

- Demonstrated specific skills and expertise, including research, analysis, writing, and general knowledge of music and music history
- Identification and analysis of appropriate primary sources and musical scores
- Conception and execution of a project that proposes and supports an original argument about a specialized topic
- Working knowledge of scholarly discourse relative to a specialized topic
- Engagement with peers through presentation, discussion, and critique of student work

Admission

The Musicology program assumes that students have some musical background before entering UCLA. Although auditions are not required, prospective majors should be sufficiently competent on an instrument or in voice to participate in a performance group, as required by the program.

Preparation for the Major

Required: Musicology M6A, M6B, M6C, 12W, Music 20A, 20B, 20C, and 6 units (three terms) of performance organizations selected from Ethnomusicology 91A through 91Z, Music 118A through 118D, Musicology 128A through 128C, CM90T, or Music Industry 111; one lower-division humanities elective (minimum of 4 units; choose from the list of approved courses held in the school Office of Student Affairs). Enrollment in Musicology M6A, M6B, M6C and Music 20A, 20B, 20C requires taking the Music Theory Placement Examination administered by the Music Department.

Transfer Students

Transfer applicants to the Musicology major with 90 or more units must complete one year of music theory prior to admission to UCLA. Experience in music performance is strongly recommended. Transfer students are required to take Musicology 12W at UCLA. Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

The Major

Required: Musicology 125A, 125B, 125C, 126, 127, 128 (in a given year, the department may designate individual Musicology seminars in the range 160-185, 186, or 191 as equivalent to 126 and 127); one additional upper-division elective, chosen from Musicology 160 through 185, 191A through 191Z, 195 (if supervised by Musicology faculty), or an equivalent seminar course in ethnomusicology, music, or music industry (see the list of approved courses held in the school Office of Student Affairs; enrollments may be limited—check with the department or instructor); and the department capstone sequence, Musicology 187A, 187B, 187C.

Each course applied toward the major must be taken for a letter grade (courses offered only on a P/NP grading basis are acceptable).

Honors Program

The honors program is designed for Musicology majors who wish to carry out an extended independent research project that culminates in a departmental honors thesis of approximately 30 pages. The program gives qualified students the opportunity to work closely with individual professors on an in-depth supervised research and writing project.

All junior and senior Musicology majors who have completed a minimum of four upper-division musicology courses with a departmental grade-point average of 3.7 or better and an overall GPA of 3.0 or better are eligible to apply. Normally, the thesis must be completed during fall quarter of the senior year.

To qualify for graduation with departmental honors, students must (1) complete all requirements for the major, (2) have a cumulative grade-point average of 3.7 or better in upper-division courses in the department and an overall GPA of 3.0 or better, and (3) complete at least one term of Musicology 198 (2 units) with a grade of A− or better on the resulting thesis.

To qualify for graduation with departmental highest honors, students must (1) complete all requirements for the major, (2) have a cumulative GPA of 3.9 or better in upper-division courses in the department and an overall GPA of 3.65 or better, and (3) complete at least one term of Musicology 198 (2 units) with a grade of A or better on the resulting thesis.

Music History and Industry BA

Capstone Major

Learning Outcomes

The Music History and Industry major has the following learning outcomes:

- Development of basic musicianship and music literacy and fluency in music theory to accurately and efficiently communicate about musical concepts across multiple repertories in popular music; basic competence with music technology
- Demonstrated general knowledge of the histories and repertories of Western European and U.S.—American traditional, popular, and classical musics, as well as the influence of other world traditions
- Engagement with live ensemble performance in at least one area of music
- Working knowledge of scholarly and critical discourse relative to music history and the music industry
- Conception and execution of project that proposes and supports an original argument about a specialized topic or addresses a specific cultural question or presents and analyzes a case study of actual practice in the music industry
Musicology Department.

Preparation for the Major

Required: Music 20A, 20B, 20C; Musicology M6A, M6B, M6C, 12W; and 4 units (two terms) of performance organizations selected from Ethnomusicology 9IA through 91Z, Music C185A through C185D, C185F through C186A, Musicology 28A through 28C, CM90T, or Music Industry 111; one musicology or music industry elective, preferably from lower-division courses (minimum of 4 units). Enrollment in Music 20A, 20B, 20C, and Musicology M6A, M6B, M6C requires taking the Music Theory Placement Examination administered by the Music Department or an equivalent assessment administered by the Musicology Department.

Transfer Students

Transfer applicants to the Music History and Industry major with 90 or more units must complete one year of music theory prior to admission to UCLA. Experience in group music performance (any genre) is strongly recommended. Transfer students are required to take Musicology 12W at UCLA.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

The Major

Required: Musicology 125A, 125B, 125C, 128, Music Industry 101, 102 or 112A or 112B, 195, supervised by a member of the Music Industry minor faculty; two additional upper-division music industry elective courses; and the Music History and Industry capstone sequence, Musicology 184A, 184B, 184C.

Each course applied toward the major must be taken for a letter grade (courses offered only on a P/NP grading basis are acceptable).

Musicology Minor

The Musicology minor provides undergraduates with an overview of music history and the study of music. Students may select from a wide variety of undergraduate courses that range through the history of European and American music.

To enter the minor, students must have an overall grade-point average of 2.0 or better and file a petition with the school Office of Student Affairs in 1642 Schoenberg Music Building. For more information, see the minor website.

Required Lower-Division Courses (10 units): Two musicology courses with grades of C or better.

Required Upper-Division Courses (21 to 25 units): Musicology 101, one seminar course from 160 through 185 or 191A through 191P, one additional upper-division musicology course, and two additional upper-division ethnomusicology, music, musicology, or music industry courses (minimum 8 units). Enrollment in some courses may be limited; check with the department or instructor.

A minimum of 20 units applied toward the major requirements must be in addition to units applied toward major requirements or another minor.

Each minor course must be taken for a letter grade (courses offered only on a P/NP grading basis are acceptable), and students must have an overall grade-point average of 2.0 or better in the minor. Successful completion of the minor is indicated on the transcript and diploma.

Graduate Study

Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Division website.

In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Graduate Degrees

The Department of Musicology offers Master of Arts (MA), Candidate in Philosophy (CPhil), and Doctor of Philosophy (PhD) degrees in Musicology.

Musicology

Lower-Division Courses

3. Introduction to Classical Music. (Formerly numbered Music History 3.) Lecture, four hours; discussion, one hour. Survey of music of Western classical tradition, with emphasis on historical context, musical meanings, and creation of tradition itself. P/NP or letter grading.

5. History of Rock and Roll. (Formerly numbered Music History 5.) Lecture, four hours; discussion, one hour. Analysis of forms, practices, and meanings of rock and roll music, broadly conceived, from its origin to present. Emphasis on how this music has reflected and influenced changes in sexual, racial, and class identities and attitudes. Credit for both courses 5 and 185 not allowed. Letter grading.

6.6A-66B-66C. Introduction to Musicianship. (2–2–2) (Formerly numbered Music History 6A-M6B-M6C.) Same as Ethnomusicology M6A-M6B-M6C and Musicology M6A-M6B-M6C.) Laboratory, four hours. Preparation: placement examination. Course M6A is enforced requisite to M6B, which is enforced requisite to M6C. Students must receive grade of C or better to proceed to next course in sequence. Introduction to musician ship through in-depth exploration of basic common musical elements and training in aural recognition, sight singing, dictation, and keyboard skills.

Focus on topics such as tonal and modal harmony, rhythm, improvisation, composition, notation, and ear training to prepare students for later theory courses, participation in music ensembles, advanced study in music, and professional careers. Letter grading.

7. Film and Music. (Formerly numbered Music History 7.) Lecture, four hours; discussion, one hour. History of music and cinema, particularly ways music is used to produce meanings in conjunction with visual image. Credit for both courses 7 and 177 not allowed. P/NP or letter grading.

8. History of Electronic Dance Music. (Formerly numbered Music History 8.) Lecture, four hours; discussion, one hour. Survey of electronic dance music from its origins in 1960s pop and soul to present, covering disco, house, techno, ambient, rave, and jungle. Emphasis on interaction of technology, musical structures, and culture, with focus on club cultures to induce altered states of musical consciousness; promise (versus reality of) political and spiritual transformation; electronic dance music as new art form. P/NP or letter grading.

9. American Popular Song. (Formerly numbered Music History 9.) Lecture, four hours; discussion, one hour. American popular music before advent of rock and roll in the 1950s, with special emphasis on song tradition of Tin Pan Alley. P/NP or letter grading.

12W. Writing about Music. (Formerly numbered Music History 12W.) Lecture, four hours; laboratory, one hour. Enforced requisite: English Composition 3 or 3H or English as a Second Language 36. Emphasis on learning specific skills, incorporating technical description, historical contextualization, subjective reaction, and certain stylistic conventions necessary in writing about music. Satisfies Writing II requirement. Letter grading.

13. Punk: Music, History, Subculture. (Formerly numbered Music History 13.) Lecture, four hours; discussion, one hour. Developments in punk music in their historical and cultural contexts. Survey of prepunk and musical antecedents in 1960s, rise of punk in 1970s, and tracing of its expressive trajectories to present day. P/NP or letter grading.

19. Flat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.


35. Introduction to Opera. (Formerly numbered Music History 35.) Lecture, four hours; discussion, one hour. Exploration of history of opera from its origins in Florentine Camerata in Italy in early 17th century, through ages of Enlightenment and Romanticism, and ending with modern era of early 20th century. History of opera, biography of composers and singers, operatic conventions, dramaturgy, plot, stagings, hermeneutics of opera, and musical style, with focus on learning appreciation of music of opera within rich context of its compelling history. P/NP or letter grading.

60. American Musical. (Formerly numbered Music History 60.) Lecture, four hours; discussion, 90 minutes. Survey of American musical in 20th century, beginning with its roots in opera, vaudeville, and Gilbert and Sullivan, and focusing on its connections to politics, technology, film, opera, and variety of popular musical styles, including Tin Pan Alley, jazz, and rock. Credit for both courses 60 and 160 not allowed. P/NP or letter grading.

61. Music in Los Angeles. (Formerly numbered Music History 61.) Lecture, four hours; discussion, one hour. Exploration of history of music in Los Angeles, from Spanish missions and city of Los Angeles to greater emphasis on music in 20th century, with special focus on European émigrés, internment and postwar history of Japanese American community,
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Chicano and Mexican American music to present, African American traditions including jazz on Central Avenue, 1960s Laurel Canyon and rock scene, and more recent history that includes developments in punk and hip-hop. P/NP or letter grading.

62. Mozart. (Formerly numbered Music History 62.) Lecture, four hours; discussion, one hour. Designed for students who do not read music. Life, works, and mythology of Wolfgang Amadeus Mozart, in context of both his age and our own. Credit for both courses 62 and 162 not allowed. P/NP or letter grading.

63. Bach. (Formerly numbered Music History 63.) Lecture, four hours; discussion, one hour. Designed for undergraduates and professional performers. Life, works, and music of Johann Sebastian Bach. Credit for both courses 63 and 163 not allowed. P/NP or letter grading.

64. Motown and Soul: African American Popular Music of the 1960s. (Formerly numbered Music History 64.) Lecture, four hours; discussion, one hour. Survey of developments in post-World War II African American popular music, with special attention to musical achievements of Motown Records, Stax, and other rhythm and blues genres. Credit is recognized as a political act and tool from individual performances to mass demonstrations. Credit for both courses 64 and 164 not allowed. P/NP or letter grading.

65. Blues in American Music. (Formerly numbered Music History 65.) Lecture, four hours; discussion, one hour. History of blues, both as specific genre and as a mode of techniques and approaches that have been used in contemporary American music and culture, from 19th-century roots to present. Exploration of common accepted blues mainstream exemplified by figures like Bessie Smith, Robert Johnson, and B.B. King, but also central role blues has played in jazz, folk, country, rock, hip-hop, and rap. While following evolution of music through 20th century, introduction of how blues has served as metaphor for African American experience as mediated through African American culture as it permeates American traditions. Credit for both courses 65 and 165 not allowed. P/NP or letter grading.

66. Getting Medieval. (Formerly numbered Music History 66.) Lecture, four hours; discussion, one hour. History of music, one hour. Music of Jews is diverse. With history of several thousand years and series of developments in modernity, music in Jewish life covers varieties of style found in many contexts. Exploration of music of Jewish within last 100 years, focusing on popular music of Jews in America and Israel. Examination of music in Israel, with focus on songs of land of Israel, Israeli rock, and Muzika Mizrahit (Middle Eastern popular music). P/NP or letter grading.

67. Beethoven. (Formerly numbered Music History 70.) Lecture, four hours; discussion, one hour. Life and work of Ludwig van Beethoven. Credit for both courses 70 and 170 not allowed. P/NP or letter grading.

71. Listening. (Formerly numbered Music History 71.) Lecture, four hours; discussion, one hour. Introduction to humanistic study of listening, as perceptual modality for engaging others and world, with focus on experience, history, politics, and ethics of listening. Hearing as a formative and perspectival faculty among able-bodied people, but listening practices are shaped by history, society, and culture. Hearing people listen differently depending on when, where, and how they live, as well as who they are as individuals. P/NP or letter grading.

72. Sacred Music. (Formerly numbered Music History 72.) Lecture, four hours; discussion, one hour. Study of forms and liturgies of Western church music. Credit for both courses 72 and 172 not allowed. P/NP or letter grading.

73. Music and Religion in Popular Culture. (Formerly numbered Music History 73.) Lecture, four hours; discussion, one hour. History and analysis of variety of jazz styles, from late 19th-century forerunners to present, with emphasis on social meaning of musical practices and forms. P/NP or letter grading.

75. History of Jazz. (Formerly numbered Music History 75.) Lecture, four hours; discussion, one hour. History and analysis of mixture of various cultures, from music in the streets of New Orleans and U.S. jazz to contemporary hip-hop, Latin, U.S. rap, and Puerto Rican/Panamanian reggaeton. Introduction to major performers in each genre, comparison of stylistic traits associated with each music, and exploration of technologies associated with contemporary music production. P/NP or letter grading.

78. Dancehall, Rap, Reggaeton, Beats, Rhymes, and Routes in African Diaspora. (Formerly numbered Music History 78.) Lecture, four hours; discussion, one hour. Survey of histories of three closely connected music genres: Jamaican dancehall, U.S. rap, and Puerto Rican/Panamanian reggaeton. Introduction to major performers in each genre, comparison of stylistic traits associated with each music, and exploration of technologies associated with contemporary music production. P/NP or letter grading.

80. Jewish American Experience through Music. (Formerly numbered Music History 80.) Lecture, three hours; discussion, one hour. History and analysis of Jewish American music to present, with emphasis on social meaning of musical practices and forms. P/NP or letter grading.

82. Music and Holocaust: Individual Experience. (Formerly numbered Music History 82.) Lecture, three hours; discussion, one hour. Life, works, and music of Jews who experienced Holocaust, in almost every concentration camp; music was means for some individuals to gain favorable treatment, while others weaponized it. Traces development of Euro-pean music through 1949, focusing on how individuals interacted with music throughout Holocaust. Study of some of newest developments in Holocaust music research, including role American and European Jewish organizations played in creation of artistic hubs in campus of southern France. Exploration also of cultural representation of Holocaust, and role of music in society’s collective memory. P/NP or letter grading.

87. SoHo Semester Seminar: Music History. (Formerly numbered Music History 87.) Seminar, two hours. Designed for sophomores Musicology majors or students interested in pursuing Musicology major. Introduction to music history as academic discipline, with particular emphasis on musicology at UCLA. Study of music and its history and consideration of theoretical issues central to musicology as it is practiced today, including gender and sexuality, music and politics, race, popular music studies, and jazz studies. P/NP or letter grading.


103. Creating Musical Community. (Formerly numbered Music History 103.) Seminar, one hour. Limited to school of music majors. Faculty and students make music together in different modes. Students learn certain repertoire, refine it, and bring it to concert performance. Students critically engage musical literacies and notion of social contract that forms basis of musical notation. Drawing from American music folk game traditions, highlights complex historical and social significance of body in use as resource when instruments are unavailable. P/NP or letter grading.

125A. Music, History, and Culture: Era of Church Patronage. (Formerly numbered Music History 125A.) Lecture, four hours; discussion, one hour. Required: course M86 (may be taken concurrently). Course 125A is required to be 125B, which is required to be 125C. Students must receive grades of C- or better to proceed to next course in sequence. Introduction to history, culture, and structure of Western music, in era
of church and court patronage, through selected topics, repertoires, and analytical techniques. Letter grading.

125B. Music, History, and Culture: Modern and Postmodern Era. (5) (Formerly numbered Music History 125C.) Lecture, four hours; discussion, one hour. Requisite: course M5A (may be taken concurrently). 125C. Course is requisite to 125D, which is requisite to 125C. Students must receive grade of C or better to proceed to next course in sequence. Introduction to history, culture, and structure of Western music, in modern and postmodern eras, through selected topics, repertoires, and analytical techniques. Letter grading.

125C. Music, History, and Culture: Modern and Postmodern Era. (5) (Formerly numbered Music History 125C.) Lecture, four hours; discussion, one hour. Requisite: course M5A (may be taken concurrently). 125B. Course is requisite to 125C, which is requisite to 125C. Students must receive grade of C or better to proceed to next course in sequence. Introduction to history, culture, and structure of Western music, in modern and postmodern eras, through selected topics, repertoires, and analytical techniques. Letter grading.

126. Musics, Cultures, and Their Interpretation. (5) (Formerly numbered Music History 126.) Lecture, four hours; discussion, one hour. Requisite: or corequisite: M6A. Designed to supplement broad historical survey in Musicology 125 series by focusing on interlocking questions of how cultures make music, and how music makes cultures. Letter grading.

127. Music, Sound, and Structure. (5) (Formerly numbered Music History 127.) Lecture, four hours; discussion, one hour. Requisite or corequisite: M6A. Designed to supplement broad historical survey in Musicology 125 series by focusing on interlocking questions of musical structure and meaning. Letter grading.

128. History of Popular Music. (5) (Formerly numbered Music History 128.) Lecture, four hours; discussion, one hour. Designed for undergraduate students. P/NP or letter grading.


135A. Baroque and Classical Periods; 135B. Romantic Period; 135C. 20th Century.


177. Selected Topics in Film and Music. (Formerly numbered Music History 177.) Seminar, two hours. Enforced corequisite: attendance, but not enrollment, in course 7 lecture. Letter grading.

181A. Ethnic Musicology / 611. (Same as Musicology M181.) Seminar, three hours. Survey of critical issues and recent developments in field of forensic musicology—application of musical analysis to law of music and sound. Intensive discussion of selected topics, repertoires, and analytical techniques. Letter grading.


185. Selected Topics in Rock and Roll. (5) (Formerly numbered Music History 185.) Seminar, two hours. Enforced corequisite: attendance, but not enrollment, in course 7 lecture. Limited to Musicology majors and minors. Examination of history of rock and roll in America in the 20th century. Letter grading.

186. Blues and Individual Expression. (5) (Formerly numbered Music History 165.) Seminar, two hours. Enforced corequisite: attendance, but not enrollment, in course 65 lecture. Exploration of ways in which specific approaches and attitudes to past shape music history, composition, and performance, with special focus on blues and rap. Credit for both courses 65 and 165 not allowed. Letter grading.


188A. Individual Studies for USIE Facilitators. (1) (Formerly numbered Music History 188A.) Tutorial, to be arranged. Enforced corequisite: Honors Collegium 101E. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to discuss selected USIE seminar topic, conduct preparatory research, and begin preparation of syllabus. Individual contract with faculty mentor required. May be repeated for credit. P/NP or letter grading.

188B. Individual Studies for USIE Facilitators. (1) (Formerly numbered Music History 188B.) Tutorial, to be arranged. Enforced corequisite: course 188A. Enforced corequisite: Honors Collegium 101E. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to discuss selected USIE seminar topic, conduct preparatory research, and begin preparation of syllabus. Individual contract with faculty mentor required. May be repeated. Letter grading.
188C. Individual Studies for USIE Facilitators. (2) Tutorial, to be arranged. Enforced requisite: course 188SB. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor while facilitating USIE 88S course. Individual contract with faculty mentor required. May not be repeated. Letter grading.

189. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth through reading, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

189HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to upper-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

190. Research Colloquia in Music History. (2) (Formerly numbered Music History 190.) Seminar, two hours. Designed for senior Musicology majors. Designed to bring together students undertaking simultaneous supervised research in music history who wish to present their work to their peers, as well as to the academic public (e.g., through organizing one conference or one special publication). Letter grading.


191A. Middle Ages; 191B. Renaissance; 191C. Baroque; 191D. Classic; 191E. Romantic; 191F. 20th Century; 191G. Other Topics; 191P. Performance Practice. Practical issues in performance practice, specific questions of how musical performance intersects with cultural and political performance, and/or practical issues in performance practice, and/or cultural and political performance, and/or general issues of theory of performance in Western music. Preparation: completion of History of Music. May be repeated for credit. Letter grading.

193C. Music History Journal Club Seminars for Majors. (2) (Formerly numbered Music History 193C.) Seminar, two hours. Limited to Musicology majors. Introduction to discourse on current topics in field, with focus especially on its practice at UCLA, and addressing research methodologies and development of bibliographic control. Normally taken in junior year. P/NP grading.

193D. Music History Performance/Analysis Seminars for Majors. (2) (Formerly numbered Music History 193D.) Seminar, two hours. Recommended requisite: course 193C. Limited to Musicology majors. Introduction to how music historians engage with issues of musical performance. and of how historical concerns, theoretical issues, and methodologies can inform music as practice, especially as it is performed, recorded, listened to, danced to, and otherwise consumed. Continued attention to issues of bibliographic control. Normally taken in senior year. P/NP grading.

195C. Seminar in Music (2) (Formerly numbered Music History 195C.) Seminar, three hours. Required or corequisite: course 195. Seminar, three hours. Preparation: completion of upper-division music history courses. Individual intensive study, with scheduled meetings to be arranged between faculty member and student. Assigned reading and tangential evidence of mastery of subject matter required. May be repeated for credit. Individual contract required. P/NP or letter grading.

197. Individual Studies in Music History. (2 to 4) (Formerly numbered Music History 197.) Tutorial, two hours. Limited to juniors/seniors. Individual intensive study, with scheduled meetings to be arranged between faculty member and student. Assigned reading and tangential evidence of mastery of subject matter required. May be repeated for credit. Individual contract required. P/NP or letter grading.

198. Honors Research in Music History. (2 to 4) (Formerly numbered Music History 198.) Tutorial, two hours. Preparation: completion of minimum of four upper-division music history courses with departmental grade-point average of 3.5 or better and overall GPA of 3.5 or better. Limited to Musicology majors. One- to two-semester independent research project under supervision of appropriate faculty member, culminating in departmental honors thesis of approximately 25 pages. May be repeated for credit. Individual contract required. P/NP or letter grading.

199. Directed Research in Music History. (1 to 4) (Formerly numbered Music History 199.) Tutorial, one hour. Preparation: 3.0 grade-point average. Limited to juniors/seniors. Research under guidance of faculty mentor. Culminating paper or project required. May be repeated for maximum of 8 units. Individual contract required. P/NP or letter grading.

Graduate Courses

200A. Introduction to Music Scholarship. (6) Seminar, three hours. Designed for graduate musicology, ethnomusicology, and music students. Introduction to history of different fields of music scholarship (with strong emphasis on non-researched debates in those fields. Practical tools for research, logic and structure of arguments, evidence, critical thinking and critique, historiography, rhetoric and voice, and archiving and data ethnomethodology. Introduction to practical written forms such as abstract, grant proposal, paper/book proposal, and review. Letter grading.

200B. Critical, Cultural, and Social Theory. (6) Seminar, three hours. Designed for graduate musicology, ethnomusicology, and music students. Introduction to issues surrounding music as social, cultural, and historical practice, with strong emphasis on critical, cultural, and social theory. May include introduction to social theory, materialist theories of culture, postcolonialism, critical theory, or overview of cultural theory or group of theories selected by instructor, including feminist, queer, and poststructuralism. May be repeated for credit. Letter grading.

200C. Music Aesthetics, Analysis, and Philosophy. (6) Seminar, three hours. Designed for graduate musicology, ethnomusicology, and music students. Exploration of selected philosophical, aesthetic, and/or analytical perspectives on music to gain insight into selected analytical and philosophical approaches to phenomenon of music and to acquire skills in analyzing and interpreting variety of repertoires. Letter grading.

M201. Repertory and Analysis. (2) (Same as Music M201.) Seminar, three hours. Requisite or corequisite: course 200A. Exploration of defined repertory through readings and analysis. Specific topics vary. May be repeated for credit. S/U grading.

244. Seminar: Analytical/Repertoire Topics. (4) Seminar, two hours. Requisite or corequisite: course 200A. Demonstration of analytical techniques that vary from year to year. May be repeated for credit. Meets with course 245; concurrent enrollment in both courses not allowed. S/U grading.

245. Seminar: Special Topics in Musicology. (4) Seminar, three hours. Exploration of topics in musicology through variety of approaches that may include historical, theoretical, or analytical approaches to subjects within musicology. Topics announced in advance. May be repeated for credit. Letter grading.

250. Seminar: Theoretical Topics. (4) Seminar, three hours. Designed for graduate musicology students. Coverage of theoretical topics that vary from year to year. May be repeated for credit. Meets with course 255; concurrent enrollment in both courses not allowed. S/U grading.

255. Seminar: Historical Topics. (4) Seminar, three hours. Designed for graduate musicology students. Coverage of historical topics that vary from year to year. May be repeated for credit. Meets with course 256; concurrent enrollment in both courses not allowed. S/U grading.

256. Audit Seminar: Historical Topics. (2) Seminar, three hours. Required or corequisite: course 200A. Specific topics vary from year to year. May not be applied toward MA or PhD degree requirements. May be repeated for credit. Meets with course 255; concurrent enrollment in both courses not allowed. S/U grading.

259. Audit Seminar: Mapping Sonic Urban Geography of Los Angeles in 1940s. (2) Seminar, three hours. Limited to departmental graduate students in Philippine Urban Humanities Certificate Program. Exploration of data and conceptual frameworks for mapping sonic urban geography of Los Angeles in 1940s. In-depth critical discussion of current theories of music and space and of most recently developed methodologies for undertaking ethnomusicological and anthropological study of soundscapes. May be applied toward MA or PhD degree requirements. May be repeated for credit. Meets with course 260; concurrent enrollment in both courses not allowed. S/U grading.

260. Mapping Sonic Urban Geography of Los Angeles in 1940s. (4) Seminar, three hours. Limited to departmental graduate students and those in Urban Humanities Certificate Program. Exploration of methods and conceptual frameworks for mapping sonic urban geography of Los Angeles in 1940s. In-depth critical discussion of current theories of music and space and of most recently developed methodologies for undertaking ethnomusicological and anthropological study of sound, including recording and mapping soundscapes. Letter grading.

261. Topics in Performance Practice. (4) Seminar, three hours. Designed for graduate students. Investigation of primary source readings in performance practices across history of Western music; analytical reports and practical applications in class demonstrations. May be repeated for credit. Letter grading.

268. Forensic Musicology. (4) Seminar, three hours. Survey of critical issues and recent developments in field of forensic musicology—application of musical analysis to law of music copyright. Instructors include professionals in music industry. Study of fundamentals of music analysis and copyright law, review of key music copyright infringement cases from both legal and musicological perspectives, outlining of procedural aspects of copyright case, and defining of working relationship between attorney and musicologist. Concurrently scheduled with course CM181. Letter grading.

CM288. Music Industry. (4) (Formerly numbered Ethnomusi- cology 288.) Lecture, four hours; discussion, one hour; outside study, seven hours. Limited to Ethnomusicology, Music, and Musicology majors. Examination of influence of music in contemporary music industry. May be repeated for credit. Letter grading.
and continuing through development of audio recordings to MTV and popular music today. Concurrently scheduled with course CM186, Letter grading.

291. Teaching Western Musical Canon. (1) Seminar, three hours. Workshop series designed to prepare graduate musicology students to teach Western musical canon at undergraduate level. May be repeated for credit. S/U grading.

296. Research Topics in Musicology. (2 to 4) Seminar, two to four hours. Preparation: consultation with instructor. Designed for graduate musicology students. Advanced study and analysis of current topics in musicology. Discussion of current research and literature in research specialty of faculty member teaching course. May be repeated for credit. S/U grading.

298. Seminar: Research Methods. (2) Seminar, two hours. Limited to second-year graduate musicology students and students with master’s degrees. Development of advanced knowledge and bibliographic control in three historically separate areas of musicological specialization. May be repeated for credit. S/U grading.


374. Teaching Apprentice Practicum. (1 to 4) Seminar, to be arranged. Preparation: apprentice personnel employment as teaching assistant, associate, or fellow. Teaching apprenticeship under active guidance and supervision of regular faculty member responsible for curriculum and instruction at UCLA. May be repeated for credit. S/U grading.

C490T. Early Music Ensemble. (4) Activity, four hours. Preparation: audition. Group performance of Western vocal and instrumental music from historical periods prior to 1800. Early instruments may be used at instructor’s discretion. May be repeated for credit without limitation. May be concurrently scheduled with course CM490T. S/U or letter grading.

495. Introductory Practicum for Teaching Apprentices in Musicology. (4) Seminar, three hours. Preparation: appointment as teaching apprentice in Music or Musicology Department. Required of all new teaching apprentices. Special course dealing with problems and practices of teaching music at college level. May not be applied toward degree requirements. S/U grading.

596. Directed Individual Studies in Musicology. (2, 4, or 6) Tutorial, to be arranged. Limited to graduate students. S/U or letter grading.

597. Preparation for MA Comprehensive Examination or PhD Qualifying Examinations. (2 or 4) Tutorial, to be arranged. Preparation: completion of all MA or PhD course and language requirements. Limited to graduate students. S/U grading.

599. Guidance of PhD Dissertation. (4, 8, or 12) Tutorial, to be arranged. Preparation: advancement to PhD candidacy. Limited to graduate students. May be repeated for credit. S/U grading.

**NAVAL SCIENCE — NAVY ROTC**

**College of Letters and Science**

120T Student Activities Center

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**Naval Science — Navy ROTC**

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Navy ROTC e-mail

Sean M. McBride, MS, Colonel, Chair

**Professor**

Sean M. McBride, MS, Colonel, U.S. Marine Corps

**Adjunct Assistant Professors**

Alexander N. Deliva, BS, Lieutenant, U.S. Navy

Robert M. Hill, MS, Commander, U.S. Navy

Eric F. Boyd, BA, Lieutenant, U.S. Navy

Nicholas D. Pattisbas, BS, Captain, U.S. Marine Corps

**Scope and Objectives**

In accordance with the National Defense Act of 1920 and with the concurrence of the Regents of the University of California, a unit of the Army Senior Division Reserve Officer Training Corps (ROTC) was established on the Los Angeles campus in July 1920. Naval and Air Force units were established in 1938 and 1949 respectively.

This voluntary training in the Naval Reserve Officer Training Corps (NROTC) program allows students to qualify for an officer’s commission in the Navy or Marine Corps while completing their college education. The NROTC curricula are not considered academic majors, but NROTC courses may be taken as free electives and applied toward the total course requirements of a major. Students contracted in the Naval Science Department, 26 units of naval science credit may be applied toward the requirements for the bachelor’s degree.

All three ROTC departments offer voluntary four- and three-year programs for freshmen and sophomores. The Army and Navy/Marine Corps also offer a two-year program for current and transfer students. All have leadership laboratories that teach leadership and management skills.

Active duty obligation following commissioning varies depending on branch of service and designated career field or occupational specialty.

**Scholarships**

NROTC scholarships are awarded on a competitive basis to U.S. citizens regardless of parents’ income. Scholarships cover tuition, a book allowance, fees, and a tax-free monetary allowance between $250 and $400 per month during the academic year. Applications for scholarships may be obtained online or by calling 800-628-7682. Completed applications should be submitted no later than December 31 for the fall term. Two or three-year scholarship applications may be obtained from the Naval Science Department and should be submitted no later than the end of the spring term.

**Navy/Marine Corps ROTC Program**

The Department of Naval Science provides professional training for students leading to an active duty commission at graduation in the U.S. Navy or Marine Corps. Through the NROTC, scholarship students receive full tuition, fees, books, and subsistence pay of $250 to $400 per month. Non-scholarship students may apply to participate as members of the midshipman battalion under the NROTC College Program and, if selected for advanced standing prior to their junior year, may receive an active duty commission at graduation. Because of the rapid development of highly technical ship systems, aviation, and other military equipment, science and engineering majors are highly desirable; however, Navy/Marine Corps scholarships are currently available to students pursuing any major offered by UCLA, as long as they agree to complete basic technical requirements. In addition to UC and UCLA requirements, Navy option midshipmen must complete 30 units and Marine Corps option midshipmen 22 units of naval science courses, physical fitness tests, and summer training, each about four to six weeks long. Both Navy and Marine Corps option students must also pass a swimming test. Naval science courses are open to UCLA students who are not in the program with consent of instructor and demonstrated interest in the Navy/Marine Corps and related fields, such as engineering, navigation and naval operations, history, and management.

**Undergraduate Study**

**College Program (Nonscholarship)**

Students attending UCLA who meet Navy/Marine Corps requirements but who do not have an NROTC scholarship may enroll in the College Program during their freshman or sophomore year. These students have the opportunity to compete for scholarships. If they do not win a scholarship, or choose not to compete for one, they must compete for advanced standing prior to their junior year. All College Program students receive uniforms, naval science textbooks and, once selected for advanced standing, monthly subsistence pay in their junior and senior years.

**Marine Corps Option**

Highly motivated NROTC students may request designation as Marine Corps option students and may also pursue any UCLA academic degree. The final summer training, and a requirement to be commissioned as an officer in the Marine Corps, involves intensive Marine training at Officer Candidate School in Quantico, Virginia. Marine Corps option students also participate, on a limited basis, in field training exercises during the academic year.
Naval Science

Lower-Division Courses

2. Naval Science Laboratory. (No credit) Laboratory, to be arranged. Mandatory for and limited to Naval Science ROTC midshipmen. Provides midshipmen with general military training and practical command and staff leadership experiences through classroom instruction and performance of various tasks and interactive processes within framework of organized midshipmen-run military unit, with oversight by active-duty military staff. As integral part of naval science curriculum, provides professional experiences designed to develop leadership potential and orientation for active duty. No grading.

1A. Introduction to Naval Science. (3) Lecture, three hours. Introduction to organization of Naval Service, various components of Navy, career opportunities,shipboard damage control, fire fighting, Naval and Marine Corps operations, and some customs and traditions of Naval Service. Letter grading.

1B. Naval Ship Systems I. (4) Lecture, four hours. Introduction to naval engineering, with emphasis on steam, nuclear, diesel, and gas turbine propulsion systems and their associated auxiliary components. Basic thermodynamic theory, electrical theory, stability, and buoyancy. P/NP or letter grading.

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

20A. Naval Ship Systems II. (4) Study of naval weapon systems, with emphasis on infrared, radar, and sonar principles. Target designation and acquisition, methods of solving fire control problem, target detection systems. Analysis of transfer and feedback functions inherent in weapon systems.

20B. Seapower and Maritime Affairs. (3) Lecture, three hours. Conceptual study of seapower, with emphasis on historical development of naval and commercial power. Seapower examined in relation to economic, political, and cultural strengths, with focus on current abilities of specific nations to use oceans to attain national objectives. P/NP or letter grading.

Upper-Division Courses


102B. Naval Leadership and Management. (4) Lecture, four hours. Examination of current and classical leadership and management theories, with emphasis on their application to junior military officer's role as a leader/manager. Topics include managerial functions, performance appraisal, motivation theories, group dynamics, leadership theories, and communication. P/NP or letter grading.

102C. Leadership and Ethics. (4) Lecture, four hours. Recommended requisite for Naval Science ROTC midshipmen; course 102B. Capstone and second of two core leadership courses that provide academic foundation of NROTC leadership development. Integration of intellectual exploration of Western moral traditions and ethical philosophy with military leadership, core values, professional ethics, Uniform Code of Military Justice, and Navy regulations. Provides midshipmen with basic understanding of major moral traditions, including relativism, utilitarianism, Kantian ethics, natural law theory, divine command theory, and virtue ethics. Letter grading.

103. Evolution of Warfare. (4) Study of evolution of warfare, including historical and comparative consideration of influence that leadership, political, economic, sociological and technological development factors have had on warfare and influence they continue to exert in age of limited warfare.

104. Fundamentals of Maneuver Warfare. (4) Seminar, four hours. Study of fundamentals of maneuver warfare, with particular emphasis on doctrine, tactics, and equipment used. Examination of topics through study of political and military objectives by focusing on historical examples from Revolutionary War to modern times. Examination of contemporary doctrine through study of recent operations. Letter grading.

197. Individual Studies in Naval Science. (1 to 4) Tutorial, four hours. Limited to juniors/seniors. Individual intensive study, with scheduled meetings to be arranged between faculty member and student. Assigned reading and tangible evidence of mastery of subject matter required. May be repeated for credit. Individual contract required. P/NP or letter grading.

NEAR EASTERN LANGUAGES AND CULTURES

College of Letters and Science

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Near Eastern Languages and Cultures
310-825-4165
Department e-mail

Kathlyn (Kara) M. Cooney, PhD, Chair

Professors
Khaled M. Abou El Fadi, JD, MA, PhD (Omar and Amerzalda Ali Endowed Professor of Islamic Law)
Carol A. Bakhos, PhD
Aaron A. Burke, PhD (Kershaw Professor of Ancient Eastern Mediterranean Studies)
Kathlyn (Kara) M. Cooney, PhD
Michael D. Cooperson, PhD
S. Peter Cowe, PhD (Narekatsi Professor of Armenian Studies)
William M. Schniedewind, PhD
M. Rahim Shyayegan, PhD (Jahangir and Eleanor Amuzegar Professor of Iranian Studies)
Susan E. Sloyomovics, PhD
Willeke Z. Wendrich, PhD (Joan Silksebee Professor of African Cultural Archaeology)

Professors Emeriti
Arnold J. Band, PhD
Andreas E. Bodorogi, PhD
Giorgio Buccellati, PhD
Elizabeth F. Carter, PhD
Herbert A. Davidson, PhD
Robert K. Englund, PhD
Lev Hakak, PhD
Ismail K. Poonawala, PhD
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Assistant Professors
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Barbara Cifola, PhD
Abeer T. Hamza, PhD
Hagop Kouyoujian, MBA
Beyza Lorenz, PhD
Nahid Pirnazar, PhD
Banafsheh Pourzangi, MA
Jonathan P. Winnever, PhD

Adjunct Professors
Ahmad Karimi-Hakkak, PhD
Nader Saiedi, PhD

Adjunct Associate Professor
Hans Barnard, MD, PhD

Adjunct Assistant Professor
Ali Mousavi, PhD

Scope and Objectives

The mission of the Department of Near Eastern Languages and Cultures is the discovery, interpretation, dissemination, and preservation of human values created over a period of five or more thousand years in an area that was the cradle of all civilization.

The department offers instruction in the major modern and ancient languages of the Near East: Akkadian, ancient Egyptian, Arabic, Aramaic, Armenian, Berber, Coptic, Hebrew, Persian, and Turkic. To meet increasing demands for a knowledge of this area and its past and present, it treats each language in a wide perspective—as a means of communication, as a vehicle of a cultural heritage, as a research tool for the area, and as an object of research itself.

Undergraduate majors may be taken in Ancient Near East and Egyptology, Arabic, Iranian Studies, Jewish Studies, and Middle Eastern Studies, MA and PhD programs are offered in Ancient Near Eastern Civilizations, Arabic, Armenian, Hebrew, Iranian, Islamic Studies, Semitics, and Turkic.

Courses in the department prepare students for careers in government, foreign trade, teaching abroad, journalism abroad, archaeology, and further academic work involving the area.

Undergraduate Study

The department offers the Bachelor of Arts degree in five fields: Ancient Near East and Egyptology, Arabic, Iranian Studies, Jewish Studies, and Middle Eastern Studies. In each of these fields students must meet the requisites and take the courses prescribed. Their adviser assists in selecting a plan of study developed around their interests.

Students may combine their major with one in another department (double major) to enhance their educational opportunities. Due to the number of additional courses required, they are advised to consider this option early in their academic career and in consultation with program advisers in both majors.

Senior Lecturers
Nancy Ezer, PhD
Latifeh H. Hagig, MA
Anahid Keshishian, PhD, Emerita
Jeremy D. Smoak, PhD

Lecturers
Katherine S. Burke, PhD
Barbara Cifola, PhD
Abeer T. Hamza, PhD
Hagop Kouyoujian, MBA
Beyza Lorenz, PhD
Nahid Pirnazar, PhD
Banafsheh Pourzangi, MA
Jonathan P. Winnever, PhD

Adjunct Professors
Ahmad Karimi-Hakkak, PhD
Nader Saiedi, PhD

Adjunct Associate Professor
Hans Barnard, MD, PhD

Adjunct Assistant Professor
Ali Mousavi, PhD
**Ancient Near East and Egyptology BA**

**Learning Outcomes**
The Ancient Near East and Egyptology major has the following learning outcomes:

- Demonstrated mastery of the ancient Near East and its history
- Demonstrated skills and expertise, including research, analysis, and writing
- Identification, evaluation, and analysis of historical monuments, time periods, vocabulary, concepts, and historical figures

**Preparation for the Major**

**Required:** Three courses selected from Ancient Near East 10W, 15W, Middle Eastern Studies M50A, M50B, Near Eastern Languages M20. Each course must be taken for a letter grade.

**Transfer Students**
Transfer applicants to the Ancient Near East and Egyptology major with 90 or more units must complete the following introductory courses prior to admission to UCLA: one civilization course on Mesopotamia, Egypt, Near Eastern archaeology, or Middle Eastern cultures.

Refer to the [UCLA transfer admission guide](https://www.ucla.edu/transfer) for up-to-date information regarding transfer selection for admission.

**The Major**

Students must complete 10 courses as follows:

**Required Core Courses:** One course selected from four of the following five areas (total of four courses):
- *History:* Ancient Near East M103A through M104D, M110A, or Jewish Studies M182A.

**Required Elective Courses:** Any six courses (no more than three may be from Anthropology) selected from the categories above or from Ancient Near East 121A, 121B, 121C, C123A, C123B, 124, 125A, M125B, M125C, C177, Anthropology 110, CM110Q, 111, 112R, 130, 140, English 111A, 111B, 111C, Greek 130, Hebrew 125, 130, 135, 138FF, Study of Religion M186A, M168b, M168c, Semitics 130, 141, 142.

A maximum of 8 units of special studies courses (197, 198, 199) approved by the department may be applied toward the major. Each course must be taken for a letter grade.

**Study Abroad**
Students are encouraged to spend time abroad either to (1) study with an education abroad program or (2) work on a UCLA-affiliated archaeological excavation in the broader Middle East. For information on studying abroad, contact the [Education Abroad Program](https://www.ucla.edu/educationabroad), 1332 Murphy Hall, 310-825-4995, for UCLA-affiliated excavations, contact the departmental academic counselor at 310-825-4165.

**Arabic BA**

**Learning Outcomes**
The Arabic major has the following learning outcomes:

- Demonstrated written and oral mastery of the Arabic language
- Demonstrated knowledge of other Arabic dialects such as Iraqi, Egyptian, etc.
- Demonstrated specific skills and expertise, including research, analysis, and writing
- Ability to read texts in Arabic, and to analyze the language and cultural context
- Identification, evaluation, and analysis of historical monuments, time periods, vocabulary, concepts, and historical figures

**Preparation for the Major**

**Required:** Arabic 1A, 1B, 1C, and History 9D or Middle Eastern Studies M50CW.

**Transfer Students**
Transfer applicants to the Arabic major with 90 or more units must complete the following introductory courses prior to admission to UCLA: one year of Arabic.

Refer to the [UCLA transfer admission guide](https://www.ucla.edu/transfer) for up-to-date information regarding transfer selection for admission.

**The Major**

**Required:** Eleven courses, including (1) Arabic 102A and 102B or 102C and 108, 150 or M151, Islamic Studies M110 and (2) six courses from Anthropology M166Q, Arabic 103A, 103B, 103C, 105, M106, M107, M110, 111A, 111B, 111C, 112A, 112B, 112C, 115, 116A, 116B, 116C, 120, M123, 130, 132, 141, 142, M148, 150 or M151 (unless taken under item 1), M155, M171, 180, 181, Art History 119A, 119B, C120, Comparative Literature 100, History 105A, 105B, 105C, M106, 108B, 111A, 111B, 111C, Islamic Studies 130, 151, Political Science 132A, M132B, 137, 165. No more than one course may be credited through a proficiency test administered by the department. No more than two upper-division 4-unit independent study or directed research courses (197, 199) may be applied toward the major. Other courses, including extra-departmental courses, may be applied with consent of the adviser.

**Iranian Studies BA**

Students majoring in Iranian Studies may combine the major with specialization in other fields to enhance their career opportunities. Due to the number of additional courses required, they are advised to consider this option early in their academic career.

**Learning Outcomes**
The Iranian Studies major has the following learning outcomes:

- Demonstrated written and oral mastery of Persian language
- Demonstrated specific skills and expertise, including research, analysis, and writing
- Ability to read texts in Persian and analyze the language and cultural context
- Identification, evaluation, and analysis of historical monuments, periods in time, vocabulary, concepts, and historical figures

**Preparation for the Major**

**Required:** Iranian 1A, 1B, 1C, or equivalent.

**Transfer Students**
Transfer applicants to the Iranian Studies major with 90 or more units must complete the following introductory courses prior to admission to UCLA: one year of Persian.

Refer to the [UCLA transfer admission guide](https://www.ucla.edu/transfer) for up-to-date information regarding transfer selection for admission.

**The Major**

**Required:** Eleven courses, including seven in Iranian language and civilization selected from Ancient Near East CM163, Iranian 102A, 102B, 102C, 103A, 103B, 103C, M110A, M110B, M110C, 120, 140, 141, 142, 161A, 161B, 161C, 170 (at least three of the seven must be selected from Iranian 102A, 102B, 102C, 103A, 103B, 103C, 120, 140, 141, 142) and four elective courses from the department or from Art History 119A, 119B, C120, History 105A, 105B, 105C, Political Science 137. A maximum of two Iranian 197 or 199 courses (8 units total) may be applied toward the major.

**Jewish Studies BA**

**Learning Outcomes**
The Jewish Studies major has the following learning outcomes:

- Demonstrated written and oral mastery of the Hebrew language
- Demonstrated specific skills and expertise, including research, analysis, and writing
- Ability to read texts in Hebrew and analyze the language and cultural context
- Identification, evaluation, and analysis of historical monuments, periods in time, vocabulary, concepts, and historical figures

**Preparation for the Major**

**Required:** Jewish Studies M10 or two courses selected from Ancient Near East 10W, Middle Eastern Studies M50A, M50B, M50CW, and demonstrated proficiency equivalent to level 3 at UCLA in one foreign language (Arabic, Armenian, Hebrew) in consultation with the department.
Transfer Students

Transfer applicants to the Jewish Studies major with 90 or more units must complete the following introductory course prior to admission to UCLA: one social, cultural, and religious institutions of Judaism course.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

The Major

Required: Eleven courses, including (1) three selected from Hebrew 102A, 102B, 102C, 103A, 103B, 103C, 110A, 110B, 111A, 111B, 111C, 125, 130, 135, 140—students may substitute another upper-division language (Judeo-Arabic, Judeo-Persian, Ladino, Yiddish) if they can demonstrate its integral role in their specific course of study, (2) two courses selected from Jewish Studies M182A, M182B, M182C, M184A, and (3) six elective courses selected from Hebrew or Jewish studies or from Ancient Near East M135, 162, English 111A, 111C, German 109, History 191F, Iranian 130, Political Science 121A, 132A, M132B, Semitics 130, Study of Religion 120, Yiddish 101A, 101B, 101C, 102A, 102B, 102C, 121A, 121B, 121C, 130, 131A, 131B, 131C.

Students are encouraged to take a research tutorial within Jewish Studies 197 or 199. A maximum of two 197 or 199 courses (8 units total) may be applied toward the major.

Study in Israel

Students are encouraged to spend up to one year in Israel either to (1) study with an education abroad program or (2) study at an Israeli university. For information on studying in Israel, contact the Education Abroad Program, 1332 Murphy Hall, 310-825-4889.

Middle Eastern Studies BA

Learning Outcomes

The Middle Eastern Studies major has the following learning outcomes:

- Demonstrated written and oral mastery of a Middle Eastern language
- Demonstrated specific skills and expertise, including research, analysis, and writing
- Identification, evaluation, and analysis of historical monuments, periods in time, vocabulary, concepts, and historical figures

Preparation for the Major

Required: Two courses selected from Ancient Near East 10W, History 9D, Middle Eastern Studies M50A, M50B, M50CW, and demonstrated proficiency equivalent to level 3 at UCLA in one modern Middle Eastern language (Arabic, Armenian, Hebrew, Persian, Turkish) or through a departmental language placement examination. Students selecting ancient languages (including Akkadian, Aramaic, Coptic, Egyptian, Old or Middle Iranian, Sumerian, Syriac) are not required to take a modern elementary Middle Eastern language.

Transfer Students

Transfer applicants to the Middle Eastern Studies major with 90 or more units must complete the following introductory courses prior to admission to UCLA: one year of Arabic, Armenian, Hebrew, Persian, Turkish, or another modern Middle Eastern language.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

The Major

Students must complete 11 courses as follows:

Required Core Courses: A total of six courses, including at least two from three of the following four areas:

- A maximum of 4 graded units of special studies courses (197, 198, 199) approved by the adviser may be applied toward the minor. No course for the minor or preparation for the minor may be taken on a P/NP grading basis.
- A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor.
- Each minor course must be taken for a letter grade, and students must have an overall grade-point average of 2.0 or better in the minor. Successful completion of the minor is indicated on the transcript and diploma.

Arabic and Islamic Studies Minor

The Arabic and Islamic Studies minor is designed for students who wish to augment their major program with a group of related courses that provide a systematic introduction to the study of Arabic language and literature and Islam.

To enter the minor, students must have an overall grade-point average of 2.0 or better and file a petition in 378 Kaplan Hall, 310-825-4165.

Required Lower-Division Courses (15 units): Arabic 1A, 1B, 1C, or equivalent.

Required Upper-Division Courses (20 units): Five courses in Arabic or Islamic studies; 199 courses may not be applied. With consent of the undergraduate adviser, two of the five courses may be taken outside the department. Courses recommended as electives for the major in Arabic (Anthropology M166Q, Art History 119A, 119B, C120, Comparative Literature 100, History 105A, 105B, 105C, M106, 108B, 111A, 111B, 111C, 130, Political Science 132A, M132B, 157, 165) may be applied. Other courses, including additional departmental courses, may be applied with consent of the adviser.
A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor. Each minor course must be taken for a letter grade, and students must have an overall grade-point average of 2.0 or better in the minor. Successful completion of the minor is indicated on the transcript and diploma.

**Armenian Studies Minor**

The Armenian Studies minor is designed for students who wish to augment their major program with a group of courses that provide a systematic introduction to the study of Armenian culture.

To enter the minor, students must have an overall grade-point average of 2.0 or better and file a petition in 378 Kaplan Hall, 310-825-4165.

Required Lower-Division Courses (35 units): Armenian 101A, 101B, and 101C, or 104A, 104B, and 104C, or equivalent; five courses from the Armenian section of the department; 199 courses may not be applied. With consent of the undergraduate adviser, two of the five courses may be taken outside the department. Ordinarily, the following courses may be applied: History 107A through 107E, Indo-European Studies M150.

A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor. Each minor course must be taken for a letter grade, and students must have an overall grade-point average of 2.0 or better in the minor. Successful completion of the minor is indicated on the transcript and diploma.

**Hebrew and Jewish Studies Minor**

To enter the Hebrew and Jewish Studies minor, students must have an overall grade-point average of 2.0 or better and file a petition in 378 Kaplan Hall, 310-825-4165.

Required Lower-Division Courses (15 units): Hebrew 1A, 1B, 1C, or 6, or equivalent.

Required Upper-Division Courses (20 units): Five courses from the Hebrew or Jewish studies section of the department; 199 courses may not be applied. With consent of the undergraduate adviser and based on course content, two of the five courses may be taken outside the department.

A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor. Each minor course must be taken for a letter grade, and students must have an overall grade-point average of 2.0 or better in the minor. Successful completion of the minor is indicated on the transcript and diploma.

**Iranian Studies Minor**

To enter the Iranian Studies minor, students must have an overall grade-point average of 2.0 or better and file a petition in 378 Kaplan Hall, 310-825-4165.

Required Lower-Division Courses (10 to 11 units): Iranian 1C or 20C or equivalent and one course from Middle Eastern Studies M50A, M50B, or M50CW.

Required Upper-Division Courses (20 to 23 units): (1) Three language and civilization courses from Iranian 102A, 102B, 102C, 103A, 103B, 103C, M110A, M110B, M110C, 120, 140, 141, 142, 161A, 161B, 161C, 170 and (2) two elective courses from Iranian M105A, M105B, M105C, M115A, M115B, M131, 132, 187. A maximum of 4 units of special studies courses (197, 198, 199) approved by the adviser may be applied toward the minor. Each course may be taken on a P/NP grading basis.

A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor. Each minor course must be taken for a letter grade, and students must have an overall grade-point average of 2.0 or better in the minor. Successful completion of the minor is indicated on the transcript and diploma.

**Israel Studies Minor**

The Israel Studies minor is designed for students interested in adding a particular focus on Israel to their major. Comprised of coursework that serves to create a broad introductory foundation of familiarity with Israeli history, society, politics, and culture, the minor is appropriate for students from a wide range of majors, including Art, Comparative Literature, Film and Television, History, Jewish Studies, Middle Eastern Studies, Political Science, and Study of Religion.

To enter the minor, students must have an overall grade-point average of 2.0 or better, completed Middle Eastern Studies M50CW or equivalent, and file a petition in 378 Kaplan Hall, 310-825-4165.

Required Lower-Division Courses (10 units): Two courses from Ancient Near East 10W, 12W, 15W, Middle Eastern Studies M50A, M50B, or M50CW.

Required Upper-Division Courses (20 to 25 units): Jewish Studies M142, M144, and three courses from at least two of the following categories: (1) language—Arabic 103A, 103B, 103C, Hebrew 103A, 103B, 103C, 111A, 111B, (2) literature, arts, and culture—Arabic 120, M123, 130, M148, Hebrew M130, C140, Jewish Studies M150A, 150B, 151B, M162, 175, Middle Eastern Studies C122, (3) politics—Political Science 120B, 132A, M132B, 157, (4) regional and historical setting—History 105A, 105B, 105C, Study of Religion 110, 120.

A maximum of 4 graded units of special studies courses (197, 198, 199) approved by the department may be applied toward the minor. A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor. Each minor course must be taken for a letter grade, and students must have an overall grade-point average of 2.0 or better in the minor. Successful completion of the minor is indicated on the transcript and diploma.

**Middle Eastern Studies Minor**

The Middle Eastern Studies minor is designed for students who wish to augment their major program in the College of Letters and Science with a group of related courses from various linguistic, literary, archeological, and historical disciplines of the Near East, from ancient Egypt, Mesopotamia, and biblical studies to the modern Arabic, Armenian, Iranian, Jewish, and Turkish world.

To enter the minor, students must have an overall grade-point average of 2.0 or better and file a petition in 378 Kaplan Hall, 310-825-4165.

Required Lower-Division Courses (9 to 10 units): Two courses selected from Ancient Near East 10W, History 9D, Middle Eastern Studies M50A, M50B, M50CW.

Required Upper-Division Courses (20 units): A total of five courses, including at least three from one of the following four areas:


- **Language:** Ancient Near East 150A, 150B, Arabic M110, C141, M148.

- **Religion:** Ancient Near East M130, M135, M185D, History M106, Islamic 170, 130, 151, Jewish Studies M155, Study of Religion 120.


Students may not substitute a core or elective course with a departmental independent study/directed research course (197, 198, or 199).

A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor.

Each minor course must be taken for a letter grade, and students must have an overall grade-point average of 2.0 or better in the minor. Successful completion of the minor is indicated on the transcript and diploma.
Graduate Study
Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Division website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Graduate Degrees
The Department of Near Eastern Languages and Cultures offers Master of Arts (MA), Candidate in Philosophy (CPhil), and Doctor of Philosophy (PhD) degrees in Islamic Studies and in Near Eastern Languages and Cultures.

Ancient Near East
See Semitics for Akkadian, Aramaic, Phoenician, Syriac, and Ugaritic courses.

Lower-Division Courses

10W. Jerusalem: Holy City. (5) Lecture, three hours; discussion, one hour. Enforced requisite: English Composition 3. Not open for credit to students with credit for course 12W. Survey of religious, political, and cultural history of Jerusalem over three millennia as symbolic focus of three faiths: Judaism, Christianity, and Islam. Transformation of sacred space as reflected in liturgy and archaeological evidence through examination of testimony of artifacts, architecture, and iconography in relation to written word. Study of creation of mythic Jerusalem through event and experience. Satisfies Writing II requirement. Letter grading.

12W. Jerusalem: Holy City. (5) Seminar, four hours. Enforced requisite: English Composition 3. Not open for credit to students with credit for course 10W. Survey of religious, political, and cultural history of Jerusalem over three millennia as symbolic focus of three faiths: Judaism, Christianity, and Islam. Transformation of sacred space as reflected in liturgy and archaeological evidence through examination of testimony of artifacts, architecture, and iconography in relation to written word. Study of creation of mythic Jerusalem through event and experience. Development of advanced writing skills and critical thinking. Satisfies Writing II requirement. Letter grading.


15. Women and Power in Ancient World. (5) Lecture, four hours; discussion, one hour. Requisite: English Composition 3. Not open for credit to students with credit for course 15W. Examination of how feminine power confronts masculine dominance within complex social systems in ancient world. To gain political power, some female rulers used their sexuality to gain access to important men. Others gained their position as regents and helpers of masculine kings who were too young to rule. Women's power was compromised from outset. Examination of root causes and results of this political inequality. P/NP or letter grading.

15W. Women and Power in Ancient World. (5) Lecture, four hours; discussion, one hour. Requisite: English Composition 3. Not open for credit to students with credit for course 15. Examination of how feminine power confronts masculine dominance within complex social systems in ancient world. To gain political power, some female rulers used their sexuality to gain access to important men. Others gained their position as regents and helpers of masculine kings who were too young to rule. Women's power was compromised from outset. Examination of root causes and results of this political inequality. Satisfies Writing II requirement. P/NP or letter grading.

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discourse. P/NP or letter grading.

20. Egyptian Hieroglyphs. (5) Lecture, five hours. Basic introduction to language and hieroglyphic script of ancient Egypt. Devoted to learning principles of hi- erglyphic writing and Egyptian grammar, deciphering standard inscriptions and alphabetic text editing software to type hieroglyphs on computer. Students acquire ability to recognize and translate hiero- glyphic inscriptions on common museum objects. P/NP or letter grading.

M50A. First Civilizations. (5) (Same as Middle Eastern Studies M50A.) Lecture, three hours; discussion, one hour. Survey of great civilizations of ancient Near East—Egypt, Israel, and Mesopotamia—with attention to emergence of writing, monotheism, and urban societies. Letter grading.

M50B. Origins of Judaism, Christianity, and Islam. (5) (Same as Middle Eastern Studies M50B and Religion M50B.) Lecture, three hours; discussion, one hour. Examination of three major monotheisms of Western cultures—Judaism, Christianity, and Islam—historically and comparatively. Development, teachings, and ritual practices of each tradition up to and including medieval period. Composition and development of various sacred texts, highlighting key themes and ideas within different historical and literary strata of traditions, such as abrahamic, strata and traditions, such as letter by letter by letter. Consequences and impact of religious authority and common theological issues such as origin of evil and status of nonbelievers. Letter grading.

M60. Achaemenid Civilization and Empire of Alex- ander. (5) Lecture, three hours; discussion, one hour. Survey of period from circa 600 to 300 BCE, rise and fall of Achaemenid Persia, first world empire of antiquity, which was ended by Alexander the Great, whose campaigns were as transformative as they were violent. Alexander connected ancient Mediterranean and Near East as never before, ushering in new era and forever changing cultural landscape of ancient world. Focus on themes of ancient kingship and political ideology; comparative study of empires; administration and institutions; and religious and ethnic diversity in large, heterogeneous states. Exposure to breadth and knowledge of Achaemenid and Macedonian empires, facility with ancient primary sources, and development of an- alytical skills central to discipline of history. P/NP or letter grading.

89. Honors Seminars. (1 Seminar, three hours. Limited to 20 students. Designed as adjunct to lower-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities under the direction of the course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

89HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. De- signed as adjunct to lower-division lecture course. Indi- vidual study with lecture course instructor to explore topics in greater depth through supplemental read- ings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract re- quired. Honors content noted on transcript. Letter grading.

Upper-Division Courses

CM101A. Art and Architecture of Ancient Egypt, Predynastic Period to New Kingdom. (4) (Same as Art History M110A.) Lecture, three hours. Study of architecture, sculpture, painting, and minor arts during Predynastic period and Old Kingdom. May be re- peated for credit with consent of instructor. Concurrently scheduled with course C267A, P/NP or letter grading.

CM101B. Art and Architecture of Ancient Egypt, New Kingdom to Greco-Roman Period. (4) (Same as Art History M110B.) Lecture, three hours. Study of architecture, sculpture, painting, and minor arts from New Kingdom to Greco-Roman period. Concurrently scheduled with course C267B, P/NP or letter grading.

M101C. Ancient Egyptian Temple and City of Thebes. (4) (Same as Art History M110C.) Lecture, four hours; fieldwork, one hour. Focus on ancient temples of city of Thebes (modern day Luxor). Theban temples are some of best-preserved cult buildings in all of Egypt, and their study illuminates traditions of artistic representation, architectural development, and social and political transformations echoed throughout all of ancient Egypt. Investigation of ritual linking of temples to the eastern and western regions of ancient Egypt through festival processions, chronological changes in function and form of Theban temples through time, and spatial and thematic program of individual temples. P/NP or letter grading.

M103A-M103B. History of Ancient Egypt. (4-4) (Same as History M103A-M103B.) Lecture, three hours; discussion, one hour (when scheduled). Course M103A is not requisite to M103B. Designed for juniors/seniors. Political and cultural institutions of an- cient Egypt and ideas on which they were based. P/NP or letter grading. M103A. Chronological discussion of Prehistory, Old and Middle Kingdom. M103B. New Kingdom and late period. P/NP grading.

M104A. History of Ancient Mesopotamia and Syria. (4) (Same as History M104A.) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Political and cultural development of Fertile Crescent, including Palestine, from Late Uruk to neo-Babylonian period. P/NP or letter grading.

M104B. Sumerians. (4) (Same as History M104B.) Lecture, three hours. Overview of Sumer and related cultures of Greater Mesopotamia in 4th and 3rd mil- lennium BCE, with focus on rich cultural history of region and integration of archaeological, art historical, and written records. P/NP or letter grading.

M104C. Babylonians. (4) (Same as History M104C.) Lecture, three hours. Survey of Mesopotamia and cul- tural history of region from late 3rd millennium BCE to invasion of Cyrus in 539 BCE, with focus on history and archaeology of region, urban structure, literature, art and religion. P/NP or letter grading.

M104D. Assyrians. (4) (Same as History M104D.) Lecture, three hours. Overview of Assyrian cultural his- tory from its origins to end of Neo-Assyrian period (circa 612 BCE), with focus on rise, military, and expansion of Neo-Assyrian Empire. P/NP or letter grading.

M105. Archaeology of Egypt and Sudan. (4) (Same as Anthropology M110.) Lecture, two hours; labora- tory, three hours. Ancient Egypt is known for iconic archaeological sites such as Giza Pyramids and Tomb of Tutankhamun. From these and thousands of less well-known sites, enormous variety of archaeo- logical information can be gained. Through discussion
of particular archaeological themes, regions, or sites; examination of methods of prehistoric and historic archeology and how archaeological information contributes to understanding of social, political, and religious history. Background provided for development of groups. Reading—finding resources, gathering, analysis, interpretation, presentation, and training on how to embark on research in this field. Computer laboratory component included in which students research, develop, and present in time map. P/NP or letter grading.


M120A-120B-120C. Elementary Egyptian. (5-5-5) Lecture, five hours. Course 120A is requisite to 120B, which is requisite to 120C. P/NP or letter grading. 120A. Introduction to hieroglyphic script and phonology of Middle Egyptian. Basic rules of Middle Egyptian syntax, with focus on nominal, adjectival, and adverbial sentences. 120B. Verbal system and syntax of verbal sentences of Middle Egyptian. 120C. Reading of authentic Egyptian texts to deepen knowledge of Egyptian grammar and to acquire familiarity with aims and methods of philology, study of ancient texts.

121A-121B-121C. Intermediate Ancient Egyptian Readings. (5-5-5) Lecture, three hours. Requisite: course 120B. Course 121A is requisite to 121B, which is requisite to 121C. Thematic readings in ancient Egyptian historical, literary, and religious texts. May be repeated for credit. P/NP or letter grading.

122. Elementary Ancient Egyptian: Intensive. (12) Lecture, 10 hours; discussion, 10 hours. Not open to students who have learned, from whatever source, enough Egyptian to qualify for more advanced courses. Intensive course equivalent to courses 120A, 120B, and 120C. Introduction to hieroglyphic script and phonology of Middle Egyptian, with emphasis on verbal systems, pronunciation, reading, and grammar. Offered in summer only. P/NP or letter grading.

C123A-C123B. Coptic. (5–5) Lecture, three hours. Introduction to Coptic, final phase of Egyptian language, which is attested in writing from circa 300 to 1400 CE. Concurrently scheduled with courses C223A-C223B. P/NP or letter grading. C123A. Devoted to learning Coptic alphabet, grammar, and vocabulary (Sahidic dialect), with particular emphasis on historical linguistics. C123B. Requisite: course C123A. Introduction to variety of Coptic textual genres, from hagiographies to homilies, magical spells, private letters, legal contracts, and Gnostic Gospels found in Nag Hammadi. Readings in texts in dialects other than Sahidic (Bohairic, Fayumic, Akhmimic).

124. Middle Egyptian Technical Literature. (4) Lecture, three hours. Requisite: course 121C. Reading of Middle Egyptian literature in hieroglyphic transcription. Medical, veterinary, mathematical, and astronomical texts included. P/NP or letter grading.

125A. Digital Cultural Mapping Course A: Time, Place, and Digital World. (4) Lecture, three hours; discussion, one hour. Introduction to how emerging digital mapping technologies like geographic information systems (GIS), virtual globes, and three-dimensional visualization are used as new means of inquiry in the humanities and social sciences. Provides students with critical apparatus needed to effectively, responsibly, and heuristically use technology in digital cultural mapping projects. Analysis of different forms of visual presentation, with focus on data representation through mapping, reasoning, and argumentation to learn to critically assess map-based presentations. Tracing of history of mapping and spatial representation of place to learn how mapping has always been connected with societal structures, politics, economics, and culture because maps represent re-ality by structuring world and organizing knowledge about it. Part of Digital Cultural Mapping Project supported by W.M. Keck Foundation. P/NP or letter grading.

M125B. Digital Cultural Mapping Course B: Google Earth, Geographic Information Systems, Hypercritics, and Timelines. (4) (Same as Architecture M125B. Lecture, three hours; discussion, one hour. Enforced requisite: course 125A. Hands-on laboratory-based investigation of emerging digital mapping technologies, including use of emerging applications of GIS, virtual globes, and geographic information systems (GIS). Critique and creation of maps of cultural phenomena, applying skills students learned in course 125A to develop in-depth research projects, such as mapping Peabody Institute of Bryn Mawr College, or experiment with their own personal project. Fostering of creative approaches to and engagement with mapping technological opportunities and new worldviews discovered using these technologies? How does one reason, argue, and solve real-world problems through digital cultural mapping? Design, development, and implementation of student mapping-based research projects. Part of Digital Cultural Mapping Project supported by W.M. Keck Foundation. P/NP or letter grading.

M125C. Digital Cultural Mapping Course C: Summer Research. (4) (Same as Architecture and Urban Design M125C.) Lecture, three hours; fieldwork, one hour. Enforced requisite: course M125B or Architecture and Urban Design M125B. Participation in collaborative, interdisciplinary research (GIS) to study patterns in humanities or social sciences using skills learned in courses 125A and 125B. Gathering and input of datasets from real-world sources, creation of virtual representations of data through production of digital maps, and performing analysis of larger dataset to answer specific research questions. Final oral presentation required that details student work and provides critical analysis of source material and technological/methodological issues inherent to type of GIS used for investigation. Part of Digital Cultural Mapping Project supported by W.M. Keck Foundation. Offered in summer only. P/NP or letter grading.

M130. Ancient Egyptian Religion. (5) (Same as Religion M130.) Lecture, three hours; discussion, one hour. Introduction to religious beliefs, practices, and societies of ancient Egypt. Study Egyptian religion as coherent system of thought and sphere of action that once served as meaningful and relevant framework for understanding physical reality and human life for inhabitants of Nile Valley. Basic religious principles, as well as developments through time (circa 3000 BC to 300 CE). Topics include mythology, temple and cult, magic, and personal piety. P/NP or letter grading.

M135. Religion in Ancient Israel. (4) (Same as Religion M135.) Lecture, four hours. Study of various ancient Israelite religious beliefs and practices, their origin, and development, with special attention to diversity of religious practice in ancient Israel and Canaan during 1st millennium BCE. P/NP or letter grading.

140A-140B-140C. Elementary Semitic. (4–4–4) Lecture, three hours. Requisites: Semitics 140A, 140B. Elementary grammar and reading of royal inscriptions, letters, and administrative texts from Ur III period. P/NP or letter grading.

150. Introduction to History of Near Eastern Literatures in English. (4–4) Lecture, three hours. Each course may be taken independently for credit. P/NP or letter grading. 150A. Mesopotamia; 150B. Egypt. Preparation: familiarity with Egyptian history. Enforced requisite: courses M110A-M110B-M110C of 3,000 years of ancient Egyptian literature. Reading of Egyptian texts in translation to study Egypt’s intellectual history and trace transformations in its construction of cultural identity. Topics include invention of writing, autobiography, wisdom texts, narratives, royal inscriptions, and hymns. Discussion of text analysis such as narratology.


162. Archaeology, Identity, and Bible. (5) Lecture, three hours; discussion, one hour. Introduction of archaeological record of ancient Israel (ancient Israel) from Bronze Age through Achaemenid Period (ca. 2500-332 BC) in combination with current understandings of genre, authorship, and historical value of Hebrew Bible. Ancient Israelite identities are traced through combination of archaeological and textual sources. Social, religious, and political traditions of ancient Israel and Judah are interpreted in context of both earlier Bronze Age traditions and Israel’s Iron Age neighbors. Archaeological and textual data for identities, such as Amorites, Canaanites, Phoenicians, Egyptians, Assyrians, and Babylonians, form basis for understanding construction of various biblical identities. Introduction to theoretical and methodological issues involving historical archaeology of ancient Israel and Levant, and possibilities for investigating negotiation of identity in archaeological record. P/NP or letter grading.

C163. Archaeology of Iran. (4) (Same as Iran C163.) Lecture, three hours. Designed to introduce students to Iran’s archaeological prehistory through Achaemenid times. Concurrently scheduled with course CM259. P/NP or letter grading.

C165. Egyptian Archaeology. (4) Seminar, three hours. Opportunity to research aspects of topics in ancient Egyptian archaeology. May be repeated for credit. Concurrently scheduled with course C286. P/NP or letter grading.

C166. Art and Death in Ancient Egypt. (4) (Formerly numbered 166.) (Same as Art History M110D.) Lecture, four hours. Ways of death, burial, funerary ritual, and afterlife beliefs in ancient Egypt, as well as in ancient Near East and Nubia, with focus on ancient views of life after death and the afterlife—from Predynastic to Roman periods. P/NP or letter grading.

C167. Magic in Ancient World. (4) (Same as Classics C167.) Lecture, three hours; discussion, one hour (when scheduled). Requisite: Classics 10 or 20. Exploration of how influence of natural course of events by occult means as practiced in ancient world at large. Coverage of beliefs in supernatural forces, rites aimed at controlling these forces effectively, and character and social roles of ritual expert and various cultures of ancient world. Source material includes types of magical spells, literary texts about magic and magicians, and artifacts such as amulets and ritual implements. P/NP or letter grading.

C168. Introductory Hittite. (4) (Same as Indo-European Studies C168.) Lecture, two hours; recitation, one hour. Recommended preparation: knowledge of language with case system. Introduction to Hittite grammar and sentence structure, covering morphology and syntax, followed by readings of selected texts from variety of genres in transplantation. P/NP or letter grading.
M169. Introduction to Archaeological Sciences. (4) [Same as Anthropology CM110C.] Lecture, three hours. Basic understanding of newly introduced methods and techniques throughout field of archaeology to implement them and to appreciate and evaluate results of their use. Majors who have em- bedded them in their scholarly publications or theoretical models. Systematic instruction in digital data management and mining, scientific analysis of mate- rials (including geochronological and bioarchaeo- logical techniques), and visual presentation of data and research results (ranging from simple graphs to virtual reality). Concurrently scheduled with course CM269. P/NP or letter grading.


175. Conceptions of Race in Ancient Egypt. (4) Lecture, three hours; discussion. Exploration of how racial hierarchies are created and main- tained within context of ancient Egyptian culture. Race of ancient Egyptians is still at stake and tied to larger issues of global politics, human rights, and military oppression. Examination of modern issues invites comparison with conception of race in ancient world, which was not necessarily equivalent to our own. By consulting evidence from collections that include those of early scholars, contemporary anthropolo- gists, Afrocentrist scholars and artists, Hebrew Bible, ancient Egyptian evidence, and ancient Nubian evi- dence, conception of race is revealed to be complex, fluid, and contradictory. These conceptions were and are used to construct variety of equally contradictory hierarchies, often based on same evidence. P/NP or letter grading.

C177. Variable Topics in Ancient Near East. (4) Lecture, three hours; discussion, one hour. Variable topics: consult Schedule of Classes for topics to be offered in specific term. Concurrently scheduled with course C277. P/NP or letter grading.

M179. Cultural Heritage and Identity Representation: Creating Fowler and Virtual Exhibit. (4) [Same as Art History M179.] Lecture, three hours; discussion, one hour. Variable topics: consult Schedule of Classes for topics to be offered in specific term. Concurrently scheduled with course C277. P/NP or letter grading.

M185D. Religions of Ancient Near East. (4) [Same as History M185D and Religion M185D.] Lecture, three hours; discussion, one hour (when scheduled). Designed for study of polytheistic system of ancient Near East, with emphasis on Mesopotamia and Syria and with reference to religion of ancient Is- rael: varying concepts of divinity, hierarchies of gods, prayer and cult, magics, wisdom, and moral conduct. P/NP or letter grading.

189. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth than in Honors seminar, paper or other activities and led by lecture course instructor. May be applied toward honors credit for eligible stu- dents. Honors content noted on transcript. P/NP or letter grading.

189HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Des- signed as adjunct to upper-division lecture course. In- dividual study or lecture course instructor to explore topics in greater depth through supplemental read- ings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract re- quired. Honors content noted on transcript. Letter grading.

197. Individual Studies in Ancient Near East. (2 to 4) Tutorial, one hour. Limited to juniors/seniors. Indi- vidual intensive study, with scheduled meetings to be arranged between a student and instructor. As- signed reading and tangible evidence of mastery of subject matter required. May be repeated for credit. Individual contract required. P/NP or letter grading.

199. Directed Research or Senior Project in Ancient Near East. (2 to 4) Tutorial, one hour. Limited to juniors/seniors. Supervised individual research or in- vestigation under guidance of faculty mentor. Culmi- nations or project required. May be repeated for credit. Individual contract required. P/NP or letter grading.

Graduate Courses

M201. Archaeological Research Design. (4) [Same as Archaeology M201C and Archaeology M201C.] Seminar, three hours. Requisites: Archaeology M201A, M201B. How to design archaeological projects in preparation for MA thesis or PhD phase. Students do ex- ploratory research to select subject, then write research design. Includes the preparation of extensive reaction paper, grant application, or oral examination. Students work closely with faculty members and report weekly on their progress. Preparation of at least two oral progress-report presentations, one on theoretical framework and one on practical aspects of project. Final written research design that incorporates theo- retical and practical aspects of research and formu- lates bridging arguments required. S/U or letter grading.

M208. Topics in Ancient Egyptian History. (4) [Same as History M210 and Israel M210.] Seminar, three hours. Varying topics on Amarna, Achaemenid, Ar- sad, and Sasanian history. May be repeated for credit. S/U or letter grading.

210. Late Egyptian. (4) Lecture, three hours. Requi- sites: courses 121A, 121B, 121C. Late Egyptian grammar and reading of both hieroglyphic and hieratic texts. May be repeated for credit. S/U or letter grading.

211A-211B. Egyptian Texts of Greco-Roman Peri- od. (4-4) Lecture, three hours. Introduction to grammat- ics and orthography of hieroglyphic texts from Greco-Roman temples. Text readings and translation of various textual types. Letter grading.

215. Readings in Middle Kingdom Literature. (4) Seminar, three hours. Enforced requisites: courses 120A, 120B, 120C. Survey of Middle Kingdom literature through close readings of texts in original lan- guage and evaluation of current scholarship on these texts. Students hone their knowledge of Middle Egypt- ian grammar and become familiar with philological methods in study of Egyptian literature. S/U or letter grading.

220. Seminar: Ancient Egypt. (4) Seminar, three hours. May be repeated for credit. S/U or letter grading.

221A-221B. Demotic. (4-4) Lecture, three hours. Requisite: course 212C. Course 221A is requisite to 221B. Introduction to Demotic grammar and orthog- raphy. Reading of texts from various genres. May be repeated for credit with topic change. S/U or letter grading.

222A-222B. Coptic. (5-5) Lecture, three hours. In- troduction to Coptic, final phase of Egyptian language, which is attested from circa 300 to 1400 CE. Concurrently scheduled with courses C121A/C121B. S/U or letter grading. C222A. Devoted to learning Coptic alphabet, grammar, and vocabulary (Sahidic dialect), with particular emphasis on historical linguis- tics. C222B. Requisite: course C222A. Introduction to variety of Coptic textual genres, from hagiographies to homilies, magical spells, private letters, legal con- tracts, inscriptions, and Gnostic Gospels found in Nag Hammadi. Readings in texts in dialects other than Sahidic (Bo- hairic, Fayumic, Akhmimic).

230. Seminar: Ancient Syria-Palestine. (4) Seminar, three hours. Examination of selected topics on polit- ical, social, and intellectual history of ancient Israel. Exploration of how historical, social, and political con- texts shaped and influenced interpretation and use of biblical texts. May be repeated for credit. S/U or letter grading.

240A-240B-240C. Seminars: Sumerian Language and Literature. (4-4-4) Seminar, two hours. Readings of texts from various Sumerian periods and literar- ies; selected topics in textual criticism, philological analy- sis and literary history. S/U or letter grading.

CM259. Archaeology of Iran. (4) [Same as Iran CM259.] Lecture, three hours. Designed to introduce students to Iranian archaeological history from prehistoric through Achaemenid times. Concurrently scheduled with course CM163. S/U or letter grading.

260. Seminar: Ancient Near Eastern Archaeology. (2 to 4) Seminar, two hours. May be repeated for credit. S/U or letter grading.

261. Practical Field Archaeology. (2 to 8) Fieldwork, two hours. Participation in archaeological excavations or other archaeological research in Near East under staff supervision. May be repeated for credit. S/U or letter grading.

262. Seminar: Object Archaeology. (4) Seminar, two hours; laboratory, one hour. Selected topics in analysis and interpretation of Near Eastern archaeological finds from the collections of museums of the world. Work with objects in Heermanek Collection of Los Angeles County Mu- seum of Art. S/U or letter grading.

263. Seminar: Egyptian Monuments. (4) Seminar, two hours. Selected monuments and sites in Egypt, including Delta, Nile Valley, desert sites, wadis, oases, and border regions. Architecture and decoration of temples and tombs, statuary and monuments, settle- ment and use history, text translation of appropriate documents, including stele, monumental inscrip- tions, or pertinent socioeconomic texts. May be re- peated. S/U or letter grading.

264. Egyptian Museum Collections. (4) Seminar, two hours; research group meeting, one hour. Ancient Egyptian museum collections around world, data sets, provenance and dating studies, collection history and agenda, museology, and exhibition history. May be re- peated for credit with consent of instructor. S/U or letter grading.

M265. Depositional History and Stratigraphic Anal- ysis. (4) [Same as Archaeology M265.] Lecture, two hours. Theoretical understanding of depositional pro- cesses on both land and sea, and of stratiographic procedures to be used in recovery of em- bedded cultural materials. Study of issues covered in literature, with specific test cases from actual excavations and reports. Examination of complica- tions of such disciplines as surveying and pedology with help of specialists. S/U or letter grading.

C266. Egyptian Archaeology. (4) Seminar, three hours. Opportunity to research aspects of topics in ancient Egyptian archaeology. Topics vary each year. May be repeated for credit. Concurrently scheduled with course C165. S/U or letter grading.

C267A. Art and Architecture of Ancient Egypt, Pre- dysonic Period to New Kingdom. (4) Lecture, three hours. Survey of architecture, sculpture, painting, and minor arts during Predynastic period and Old Kingdom. May be repeated for credit with consent of instructor. Concurrently scheduled with course CM161A. S/U or letter grading.

C267B. Art and Architecture of Ancient Egypt, New Kingdom to Greco-Roman Period. (4) Lecture, three hours. Study of architecture, sculpture, painting, and minor arts during New Kingdom to Greco-Roman pe- riod. Concurrently scheduled with course CM161B. S/ U or letter grading.

CM269. Introduction to Archaeological Sciences. (4) [Same as Anthropology CM210B.] Lecture, three hours. Basic understanding of newly introduced methods and techniques throughout field of archaeo- nology to implement them and to appreciate and eval- uate results of their use by others who have em- bedded them in their scholarly publications or theoret- ical models. Systematic instruction in digital data
management and mining, scientific analysis of materials including geological and biochemical techniques, and visual presentation of data and research results (ranging from simple graphs to virtual reality). Concurrently scheduled with course CM169. S/U or letter grading.

270. Old Egyptian. (4) Seminar, three hours. En- forced requisites: courses 120A, 120B, 120C, or one year of introductory Middle Egyptian. Advanced reading class in Old Egyptian, earliest of five Egyptian language phases, to prepare students for independent research on Egyptian texts dating to Old Kingdom (circa 2800 to 2100 BCE). Through close reading of texts in original language and original format, students learn grammar, orthography, and phrasology of Old Kingdom texts as well as tools and methods of epigraphy. Focus on tomb biographies, royal edicts, and Pyramid Texts. Letter grading.

C277. Variable Topics in Ancient Near East. (4) Lecture, three hours; discussion, one hour. Variable topics; consult Schedule of Classes for topics to be offered in specific term. Concurrently scheduled with course C177. S/U or letter grading.

596. Directed Individual Study. (2 to 8) Tutorial, to be arranged. May be repeated for credit. S/U or letter grading.


Arabic

Lower-Division Courses

1A-1B-1C. Elementary Standard Arabic. (5–5–5) Lecture, six hours. Course 1A is enforced requisite to 1B, which is enforced requisite to 1C. Not open to students with prior knowledge of Arabic. Introduction to formal Arabic (modern standard Arabic), including listening, speaking, reading, and writing. P/NP or letter grading.

8. Elementary Standard Arabic Intensive. (12) Lecture, 10 hours; discussion, 10 hours. Not open to students who have learned, from whatever source, enough Arabic to qualify for more advanced courses. Intensive course equivalent to courses 1A, 1B, and 1C. Introduction to fundamentals of standard Arabic, including pronunciation, grammar, and Arabic script, with emphasis on all four basic language skills—speaking, listening comprehension, reading, and writing. Offered in summer only. P/NP or letter grading.

19. Fiat Lux Freshman Seminars. (1 Seminar) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

89. Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to lower-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be repeated toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

89HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to lower-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for a maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

99. Student Research Program. (1 to 2) Tutorial (supervised by regular course or other school work), three hours per week unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract requires consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Courses

102A-102B-102C. Intermediate Standard Arabic. (4–4–4) Lecture, four hours. Enforced requisite: course 1C or 6. Course 102A is requisite to 102B, which is requisite to 102C. Students who have learned, from whatever source, enough Arabic to qualify for more advanced courses. Intermediate formal Arabic, including listening, speaking, reading, and writing. P/NP or letter grading.

103A-103B-103C. Advanced Arabic. (4–4–4) Lecture, four hours. Enforced requisites: courses 102A, 102B, 102C. Not open to students who have learned, from whatever source, enough Arabic to qualify for more advanced courses. Advanced formal Arabic, including grammar, composition, and readings from classical and modern texts. P/NP or letter grading.

105. Introduction to Qur’anic and Islamic Arabic. (4) Lecture, three hours. Requisites: courses 1A, 1B, 1C. Introduction to Arabic used in Qur’an, Hadith (traditions of Prophet Muhammad), and early Islamic literature (biographies of Prophet and historical narratives). P/NP or letter grading.

M106. Qur’an. (4) (Same as Religion M108.) Lecture, three hours. Introduction to Qur’an, its early history, and form and function as scripture in Muslim history, civilization, and culture. Focus also on Qur’anic interpretation and reformism, received tradition and Qur’anic in contemporary discourses such as human rights, feminism, and contemporary reform movements. Primary sources include excerpts from Qur’an, Qur’anic interpretation, and selected writings of Muslim thinkers and reformists. Strong focus on analytical and writing skills through in-class assignments and discussion. Letter grading.

M107. Islam in West. (5) (Same as Islamic Studies M107 and Religion M107.) Lecture, three hours; discussion, one hour. Acquisition of understanding of basic doctrines and practices of Islam. Survey of history of Islam in West, with focus on U.S. and France. Analysis of issues relevant to growth and development of selected Muslim communities in West. Exposure to diverse expressions of Islam through independent research on Muslim communities and institutions in U.S. Development of strong analytical writing and speaking skills. P/NP or letter grading.

108. Summer Intensive Intermediate Arabic. (12) Lecture, and discussion, 20 hours. Enforced requisite: course 1C. Not open to students who have learned, from whatever source, enough Arabic to qualify for more advanced courses. Intensive course equivalent to courses 102A, 102B, and 102C. Intermediate formal Arabic, including listening, speaking, reading, and writing. Offered in summer only. P/NP or letter grading.

M110. One Thousand and One Nights/Alif Layla Wa-Layla. (4) (Same as Comparative Literature M110.) Lecture, three hours. Knowledge of Arabic not required. Since its appearance in Europe in 1704, One Thousand and One Nights is most well-known work of Arabic literature in West. Examination of cycle of tales more commonly known as Arabian Nights, including history of its translation, contemporary oral performances of tales in Arabic-speaking world, literary emergence of vernacular language in relation to classical Arabic, and Western appropriations of tales in music, film, and novels (Ravel, Rimsky-Korsakov, Barth, Poe, and Walt Disney). P/NP or letter grading.

111-111B-111C. Elementary Spoken Egyptian Arabic. (4) Lecture, four hours. Enforced requisite course 1C or 8. Course 111 is enforced requisite to 111B, which is enforced requisite to 111C. Not suitable for heritage speakers. Introduction to spoken Arab dialect of Egypt. Training in listening, speaking, and reading. P/NP or letter grading.

115. Summer Intensive Elementary Egyptian Arabic. (4) Lecture, three hours. Knowledge of Arabic not required; not suitable for heritage speakers. Introduction to spoken Arabic dialect of Egypt. Training in lis-
150. Classical Arabic Literature in English. (4) Lecture, three hours. Readings in English, knowledge of Arabic not required. Survey of premodern Arabic cultural production in its political, religious, and social contexts. Coverage of pre-Islamic Arabia, rise of Islam, and early and medieval Arabic history, along with significant figures and moments in literature and culture of premodern period. Consideration of selected modern responses to Arabic tradition. P/NP or letter grading.

M151. Modern Arabic Literature in English. (4) (Same as Comparative Literature M167.) Lecture, three hours. Designed for upper-division literature majors. Topics: introductions of other Arab countries in modern Arab culture: East-West debate; memory, trauma, and mourning; violence, narrative, and ethics; globalization, oil, and cultural insurgency; Arab culture in transnational context or questions of reception, exotism, translation, and marketing. Genres may include prison narratives; novel of terror; memoirs by women or by refugees and exiles; 19th- and 20th-century travel narratives; Arabic romantic poetry; literature of pre-1948; rise of Arab novel. Areas may range from generic look at Arab world to narrow focus on Maghreb or one country such as Algeria, Palestine, Iraq, Lebanon, or Egypt. May also be organized around Arabic literatures written in one specific language, namely English, Arabic, or French. Letter grading.

M155. Al-Andalus: Literature of Islamic Spain. (4) (Same as Comparative Literature M111.) Lecture, three hours. Study of literature of Islamic Spain to learn about interaction of Arabic and Western and Arab and Jewish cultures and to recognize Islamic culture as a vital force in European life and letters. P/NP or letter grading.

M171. Culture Area of Maghrib (North Africa). (4) (Same as Anthropology M166Q and History M1068C.) Lecture, three hours. Designed for juniors/seniors. Introduction to the region, especially Morocco, Tunisia, and Libya, also known as Maghrib or Tamazgha. Topics include changing notions of personal, tribal, ethnic, linguistics and religious identities; colonialism; gender and legal rights, changing representations of Islam, and religions in region’s public spaces. P/NP or letter grading.

177. Variable Topics in Arabic. (4) Lecture, three hours. Variable topics; consult schedule of classes for topics to be offered in specific term. May be repeated for credit. P/NP or letter grading.

180. Linguistic Analysis of Arabic. (4) Lecture, four hours. Requisite: course 102C. Linguistic description of Arabic in both its modern standard and dialect forms. Introduction to linguistic analysis of Arabic phonology, morphology, and syntax and to linguists’ approaches to specific problems posed by Arabic grammar and syntax. P/NP or letter grading.

181. Translating Arabic. (4) Seminar, three hours. Preparation: advanced proficiency in English and Arabic (at least three years of Arabic instruction or equivalent). Open to both native and nonnative speakers of English and Arabic. Training of students in methodology of translation from Arabic into English, with focus on producing accurate and readable English versions of Arabic texts from variety of fields. Close reading and translation of Arabic texts, with view of linguistic and cultural difficulties that arise in course of translation. Texts may include classical Arabic literature (religion, historiography), modern writing (literature, media), and spoken Arabic television (radio), based on student interest. Letter grading.

188FL. Special Studies: Readings in Arabic. (2) Seminar, two hours. Requisite: course 102C. Students must be enrolled in affiliated main course. Primary readings and additional work in Arabic to enrich and augment work assigned in main course, including reading, writing, and other exercises. May be repeated for credit. P/NP or letter grading.

189. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth and supplemental readings, papers or other activities. May be repeated for credit. P/NP or letter grading.

220. Seminar: Islamic Texts. (4) Seminar, three hours. Major Islamic thinkers and their works from classical period to modern times. Coverage of doctrines as transmitted thought forms. Emphasis on works of Islamic authors in the religion of Islam, as Ahl al-sunna wa-l-jama’a, Shi’a, Mu’tazila, and Sufis. May be organized around one author or his works, multiple authors and their works, or specific topic with representative readings from various schools. Exploration of secondary literature in Arabic and other languages for student research papers. May be repeated for credit. S/U or letter grading.

M220B. Modern Arabic Literature in Arabic. (4) (Same as Hebrew, M231.) Lecture, three hours; discussion, one hour. Requisites: course 102C, Hebrew 102B. Reading of Judeo-Arabic texts by Malmonides (medieval religion, medicine, philosophy) and more recent texts. In addition, study of Arabic literary texts from Iraq and Egypt, with discussion of grammar and deviations from norms of classical Arabic. S/U or letter grading.

240A. Seminar: Arab Historians. (4) Seminar, three hours. Introduction to very large body of literature on medieval Islamic civilizations and societies in Arab that represent cross-section of Islamic historiographical traditions in Arabic that represent cross-section of Islamic historical writings, including Ibn Ishaq’s Sira, Waqidi’s Maghazi, Bahaluddin’s Futuh, Tabari’s Ta’khkhist, digests of Yaqubi and Alkifafi, and ‘Abd al-Hadi’s Topographies. Historians studied to determine their reliability as sources or their view of history and its theoretical foundations. Exploration of sources, research tools, and method of history. May be repeated for credit. S/U or letter grading.

240B. Seminar: Arab Geographers. (4) Seminar, three hours. Introduction to very large body of literature on medieval Islamic geographers. Selected readings in Arabic that represent cross-section of Islamic geographical writings distributed over number of disciplines and various aspects of geography, such as Surat al-arid, Kitab al-Buldan, al-Masalik wa’l-Mamlik, and Topographies. May be repeated for credit. S/U or letter grading.

C241. Modern Arabic Literature. (4) Lecture, three hours. Requisite: course 102C. Conducted in English and Arabic, with all required readings in original Arabic only. Readings in modern Arabic literature, variety organized around or across a particular period, genre, topics, canonical authors, regional, or national literatures. Analysis of aesthetics of literary and critical texts and making use of film, video-clip, and song in approaching literary culture. May be repeated for credit. Concurrently scheduled with course C411. S/U or letter grading.

250. Seminar: Premodern Arabic Literature. (4) Seminar, three hours. Readings in Arabic texts from variety of periods and genres, along with appropriate secondary literature. Topics include pre-Islamic poetry and oratory, Qur’an, Umayyad and Abbasid poetry and literary prose, Hadith and Fiqh, historiography, biographies, geography, medicine, mathematics, theology, asceticism, and mysticism. May be repeated for maximum of 24 units. S/U or letter grading.

251. Seminar: Modern Arabic Literature. (4) Seminar, three hours; discussion, one hour. Requisite: course C141. Selected topics in modern and contemporary Arabic novel and poetry. May be repeated for credit. Letter grading.

M255. Literatures and Cultures of Maghreb. (4) (Same as Comparative Literature M251.) Seminar, three hours. Limited to graduate students. Examination of traditionally diverse literatures of Maghreb in their multiple and competing contexts of language and gender politics, religious and cultural formations, Pan-Arabism and postcolonial nationhood, Third-World and economic development, modernity and globalization, immigration and citizenship, soccer industry and Rai music, mass media and Star Academy Maghreb, and globalized arabic translations from different Maghribian languages (particularly Arabic and French) in conjunction with theories of language and linguistic pluralism, cultural theory as vital force in European life and letters. P/NP or letter grading.

275. Encountering Arabic Manuscripts: Introduction to Arabic Paleography and Critical Edition of Manuscripts. (4) Lecture, three hours; discussion, one hour. Requisite: course 103C. Introduction to Arabic paleography and how to prepare editions of medieval manuscripts with critical apparatus and sigillography. Examination of previously unknown Arabic manuscripts have been discovered. While vast range of medieval texts have been published in editions of varying quality, equally large number of manuscripts remains unpublished. UCLA has outstanding collections of Near Eastern manuscripts in Arabic, Persian, and Ottoman Turkish, primarily in fields of medicine, literature, philology, theology, law, and history. It is rich in related to studies of theologians and scholars at different centers of learning in Iran during Safavid period noted for works of Shite theology, Islamic sciences, and philosophy. Course opens this treasure to graduate students interested in editing and/or translating manuscripts. S/ U or letter grading.

M280. Modern Arab Thought. (4) (Same as Comparative Literature M288.) Seminar, three hours. While much has been written and said about resurgence and spread of political Islam after collapse of secular nationalism and failure of Arab left to apprehend exigencies of postrevolutionary moment, little has been devoted to less sensational topic of modern Arab thought despite unmistakable proliferation of critical output produced by Arab thinkers and intellectuals in aftermath of 1960s and more often described as “Arab-Islamicist” or “Arabization.” This course addresses this glaring imbalance by considering new cultural material—literary, critical, philosophical, artistic, and journalistic—produced before and after al-Nahda but mostly before and after 1967 and fosters insightful approaches to uniquely coexist in Arab contemporaneity of ever-deepening and generalized crisis and of steady and consolidated development (if not effacement) of cultural and artistic production. S/U or letter grading.

496. Arabic Language Pedagogy Course. (2) Seminar, three hours. Taught in English and Arabic. Discussion of multiple topics pertaining to Arabic language teaching and learning. Critical analysis of Classical Arabic language pedagogy, with emphasis on practical issues and applications of different language teaching methodologies. Activities include lectures, classroom observations, and teaching demonstrations. Participants collaborate on projects that investigate issues related to teaching different language objectives, and host other relevant theories of gender, globalization, and postcolonial cultural studies. S/U or letter grading.

599. PhD Dissertation Research and Preparation. (2 to 8) Tutorial, to be arranged. May be repeated for credit. S/U or letter grading.
Armenian

Lower-Division Courses

19. Fiat Lux Freshman Seminars. (1 Seminar) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

89. Honors Seminars. (1 Seminar) Seminar, three hours. Limited to 20 students. Designed as adjunct to lower-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be repeated toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

89HC. Honors Contracts. (1 Tutorial), three hours. Limited to students in College Honors Program. Designed as adjunct to lower-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

99. Student Research Program. (1 to 2) Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Courses

101A-101B-101C. Elementary Modern Western Armenian. (5–5–5) Lecture, five hours. Course 101A is recommended prerequisite. Course 101B, which is recommended requisite to 101C. Students with knowledge of Armenian should contact instructor to determine appropriate enrollment level. Armenian grammar, conversation, and exercises. P/NP or letter grading.


110. History of Armenian Language. (4) Lecture, three hours. Comprehensive examination of status of Armenian as heritage language in diasporic context. Introduction to diasporic Armenian, and a literature of Armenia, and investigation of interface between sociopolitical and economic factors in creation of works of art (literature, art, architecture) and social function these works performed in this important period of Armenian history. Letter grading.

130. Armenian Civilization under Bagratid Dynasty. 884 to 1064. (4) Lecture, four hours. Interdisciplinary investigation of interface between sociopolitical and economic factors in creation of works of art (literature, art, architecture) and social function these works performed in this important period of Armenian history. Letter grading.

131. Armenian Civilization in Cilician Period, 1080 to 1375. (4) Lecture, four hours. Interdisciplinary investigation of rise and fall of unique form of Armenian poesy established outside homeland and examination of degree to which its social structure and cultural and aesthetic norms were impacted by those of West (Byzantium, Western Europe, and East (Crusader states, Seljuk, Mamluks, Mongols). Letter grading.

M134. Introduction to Armenian Music. (4) Same as Ethnomusicology M134 and Music M134.) Lecture, three hours. Some amount of formal music study and experience as vocalist or instrumentalist desirable but not essential. Introduction to history, tradition, and scope of music of Armenia. Focus on number of different genres and approaches, and interactions between music and culture, society, and history. P/NP or letter grading.


C151. Armenian Literature and Canon Formation. (4) Lecture, four hours. Discussion of fundamental themes and genres around which Armenian literary tradition evolved and modalities by which this has been transformed in course of last two centuries as result of exposure to European thought and expressive forms. Concurrently scheduled with course C251. P/NP or letter grading.

C152. Modern Armenian Drama as Vehicle for Social Critique. (4) Lecture, four hours. Readings of selected plays from 1668 to 1992 from three main groups of playwrights, national, diaspora, and serious drama and featuring works by most significant Armenian playwrights, with focus on their role as commentators on contemporary mores and as agents for social reform. Concurrently scheduled with course C252. Letter grading.

C153. Art, Politics, and Nationalism in Modern Armenian Literature. (4) Lecture, four hours. Examination of role of literature in the construction of the Armenian nation in service to cause or causes, as propaganda for various ideologies, as art for art’s sake, etc. Exploration of contrasting aesthetics implicit in these differing interpretations. Concurrently scheduled with course C253. P/NP or letter grading.


C166. Armenian Film and Culture. (5) Lecture, six hours. Requisite: course 1C or 4C. Overview of development of Armenian cinematography from first talkie to present, with focus on work of most seminal directors from Armenian Republic, as well as various voices from the worldwide diaspora. Concurrently scheduled with course C266. P/NP or letter grading.

170. Armenian Poetry, 1880 to 1930. (4) Lecture, three hours. Requisite: course 1C or 4C. Examination of process behind creation of range and variety of poetic expression that developed in new literary formats and genres of what became standard modern Eastern and Western Armenian language in second half of 19th century. Special attention to crafting of central poetic characters, particularly individual and social consideration to poets and aesthetics, continuity and innovation under impact of modernism, and employment of poetic structure as medium for expression of deeper philosophic and poetic texts read in original language. P/NP or letter grading.

171. Variable Topics in Armenian Studies. (4) Lecture, three hours. Examination of major issues in Armenian studies. May be repeated for maximum of 16 units with topic and/or instructor change. P/NP or letter grading.

M172. Medieval Armenian Art. (4) Same as Art History M118A.) Lecture, three hours. Examination of cultural and historical impact of Armenian miniature paintings. P/NP or letter grading.


188. Variable Topics in Armenian. (4) Lecture, four hours. Departmentally sponsored experimental or temporary courses, such as those taught by visiting faculty members. May be repeated for credit with topic change. P/NP or letter grading.

199. Advanced Honors Seminars. (1 Seminar) Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.
189HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to upper-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

197. Individual Studies in Armenian. (2 to 4) Tutorial, one hour. Limited to juniors/seniors. Individual intensive study, with scheduled meetings to be arranged between faculty member and student. Assigned reading and tangible evidence of mastery of subject matter required. May be repeated for credit. Individual contract required. P/NP or letter grading.

199. Directed Research or Senior Project in Armenian. (2 to 4) Tutorial, one hour. Limited to juniors/seniors. Supervised individual research or other activity under guidance of faculty mentor. Culumnating paper or project required. May be repeated for credit. Individual contract required. P/NP or letter grading.

Graduate Courses

230A-230B-230C. Elementary Classical Armenian. (4-4-4) Lecture, course 230A is required prior to 230B, which is requisite to 230C. Introduction to grammar of classical literary language (5th to mid-19th century) and guided readings in narrative prose texts. Letter grading.


232A-232B-232C. Advanced Classical Armenian. (4-4-4) Lecture, three hours. Requisite: course 231A or 2318 or 231C. In-depth reading and linguistic analysis of texts related to Athenian School of 6th to 8th century and later. Individual contract required. P/NP or letter grading.

250A-250B. Seminars: Armenian Literature. (4-4) Seminar, three hours. Selected topics from various periods of Armenian literature. May be repeated for credit. S/U or letter grading.

2521. Armenian Literature and Canon Formation. (4) Lecture, four hours. Discussion of fundamental themes and genres around which Armenian literary tradition evolved and modalities by which this has been transformed in course of last two centuries as result of exposure to European thought and expressive forms. Concurrently scheduled with course C151, S/U or letter grading.

2522. Modern Armenian Drama as Vehicle for Social Critique. (4) Lecture, four hours. Readings of select plays from 1868 to 1993 from three main genres of tragedy, comedy, and series drama and featuring works by most significant Armenian playwrights, with focus on their role as commentators on contemporary mores and as agents for social reform. Concurrently scheduled with course C152. Letter grading.

2523. Art, Politics, and Nationalism in Modern Armenian Literature. (4) Lecture, four hours. Examination of role of literature in modern Armenian society in service to cause or causes, as propaganda for various ideologies, as art for art’s sake, etc. Exploration of contrasting aesthetics implicit in these differing interpretations. Concurrently scheduled with course C153. P/NP or letter grading.


260. Armenian Film and Culture. (5) Lecture, six hours. Requisite: course 1C or 4C. Overview of development of Armenian cinematography from first talkie to present, with focus on work of most seminal directors from Armenian Republic, as well as various voices from worldwide diaspora. Concurrently scheduled with course C166. S/U or letter grading.

596. Directed Individual Study. (2 to 8) Tutorial, to be arranged. May be repeated for credit. S/U or letter grading.


Hebrew

Lower-Division Courses

1A-1B-1C. Elementary Hebrew. (5-5-5) Lecture, four hours; laboratory, one hour. Enforced preparation: Hebrew placement test. Course 1A is enforced requisite to 1B, which is enforced requisite to 1C. Not open to native speakers. Introduction to modern Hebrew, including listening, speaking, reading, and writing. P/NP or letter grading.


19. Fiat Lux Freshman Seminars, (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

99. Honors Seminars, (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to lower-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

89HC. Honors Contracts, (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to lower-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.


111B-111C. Conversational Hebrew. (3–3) Lecture, two hours; laboratory, one hour. Requisite: course 111A. Course 111B is requisite to 111C. Vocabulary used in daily life, different speech acts in both formal and informal contexts, and various Israeli sociocultural issues using different kinds of media, such as video, Internet, and newspapers. P/NP or letter grading.

112. Readings in Modern Scholarly Hebrew. (2) Lecture, two hours. Requisite: course 102C. In-depth reading and discussion of selected scholarly articles in modern Hebrew for various disciplines: Bible study, Jewish history and folklore, sociology, and literary criticism. Development of student proficiency in vocabulary, terminology, and ideas in these fields while enhancing comprehension of complex syntactical structures in Hebrew. May be repeated for credit. P/NP or letter grading.

M113. Contemporary Israeli Short Stories/Novellas and Films in English. (5) (Same as Jewish Studies M113) Lecture, three hours; laboratory, two hours. Exploration of Israeli short stories/ Novellas and films (translated into English) written since mid-1960s that use, each to varying degree, postmodernist techniques to undermine predominance of modernist-Zionist narrative. Recycling and reexamination of Israeli conditioning and Zionist conditionality about legitimacy of meta-narratives to redefined blurred outline of Israeli identity and subvert its underpinning formative myths. They simultaneously display loss of faith in representational dimension of cultural discourse, including ability of texts to penetrate to its hidden meaning. Using periphery discourses, these texts strive to change modernist aesthetic and power paradigms. P/NP or letter grading.


130. Hebrew Bible with Medieval Commentaries, (4) Lecture, three hours. Requisite: course 103C. Hebrew Bible with the commentaries of Rashi, Ibn Ezra, and/or Nahmanides. May be repeated for maximum of 16 units. Letter grading.

130B. Talmudic Hebrew, (4) Lecture, three hours. Requisites: courses 103A, 103B, 103C. Readings in Mishnah, Talmud, and/or Midrash. May be repeated for credit.


C110. Modern Hebrew Poetry and Prose, (4) Lecture, three hours. Requisites: courses 103A, 103B, and 103C, or equivalent knowledge of Hebrew. Study
of major Hebrew writers of past 100 years. May be re- peated for credit. Concurrently scheduled with course C240, Letter grading.

170. Dead Sea Scrolls. (4) Lecture, three hours. Requir- ees: course 110C. Readings in Hebrew scrolls from Dead Sea, with focus on grammar, paleography, and biblical interpretation in Dead Sea Scrolls. May be repeated for credit. P/NP or letter grading.

180A-180B. Survey of Hebrew Grammar. (4—4) Lec- ture, three hours. Requisites: courses 102A, 102B, 102C. Descriptive and comparative study of Hebrew grammar: phonology and morphology. Topics include development of Hebrew language from biblical times to present day, its relation to Arabic and other Semitic languages, and the expansion in Israeli Hebrew, traditional pronunciation of Hebrew by vari- ous Jewish communities, Hebrew contribution to other Jewish languages (Yiddish, Ladino, Judeo-Ar- abic), P/NP or letter grading.

188FL. Special Studies: Readings in Hebrew. (2) Seminar, two hours. Requisite: course 102C. Students must be concurrently enrolled in an affiliated main course. Primary readings and advanced training in He- brew. Additional work in Hebrew to augment work assigned in main course, including reading, writing, and other exercises in Hebrew. P/NP or letter grading.

189. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible stu- dents. Honors content noted on transcript. P/NP or letter grading.

189HC. Honors Contracts. (1) Tutorial, three hours. Limited to 20 students. Open to students in College Honors Program. Des- signed as adjunct to upper-division lecture course. In- dividual study with lecture course instructor to explore topics in greater depth through supplemental read- ings, papers, or other exercises. May be repeated a maximum of 4 units. Individual honors contract re- quired. Honors content noted on transcript. Letter grading.


225. Studies in Dead Sea Scrolls. (2 or 4) Seminar, three hours. Requisite: course 120. Critical study of Dead Sea Scrolls, with attention to history of biblical interpretation and role of Dead Sea Scrolls in formative Judaism. Readings are based on critical manuscripts from Dead Sea Scrolls. May be repeated for credit. S/U or letter grading.

230. Rabbinic Hebrew Literature. (4) Seminar, three hours. May be repeated for credit. S/U or letter grading.

M231. Texts in Judeo-Arabic. (4) (Same as Arabic M231.) Lecture, three hours. Requisites: course 102C, Arabic 102C. Reading of Judeo-Arabic texts by Mai- nonides (medieval religion, medicine, philosophy) and more recent texts in Judeo-Arabic dialets of Iraq and Egypt, with discussion of grammar and deviations from norms of classical Arabic. S/U or letter grading.

235. Hebrew Literature of Second Temple Period. (4) Seminar, three hours. Designed for students who have basic language skills and capacities necessary for reading Biblical Hebrew or Rabbinic Hebrew. Reading, analysis, and interpretation of Hebrew litera- ture composed during Second Temple period. Rele- vant sources include Chronicles, Ezra-Nehemiah, Ec- clesiastes, Ben Sira, Daniel, Dead Sea Scrolls, and other documents from Judean desert, and various ap- roach to Hebrew language and literature in relation to both earlier biblical sources, styles, grammatical forms, and syntax and to subsequent Rabbinic literature. Topics include following skills: reading un- pointed texts, mastering distinctive elements of vo- cabulary, idiom, and syntax of Second Temple He- brew, and analyzing relationships between biblical and postbiblical sources. May be repeated for credit. S/U or letter grading.

C240. Modern Hebrew Poetry and Prose. (4) Lec- ture, three hours. Requisites: courses 103A, 103B, and 103C, or equivalent knowledge of Hebrew. Study of major Hebrew writers of past 100 years. May be re- peated for credit. Concurrently scheduled with course C140. Letter grading.


596. Directed Individual Study. (2 to 8) Tutorial, to be arranged. May be repeated for credit. S/U or letter grading.


Near Eastern Languages and Cultures / 625

Iranian

Lower-Division Courses

1A-1B.1C. Elementary Persian. (5—5—5) Lecture, six hours. Course 1A is enforced requisite to 1B, which is enforced requisite to 1C. Not open to students with prior knowledge of Persian. P/NP or letter grading.

8. Elementary Persian: Intensive. (15) Lecture. 10 hours; discussion, 10 hours. Not open to students who have learned from whatever source, enough Per- sian to qualify for advanced courses. Intensive course equivalent to courses 1A, 1B, and 1C. Intro- duction to fundamentals of Persian, including pronun- ciation, grammar, and Persian script, with emphasis on all four basic language skills—speaking, listening, comprehension, reading, and writing. Offered in summer only. P/NP or letter grading.

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of characters, places, and major topics in current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

20A-20B-20C. Accelerated Elementary Persian. (6- 6—6) Lecture, four hours; discussion two hours; lab- oratory, 30 minutes per day. Preparation: some knowl- edge of spoken Persian. Course 20A is enforced re- quire to 20B, which is enforced requisite to 20C. In- tensive and thorough immersion in the fundamental structures of Persian grammar; reading from a wide range of classical and modern poetry and prose compositions. P/NP or letter grading.

56. Gender and Sexuality in Arts and Literatures of Iran and Middle East. (5) Lecture, three hours; dis- cussion, one hour. Multifaceted introduction to Persian poetry, recognized as jewel of Persian culture, and to pictorial, architectural, performative, cinematic, and photographic dimensions of artistic milieu span- ning between Balkans, India, and Central Asia from 19th century CE to present. With consideration of cent- rality of discourses on identity, desire, and spirituality to core of Persian aesthetics, study of broad variety of socioanthropological, ethical, and historiographical is- sues stemming from its many traditions charac- terizing extensive field of Iranian studies and most controver- sial conversations on nature of sexuality, eth- nicity, and religion. P/NP or letter grading.

M60. Achaemenid Civilization and Empire of Alex- ander. (Same as Ancient Near East M60 and His- tory M60.) Lecture, three hours; discussion, one hour. Survey of period from circa 600 to 300 BCE, rise and fall of Achaemenid Persia, and selected topics of antica- lity, which was ended by Alexander the Great, whose campaigns were as transformative as they were vio- lent. Alexander connected ancient Mediterranean and Near East as never before, ushering in new era and forever changing cultural landscape of ancient world. Focus on themes of ancient kingship and political ide- ology; comparative study of empires; administration and institutions; and religious and ethnic diversity in large, heterogeneous state. Students gain broad knowledge of Achaemenid and Macedonian empires, facility with ancient primary sources, and development of analytical skills central to discipline of history. P/NP or letter grading.

89. Honors Seminars. (1) Seminar, three hours. Lim- ited to 20 students. Designed as adjunct to lower-divi- sion lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible stu- dents. Honors content noted on transcript. P/NP or letter grading.

89HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Des- signed as adjunct to lower-division lecture course. In- dividual study with lecture course instructor to explore topics in greater depth through supplemental read- ings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract re- quired. Honors content noted on transcript. Letter grading.

99. Student Research Program. (1 to 2) Tutorial (su- pervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-divi- sion students under guidance of faculty mentor. Stu- dents must be in good academic standing and en- rolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Courses

102A-102B-102C. Intermediate Persian. (5—5—5) Lecture, six hours. Requisite: course 102C, which is requisite to 102D. P/NP or letter grading.

103A-103B-103C. Advanced Persian. (4—4—4) Lec- ture, three hours. Requisite: course 102C. Students who do exceptionally well in course 20C may be per- mitted to enroll with consent of instructor. Each course may be taken independently for credit. P/NP or letter grading.

103A. Introduction to Classical Persian Po- etry; 103B. Introduction to Classical Persian Prose; 103C. Introduction to Contemporary Persian Poetry and Prose.

104. Philosophical Texts. (4) Lecture, three hours. Readings in English. Introduction to wide selection of philosophical texts in translation. Identification of major philosophical themes in ontology, epistemology, psychology, and cosmology through texts, with study in detail, P/NP or letter grading.

M105A. Bahá’í Faith in Iran: Historical and Socio- logical Survey. (4) (Same as Religion M105A.) Lecture, three hours. Readings in English. Rise and devel- opment of Bahá’í and Baha’i religion from first half of 19th century Iran. Focus on personalities of Báb, Bahá’u’lláh, and ‘Abdu’l-Bahá. May be taken inde- pendently for credit. P/NP or letter grading.
May be taken independently for credit. P/NP or letter grading.

M110A-M110B-M110C. Iranian Civilization. (4—4—4) (Same as Ancient Near East M110A-M110B-M110C and M110A-M110B-M110C) Lecture, three hours; discussion, one hour (when scheduled). P/NP or letter grading. Preparation: knowledge of Persian not required. May be repeated for credit with consent of instructor. P/NP or letter grading.


M115A-M115B-M115C. Elementary Azeri. (4—4—4) (Same as Turkic Languages M115A-M115B-M115C) Lecture, five hours. Knowledge of Russian, Turkish, and Azeri helpful. Grammatical competence at elementary level; knowledge of basic facts of Azeri grammar; reading competence with help of dictionary; ability to write simple compositions; basic conversational skill. P/NP or letter grading.

120. Comparative Study of Six Major Persian Poets. (4) Lecture, two hours; discussion, one hour. Preparation: Knowledge of Persian. Lecture, six hours. Details analysis of selected Persian works. May be repeated for credit with consent of instructor. P/NP or letter grading.

130. Intellectual History of Jews of Persia. (4) Lecture, three hours. Readings in English. Introduction to intellectual history of Jews in Persia by highlighting select areas of Judeo-Persian studies and focusing on various authors and their work. P/NP or letter grading.


132. Intermediate Judeo-Persian Literature and Culture. (4) Lecture, three hours. Enforced requisites: courses 102C, 131. Literary study of Judeo-Persian literature, as segment of Iranian classical literature. Judeo-Persian literature in forms of prose and verse, compared with their parallel genres in context of Iranian literature. Textual study of Judeo-Persian manuscripts, both print and cursive, and their variations depending on time period or locality. P/NP or letter grading.

140. Persian Belles Lettres (Shabâyât). (4) Lecture, three hours. Requisite: course 102C. Study of major Persian poets and prose writers: prose—Soheivard, Hamadâni, Nasafi, Iraqi, and others; poetry—Hâfez, Sa’di, Rûmî, Bahâi, Delkhoda, and others. May be repeated for credit with consent of instructor. P/NP or letter grading.

141. Persian Analytical Prose. (4) Lecture, three hours. Requisite: course 102C. Study of selected analytical and expository prose texts, with emphasis on philosophy, sciences, literary criticism, and history. May be repeated for credit with consent of instructor. P/NP or letter grading.

142. Persian Popular Ethics. (4) Lecture, three hours. Requisites: courses 103A, 103B, 103C. Study of major Persian works on popular ethics that have helped shape normal social, cultural, and political values in Iranian civilization. May be repeated for credit with consent of instructor. P/NP or letter grading.

150A-150B. Survey of Persian Literature in English. (4—4) Lecture, three hours. Knowledge of Persian not required. Each course may be taken independently for credit.

161A-161B-161C. Elementary Middle Iranian. (4—4—4) Lecture, three hours. Preparation: knowledge of Persian desirable. Course 161A is requisite to 161B and 161C. May be repeated for credit with consent of instructor. P/NP or letter grading.

164. Ancient Cities of Iran: Archaeological Survey of Historic Cities and Sites of Iran from 4000 BC to 1900 AD. (4) Lecture, four hours. Introduction to archeological and historical monuments and sites of Iran from earliest periods to early 20th century. Examination of emergence of early Iranian villages, formation of cities and their development and expansion throughout late Sasanian and early Islamic periods to preindustrial era in early years of past century. Study of selection of ancient Iranian sites and cities, from fifth millennium BC to Qajar period, based on relevant archaeological, historical, and geographical sources. Study of archaeology and historical geography of each site city or town with aerial views, which reveal rich array of architecture and town planning—from ordinary settlements and vernacular constructions to worldly-known royal and religious monuments. P/NP or letter grading.

166. Civilization of Pre-Islamic Iran. (4) Survey of Iranian culture from the beginning through Sasanian period.

170. Religion in Ancient Iran. (4) Study of religion in Iran from earliest periods through 20th century with consent of instructor. S/U or letter grading.


259. Special Studies: Readings in Persian. (2) Seminar, two hours. Requisite: course 102C. Students must be concurrently enrolled in affiliated main course. May be repeated for credit.

288FL. Special Studies: Readings in Iranian. (2) Seminar, two hours. Requisite: course 102C. Students must be concurrently enrolled in affiliated main course. May be repeated for credit.

289HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Semester-long project or independent study with course leader. May be repeated for credit. Individual contract required. P/NP or letter grading.

199. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. May be repeated for credit. Individual contract required. P/NP or letter grading.
597. Examination Preparation. (2 to 8) Tutorial, to be arranged. S/U or letter grading.


Islamic Studies

Lower-Division Courses

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

M20. Introduction to Islam. (3) Formerly numbered M110. (Same as Religion M20.) Lecture, three hours, discussion, one hour. Genesis of Islam, its doctrines, and practices, with readings from Qur'an and Hadith; schools of law and theologies; polytheism and monotheism; reform and modernism. P/NP or letter grading.

M115. Islam and Other Religions. (3) Formerly numbered M590. (Same as Religion M115.) Lecture, three hours; discussion, one hour. Students gain famil- iarity with histories of interaction between Muslims and non-Muslims in plural societies. Consideration of axis questions such as how does Islam vis-a-vis its alternatives; what encounters did rapid expansion of Islam bring about in diverse soci- eties; how did Islam and other religions change through interdynam and integration of ideas; how does political power played in conditioning interre- ligious interaction; how have conversion and hybridity affected what it means to be Muslim; what is different about interreligious interactions in secular states and societies; and how is past invoked to justify opinions and policies today. Investigation of these questions by conducting microstudies: close readings of sources throughout paper or project grading.

151. Islamic Thought. (4) Lecture, three hours; discussion, one hour. Rise and development of Shi'a Islam, its doctrines, and practices; major branches: Twelvers, Ismailis, Zaydis; their contribution to Islamic thought in modern times; reinterpretation and reform. Letter grading.

189. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

189HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. De- signed as adjunct to lower-division lecture course. In- dividual study with lecture course instructor to explore topics in greater depth through supplemental read- ings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract re- quired. Honors content noted on transcript. P/NP or letter grading.

99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-divi- sion students under guidance of faculty mentor. Stu- dents must be in good academic standing and en- rolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP or letter grading.

Upper-Division Courses

M107. Islam in West. (5) Same as Arabic M107 and Religion M107.) Lecture, three hours; discussion, one hour. Acquisition of understanding of basic doctrines and practices of Islam. Survey of history of Islam in West, with focus on U.S. and France. Analysis of is- sues regarding growth and development of selected Muslim communities in West. Exposure to diverse ex- pressions of Islam through independent research on Muslim communities and institutions in U.S. Develop- ment of strong analytical writing and speaking skills. P/NP or letter grading.

M111. Introduction to Islamic Archaeology. (4) (Same as Art History M119C and Middle Eastern Studies M111.) Lecture, three hours. From earliest monuments of Islam in Arabia and Jerusalem to humble remains of small Egyptian port, broad focus on archaeological and standing remains in central Is- lamic lands: Egypt, Iran, North Africa, and Spain. Profound cultural trans- formations occurred from birth of Islam in 7th century to early Ottoman period in 16th and 17th centuries, which remains recoverable in material records. Assessment of effectiveness of tools afforded by historical archae- ology to aid understanding of past societies. P/NP or letter grading.

M112. Archaeology and Art of Christian and Islamic Egypt. (4) Formerly numbered M111D.) Lecture, three hours. Culture of Egypt transformed gradually after Muslim conquest in mid-7th century CE. Ac- cording to material evidence such as ceramics, tex- tiles, architectural forms, and building techniques, it is functionally impossible to separate pre-Islamic Chris- tian Egypt from early Islamic Egypt. Although popula- tion may have become largely Muslim by 10th century,

Islamic Studies

Lower-Division Courses

200. Introduction to Islamic Studies. (4) Seminar, three hours. Introduction to various disciplines and methods employed in study of Islamic histories, cul- tures, and societies, with special emphasis on meth- odologies and current theories about how they may be used and combined by Islamic studies students. Con- tent varies each year. Letter grading.

201. Arabo-Islamic Sciences. (4) Seminar, three hours. Preparation: good reading knowledge of Arabic, English, and one other Western language. Com- prehensive coverage of Arabo-Islamic sciences that

Jewish Studies

Lower-Division Courses

M10. Introduction to Judaism. (5) (Same as Religion M10.) Lecture, three hours; discussion, one hour. Ju- daism's basic beliefs, institutions, and practices. Topics include development of biblical and rabbinic Judaism; concepts of god, sin, repentance, prayer, and the messiah; history of Talmud and synagogue; evolution of folk beliefs and year-cycle and life-cycle practices. P/NP or letter grading.

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

M67. Popular Jewish and Israeli Music. (5) Same as Musicology M67.) Lecture, four hours; discussion, one hour. Music of Jews is diverse. With history of several thousand years, Jews have encountered many forms of modernity, music in Jewish life covers variety of styles found in many contexts. Exploration of music of Jews within last 100 years, with focus on popular music of Jews in America and Israel. Examination of music in Israel, with focus on songs of land of Israel, Israeli rock, and Mizuka Mizrahit (Middle Eastern popular music). P/NP or letter grading.

M82. Music and Holocaust: Individual Experience. (5) (Same as Musicology M82.) Lecture, three hours; discussion, one hour. In synagogue and on stage, and from LP recordings to YouTube, Jews in America have varied musical experiences. Music of synagogue, cel- ebrations at home, in concert, and theater are all interesting developments of Jewish music. New Op- portunities in entertainment industry brought new possibilities for Jews in popular music, rock, and film spects. Exploration of music of Jews re- sponding and adapting to their American context and becoming American through music. Exploration of dif- ferent music genres and contexts. Presentations by great composers and performers. Letter grading.
Middle Eastern Studies

Graduate Courses


Lower-Division Courses

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and examining many paths of discovery at UCLA. P/NP grading.

M50A. First Civilizations. (5) (Same as Ancient Near East M50A.) Lecture, three hours; discussion, one hour. Survey of great civilizations of ancient Near East—Egypt, Israel, and Mesopotamia—with attention to emergence of writing, monotheism, and urban societies. Letter grading.

M50B. Origins of Judaism, Christianity, and Islam. (5) (Same as Ancient Near East M50B and Religion M50.) Lecture, three hours; discussion, one hour. Examination of three major monotheisms of Western cultures—Judaism, Christianity, and Islam—historically and comparatively. Development, teachings, and ritual practices of each tradition up to and including medieval period. Composition and development of various sacred texts, highlighting key themes and ideas within different historical and literary strata of traditions, such as mechanisms of revelation, struggle for religious authority, and common theological issues such as origin of evil and status of nonbelievers. Letter grading.

M50CW. Making and Studying Modern Middle East. (6-8) (Same as Anthropology M676W.) Lecture, three hours; discussion, one hour. Requisite: English Composition 3. Survey of modern Middle Eastern cultures through readings and films from Middle East and North Africa. Satisfies Writing II requirement. Letter grading.

89. Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to lower-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

89HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to upper-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

Upper-Division Courses

M111. Introduction to Islamic Archaeology. (4) (Same as Art History M119C and Islamic Studies M111.) Lecture, three hours. From earliest monuments of Islam in Arabia and Jerusalem to humble remains of small Ethiopian church, archaeological and standing remains in central Islamic lands (primarily Syria, Egypt, and Iraq), Turkey, Iran, North Africa, and Spain. Profound cultural transformations occur under caliphate from early 7th century to early Ottoman period in 16th and 17th centuries, which are traceable in material records. Assessment of effectiveness of tools afforded by historical archaeology to aid understanding of past societies. P/NP or letter grading.

M112. Archaeology and Art of Christian and Islamic Egypt. (4) (Same as Archaeology M112, Art History M118D, and Islamic Studies M112.) Lecture, three hours. Culture of Egypt transformed gradually after Muslim conquest in mid-7th century CE. According to material evidence such as ceramics, textiles, architectural forms, and building techniques, it is functionally impossible to separate pre-Islamic Christian Egypt from early Islamic Egypt. Although population may have become largely Muslim by 10th century, Egypt remained Christian to 14th century and retains sizeable Christian minority to present. Survey of archaeological remains and standing architecture of Egypt from 6th to 19th century, charting changes and continuities in material culture and shifts in the human geography and land use. P/NP or letter grading.

C122. History, Memory, and Identity in Israel. (4) Seminar, three hours. Israeli society was born in effort to reshape images of Jewish past, present, and future. That society has been shaken by many debates over history, recent and ancient events, and how these are represented by historical scholarship as well as in popular media and public spaces. Struggles have raged around meaning and purpose of Israel as central (as in many other societies) to debates about identity in present and directions, goals, and hopes for future. Exploration of ways in which struggles over past have shaped Israeli present. Examination of historical and sociocultural debates and their reflections in range of media to make some sense of ever-changing past, ways in which it shapes political, ideological, and cultural identities in present, and where meeting points between popular discourse and work historians do. Examination of conflicting readings of past and its representation in Israeli historiography and in shaping of Israeli collective identity. Currently scheduled with course C222. P/NP or letter grading.

M133. Bible and Qur’an. (4) (Same as Religion M133.) Lecture, three hours. Survey of Hebrew Bible/Old Testament, New Testament, and Qur’an to familiarize students with contexts of Judeism, Christianity, and Islam, and sociocultural background from which these multifarious texts emerged, and to explore major themes and consider variety of approaches to scripture. Development of appreciation for role scripture plays in these religious systems and in American culture and society. P/NP or letter grading.

M142. Modern Israel: Politics, Society, Culture. (4) (Same as Jewish Studies M142.) Lecture, three hours. Examination of evolution of Israel—its changing society, volatile domestic and foreign politics, and dynamic culture since 1948 formation, in context of global political and cultural change and changing Jewish world. Tension between Israel’s conception of itself as Jewish state and fact that it is home to wide variety of ethnic and religious groups and to great diversity of cultures; that it was envisaged as safe haven for Jewish people but has been characterized by insecurity and ongoing war; that, founded as ethnic identity, Israel has been caught in historical contexts that have little bearing on its democratic system, such as tensions between Jews and Arabs, secular and religious Jews, and disparate ethnic groups. P/NP or letter grading.

M144. Zionism: Ideology and Practice in Making of Jewish State. (4) (Same as Jewish Studies M144.) Lecture, three hours; discussion, one hour. History of Zionism on backdrop of European, world, and Jewish histories; from ideological origins to political, cultural, and social foundations of State of Israel. P/NP or letter grading.

177. Variable Topics in Middle Eastern Studies. (4) Lecture, three hours. Variable topics; consult Schedule of Classes for topics to be offered in specific term. May be repeated for credit. P/NP or letter grading.

M178. Variable Topics. (4) (Same as Religion M178.) Seminar, three hours. Interdisciplinary approach to some major topics in study of religion and Middle Eastern studies. May be repeated for credit with topic change. P/NP or letter grading.

M179SL. Movement in Art, Philosophy, and Daily Life. (5) (Same as Comparative Literature M179SL) Seminar, three hours; fieldwork, three hours. Exploration of connection between daily life and art. Only relevant output of brain, irrespective of what may or may not go on inside it, is control over movements. In living animals, sentience or consciousness exists to integrate often complex input and decide on course of action. Similarly, ownership and agency are inseparably associated with biological systems that control our movements. Movements play vital part in constructing personal, social, and environmental space that permeates and surrounds us. Exploration of how humans and animals move, and how movement, as well as limitations of mobility, relate to personal and community identity. P/NP or letter grading.

199. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

189HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to upper-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

Graduate Courses

200. Bibliography and Method of Near Eastern Languages and Literatures. (4) Lecture, two hours. Required for MA degree. Introduction to bibliographical resources and training in methods of research in various areas of specialization offered by department. May be repeated for credit. S/U or letter grading.

201. Study of Religion: Theory and Method. (4) Seminar, three hours. Preparation: familiarity with at least two major world religions. Designed for advanced graduate students. Consideration of theory and method in study of religion. Introduction to variety of theories and methods used in academic study of religion. In attempt to demonstrate importance that historical, cultural, and social exigencies play in development of religious traditions, discussion of theories comparatively and in their historical context, with focus on presuppositions and core concepts and implications of each theory. Letter grading.

210. Survey of Afro-Asiatic Languages. (4) Lecture, three hours. Survey of structures of number of representative languages from various major branches of Hamito-Semitic (Afro-Asiatic) language family. S/U or letter grading.

C222. History, Memory, and Identity in Israel. (4) Seminar, three hours. Israeli society was born in effort to reshape images of Jewish past and has been shaken by many debates over history, recent and ancient events, and how these are represented by historical scholarship as well as in popular media and public spaces. Struggles over image of past have become central to identity in present and directions, goals, and hopes for future. Exploration of ways in which struggles over past have shaped Israeli present. Examination of historical and sociocultural debates and their reflections in range of media to make some sense of ever-changing past, ways in which it shapes political, ideological, and cultural identities in present, and where meeting points between popular discourse and work historians do. Examination of conflicting readings of past and its representation in Israeli historiography and in shaping of Israeli collective identity. Currently scheduled with course C222. P/NP or letter grading.

Near Eastern Languages and Cultures / 629
Near Eastern Languages

Upper-Division Courses

CM114. Teaching and Learning of Heritage Languages. (4) (Same as Asian CM124 and Slavic CM114) Lecture, three hours. Consideration of issues relevant to heritage language learners (HLL) and to heritage language (HL) instruction. Readings and discussion on such topics as definitions of HLs and HLLs; linguistic, demographic, sociolinguistic, and sociocultural profiles of HLs; particularly HL groups most represented among UCLA students; institutional and instructor attitudes toward HLs; impact of student motivation and expectations on HL curriculum and teaching approaches; similarities and differences between HLLs and foreign language learners (FLs) regarding teaching methods and materials; diagnostic testing and needs analysis; use of oral/aural proficiency. S/U grading.

Graduate Courses

CM214. Teaching and Learning of Heritage Languages. (4) (Same as Asian CM224 and Slavic CM214) Lecture, three hours. Consideration of issues relevant to heritage language learners (HLL) and to heritage language (HL) instruction. Readings and discussion on such topics as definitions of HLs and HLLs; linguistic, demographic, sociolinguistic, and sociocultural profiles of HLs; particularly HL groups most represented among UCLA students; institutional and instructor attitudes toward HLs; impact of student motivation and expectations on HL curriculum and teaching approaches; similarities and differences between HLLs and foreign language learners (FLs) regarding teaching methods and materials; diagnostic testing and needs analysis; use of oral/aural proficiency. S/U grading.

Semiotics

Lower-Division Courses

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

Upper-Division Courses

CM287. Central Asian Studies: Discipline, Methods, Debates. (2) (Same as Anthropology M247Q and History M287) Seminar, two hours. Introduction to study of central Asia as practiced in humanities and social sciences disciplines. S/U grading.

375. Teaching Apprentice Practicum. (1 to 4) Seminar, to be arranged. Preparation: apprentice personnel employment as teaching assistant, associate, or fellow. Teaching apprenticeship under active guidance and supervision of regular faculty member responsible for evaluation of teaching assistant performances. May not be applied toward MA degree requirements. S/U grading.


501. Cooperative Program. (2 to 8) Preparation: consent of UCLA language advisor and graduate dean; also faculty mentor and host campus faculty member. May be repeated. S/U grading.

596. Directed Individual Study. (2 to 8) Tutorial, to be arranged. May be repeated for credit. S/U or letter grading.


Semiotics

Lower-Division Courses

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

Upper-Division Courses


140A-140B. Elementary Akkadian. (4-8) Lecture, three hours. Elementary grammar and reading of texts in standard Babylonian.
141. Advanced Akkadian. (4) Lecture, three hours. Advanced Akkadian syntax and grammar; reading of Akkadian historical and literary texts. May be repeated for credit. P/NP or letter grading.

142. Akkadian Literary Texts. (4) Lecture, three hours. Selected readings from Akkadian myths and epics, with introduction to historical tradition of works and their literary structure. May be repeated for credit. P/NP or letter grading.

189. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture course. In-depth examination of topics in greater depth through supplemental readings, papers, or other activities. May be repeated for credit. Individual honors contract required. Honors content noted on transcript. P/NP or letter grading.

189HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to undergraduate-level course. Individual study with course lecture instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for credit. Individual honors contract required. Honors content noted on transcript. Letter grading.

197. Individual Studies in Semitics. (2 to 4) Tutorial, one hour. Limited to juniors/seniors. Individual intensive study of topics to be arranged between faculty member and student. Assigned reading and tangible evidence of mastery of subject matter required. May be repeated for credit. Individual contract required. P/NP or letter grading.

199. Directed Research or Senior Project in Semitics. (2 to 4) Tutorial, one hour. Limited to juniors/seniors. Supervised individual research or investigation; project required. May be repeated for credit. Individual contract required. P/NP or letter grading.

Graduate Courses

210. Ancient Aramaic Dialects. (4) Lecture, three hours. Prerequisite: course 130. Reading of surviving inscriptions and papyri. Texts include Old Aramaic inscriptions, Egyptian Aramaic texts, Qumran Aramaic, and Targumic Aramaic. May be repeated for credit. S/U or letter grading.

215B. Syriac. (4) Lecture, two hours. Morphology and syntax of Syriac language; readings in Syriac translation of Bible and Syriac literature. May be repeated for credit. S/U or letter grading.

220A-220B. Ugartic. (4–4) Lecture, two hours. Prerequisites: Hebrew 102A, 102B, 102C. Study of Ugartic language, a language course 220B may be repeated for credit. S/U or letter grading.


230. Seminar: Northwest Semitic Languages and Literatures. (4) Seminar, two hours. May be repeated for credit. S/U or letter grading.

240. Seminar: Akkadian Language. (4) Seminar, two hours. Readings of texts from various dialects of Akkadian; selected problems in linguistic analysis of Akkadian dialects. May be repeated for credit. S/U or letter grading.

240X. Seminar: Akkadian Language. (1) Seminar, two hours. Readings of texts from various dialects of Akkadian; selected problems in linguistic analysis of Akkadian dialects. Course for students who participate regularly in class meetings but without the homework required in course 240. May be repeated for credit. S/U or letter grading.

241. Seminar: Akkadian Literature. (4) Seminar, two hours. Readings of texts from various Akkadian literary genres; selected problems in literary history and stylistic analysis. May be repeated for credit. S/U or letter grading.

241X. Seminar: Akkadian Literature. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP or letter grading.

241A Seminar: Comparative Semitics. (4) Seminar, two hours. S/U or letter grading.

256. Directed Individual Study. (2 to 8) Tutorial, to be arranged. May be repeated for credit. S/U or letter grading.

257. Examination Preparation. (2 to 8) Tutorial, to be arranged. S/U or letter grading.


Turkic Languages

Lower-Division Courses

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP or letter grading.

89. Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to lower-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

89HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to lower-division lecture course. Individual study with course lecture instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for credit. Individual honors contract required. P/NP or letter grading.

99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Research and other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. Letter grading.

Upper-Division Courses

101A-101B-101C. Elementary Turkish. (5–5–5) Lecture, five hours. Course 101A is requisite to 101B, which is requisite to 101C. Grammar, reading, conversation, and elementary composition drills. P/NP or letter grading.


111A-111B-111C. Elementary Uzbek. (4–4–4) Lecture, three hours; laboratory; two hours. Elementary grammar, reading, and composition courses: elementary conversation.

112A-112B-112C. Advanced Uzbek. (4–4–4) Lecture, three hours; laboratory; two hours. Descriptive Uzbek grammar, reading, and analysis of Uzbek literary and folkloric texts. High-style composition and conversation.


160. Turkish Tradition. (4) Lecture/discussion. Preparation: entrance examination. Survey of cultural history of Turkey, as seen primarily through their literature, from their early history to the present.

165. Islamic Literary Heritage of Central Asia. (4) Lecture, two hours; discussion, one hour. Systematic survey of Islamic documents produced in Turkish and Persian in Central Asia, with reading of primary sources in English translation. Study of special characteristics of Central Asian Islam.


189. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate-level course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be repeated for credit. Individual honors contract required. P/NP or letter grading.

189HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to upper-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for credit. Individual honors contract required. P/NP or letter grading.

199. Directed Research or Senior Project in Turkish. (2 to 4) Tutorial, one hour. Limited to juniors/seniors. Supervised individual research or investigation under guidance of faculty mentor. May be repeated for credit. Individual contract required. P/NP or letter grading.

197. Individual Studies in Turkic. (2 to 4) Tutorial, one hour. Limited to juniors/seniors. Individual intensive study, with scheduled meetings to be arranged between faculty member and student. Assigned reading and tangible evidence of mastery of subject matter required. May be repeated for credit. Individual contract required. P/NP or letter grading.

Graduate Courses

210A. Readings in Ottoman I. (4) Lecture, three hours. Examination of printed texts in Ottoman from 19th and 20th centuries to improve student competence to read, translate, and translate Ottoman texts. Readings include selections from newspapers, almanacs, travel books, and literary and historical texts. S/U or letter grading.

211. Ottoman Diplomatics. (4) Lecture, three hours. Prerequisites: courses 210A, 210B, 210C. Organization and contents of Ottoman archives; reading and discussion of documents and registers. Introduction to use of Ottoman archive materials as a source for historical research.

596. Directed Individual Study. (2 to 8) Tutorial, to be arranged. May be repeated for credit. S/U or letter grading.

597. Examination Preparation. (2 to 8) Tutorial, to be arranged. S/U or letter grading.

Neurobiology
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Scope and Objectives
The Department of Neurobiology is a premier research department and a leading force in neuroscience discovery and education at UCLA and worldwide. Department faculty with diverse research backgrounds in cellular and molecular biology, psychology, and engineering; utilize the most sophisticated technologies available to work in concert with colleagues throughout UCLA and the world to enhance the understanding of the brain and its role in health and disease.

Medical History
Lower-Division Courses
19. Fiat Lux Freshman Seminars. (1 Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

99. Student Research Program. (1 to 2 Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in a minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Courses
M169. History of Neurosciences. (4) Same as Medical History M169. Lecture, one hour; discussion, two hours. Development of neurosciences, especially neuroanatomy and neurophysiology, from Enlightenment era through latter 20th century. Emphasis on fundamental nerve functions, cell communication, and technological, conceptual, and cultural influences that have shaped understanding of brain and nervous system. P/NP or letter grading.

M171. Variable Topics Research Seminars: Contemporary Biology and Physiology. (2 Same as Physical Science M171.) Seminar, two hours. Limited to undergraduate fellows in Integrated and Interdisciplinary Undergraduate Research Program. Presentations of scientific data from papers of research articles selected and prepared by students' own research. May be repeated for credit. P/NP grading.

197. Individual Studies in Neurobiology. (2 to 4 Tutorial, to be arranged. Limited to juniors/seniors. Individual intensive study, with scheduled meetings to be arranged between faculty member and student. Assigned readings and tangible evidence of mastery of subject matter required. May be repeated for credit. Individual contract required. P/NP or letter grading.

199. Directed Research in Neurobiology. (2 to 8 Tutorial, to be arranged. Limited to juniors/seniors. Supervised individual research or investigation under guidance of faculty mentor. Studies in anatomy and related subject areas appropriate for training of particular students, which includes reading assignments or laboratory work leading to formal or written report. May be repeated for maximum of 16 units. Individual contract required. P/NP or letter grading.

Graduate Courses
M200A. Synapses, Cells, and Circuits. (4) Same as Neuroscience M204. Lecture, three hours; laboratory, two hours. Fundamental topics concerning subcellular, cellular, and structural organization of nervous system. Specific topic areas include neuronal ultrastructure, cellular neurobiology, neuroanatomy, neural circuitry, and imaging. Letter grading.

M200B. Cell, Developmental, and Molecular Neurobiology. (6) Same as Neuroscience M201L. Lecture, six hours. Fundamental topics concerning cellular, developmental, and molecular neurobiology, including intracellular signaling, cell-cell communication, neurogenesis and migration, synapse formation and elimination, programmed neuronal death, and neurotrophic factors. Letter grading.

M200C. Sensory Systems Neurobiology. (4) Same as Neuroscience M221L. Lecture, two hours; discussion, two hours. Fundamental topics in sensory systems neurobiology, including sensory transduction, taste and olfaction, audition, vision, and somatosensory system. Letter grading.


M200G. Biology of Learning and Memory. (4) Same as Neuroscience M220 and Psychology M208L. Lecture, four hours. Molecular, cellular, circuit, systems, neuroanatomy, theory, and models of learning and memory. Cross-disciplinary focus on learning and memory to provide a broad and integrative perspective of how and why the brain works. Letter grading.

220. Structural Neurobiology. (2) Lecture, two hours; discussion, one hour. Introduction to molecular structure of chemical, electrical, and mixed synapses as determined by imaging methods such as electron tomography. Comprehensive review of current principles governing synaptic transmission and balanced account of some of most topical areas of field, including structural, functional, and molecular neurobiology. Letter grading.

255. Functional Organization of Visual System. (2) Seminar, three hours. Preparation: basic neuroscience course. Recommended: neuroanatomy, neurophysiology, and/or neural systems courses. Designed for neuroscientists, cell biologists, and psychologists. Basic organizational, physiological, and functional aspects of visual system and how visual information is processed at different levels of nervous system. Structure, microcircuity organization and function of retina, central visual nuclei, and primary cortical areas mediating visual behavior. S/U grading.


270. Joint Seminar: Neuroscience Lectures. (1 Seminar, one hour. Formal lectures on current research topics in neuroscience by speakers from national, international, and local neuroscience communities. S/U grading.

M287. Dynamics of Neural Microcircuits. (4) Same as Neuroscience M287. Lecture, two hours; discussion, two hours. Development of integrative understanding of neural microcircuits that underlie specific functions of sensory processing, generation, and coordination of motor activity, as well as generation and modulation of neural rhythms. Letter grading.

296. Research Seminar and Journal Club. (1 Seminar, one hour. Seminar and journal club with focus on current research topics and activities occurring within department. S/U grading.
Scopes and Objectives

Neurology is the medical science dealing with the normal and diseased nervous system. Neurological disorders are often associated with significant disability, morbidity, and mortality. Their higher incidence in association with greater longevity of the population, increased awareness, improved diagnostic methods, and other factors place neurological disorders among the major medical problems today. The Department of Neurology and the Reed Neurological Research Center provide means for a coordinated basic science and clinical research approach to neurological disorders, patient care, and neurological education.

The department instructs medical students throughout the four years. Emphasis in the first year is on basic aspects of neuroanatomy, chemistry, and physiology; in the second year, neurological history taking and neurological examination of afflicted patients are stressed. The third year consists of a clerkship, and the fourth year provides electives in neurology, including an advanced clinical clerkship. Graduate students and postdoctoral candidates are trained in both the basic and clinical laboratories.

For more details on the Department of Neurology and courses offered, see the department website.

Neurology

Lower-Division Courses

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Courses

188SA. Individual Studies for USIE Facilitators. (1) Tutorial, to be arranged. Enforced corequisite: Honors College 101E. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to discuss selected USIE seminar topic, conduct preparatory research, and begin preparation of syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.

188SB. Individual Studies for USIE Facilitators. (1) Tutorial, to be arranged. Enforced corequisite: course 188SA. Enforced corequisite: Honors College 101E. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to finalize course syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.

188SC. Individual Studies for USIE Facilitators. (2) Tutorial, to be arranged. Enforced corequisite: course 188SB. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor while facilitating USIE 88S course. Individual contract with faculty mentor required. May not be repeated. Letter grading.

199. Directed Research in Neurology. (2 to 8) Tutorial, two hours. Limited to juniors/seniors. Supervised individual research or investigation under guidance of faculty mentor. Culminating paper required. May be repeated for credit. Individual contract required. P/NP or letter grading.

Scope and Objectives

Neuroscience seeks to understand the brain in health and in disease. Topics of fundamental interest include perception, cognition, learning, memory, motor control, and regulation of body function. The undergraduate interdepartmental program seeks to explore the principles and concepts of this broad range of nervous system function at many levels of analysis, including molecular, cellular, synaptic, neural, computational, and behavioral.

Information on the graduate program in this discipline can be found in the Neuroscience graduate interdepartmental program section.

Undergraduate Study

The Neuroscience major is a designated capstone major. Undergraduate students have the option of conducting two terms of independent research under a faculty laboratory, applying to participate in DOPA-Team, or completing an advanced laboratory methods course with a series of research modules. Through their capstone work, students demonstrate ability to generate testable scientific hypotheses and develop a research plan to test such hypotheses; work on research projects independently and in small groups; evaluate and discuss primary literature and the validity of hypotheses generated by others; communicate effectively orally and in writing; and demonstrate creative thinking.

Neuroscience BS

Capstone Major

Learning Outcomes

The Neuroscience major has the following learning outcomes:

• Generation of testable scientific hypotheses and development of a research plan to test such hypotheses
• Work on research projects independently and in small group settings
• Evaluation and discussion of primary literature
• Evaluation of the validity of hypotheses
• Effective written and oral communication
• Demonstrated creative thinking

Preparation for the Major

Life Sciences Core Curriculum

Required: Chemistry and Biochemistry 14A, 14B, 14BL, 14L, 14CL, and 14D, or 20A, 20B, 20L, 30A, 30AL, 30B, and 30BL; Life Sciences 7A, 7B, 7C, and 23L; Life Sciences 30A, 30B, and 40 or Statistics 13, or Mathematics 3A, 3B, 3C, and Statistics 10 or 13, or Mathematics 31A or 31AL, 31B, 32A, and Statistics 10 or 13; Physics 1A, 1B, 1C, 4AL, and 4BL, or 5A, 5B, and 5C.

Each core curriculum course must be passed with a grade of C– or better, and all courses must be completed with an overall grade-point average of 2.0 or better. Students receiving grades below C– in two core curriculum courses, either in separate courses or repetitions of the same course, are subject to dismissal from the major.

Transfer Students

Transfer applicants to the Neuroscience major with 90 or more units must complete the following introductory courses prior to admission to UCLA: one year of general biology with laboratory for majors, preferably equivalent to Life Sciences 1 and 2, or 7A, 7B, and 7C, one year of calculus, one year of general chemistry with laboratory for majors, one semester of organic chemistry with laboratory, and one statistics course. A second semester of organic chem-
admission. up-to-date information regarding transfer selection are available in the Neuroscience Undergraduate program. Applications and program requirements are available in the Neuroscience Undergraduate program. Students must submit the application before beginning their upper-division honors requirements. After completion of all requirements and with the recommendation of the faculty sponsor and a second reader of the thesis, the chair confers honors at graduation.

Neuroscience Minor

The Neuroscience minor is designed to allow students in other majors an opportunity to explore the interdisciplinary field of neuroscience in a structured and rigorous way, while pursuing a major field of study in another discipline at the same time. To enter the minor, students must have an overall grade-point average of 2.0 or better and a 2.5 GPA in the prerequisite courses for Neuroscience M101A and M101B.

Nonscience majors wishing to minor in Neuroscience should be aware that preparation courses in chemistry, life sciences, and physics are prerequisites to the upper-division course requirements.

Required Upper-Division Courses (approximately 31 units): Neuroscience M101A, M101B, M101C (5 units each) and four elective courses selected from 101L, 102, 199A and 199B, and from any of the three elective options listed under the Neuroscience major. A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor. Each minor course must be taken for a letter grade, and students must have an overall grade-point average of 2.0 or better in the minor. Successful completion of the minor is indicated on the transcripts and diploma.

Neuroscience

See the Neuroscience graduate interdepartmental program for graduate courses.

Lower-Division Courses

10. Brain Made Simple: Neuroscience for 21st Century. (4) Lecture, four hours. Preparation: high school background in either biology or chemistry. Not open for credit to students with credit for course M101A (or Molecular, Cell, and Developmental Biology M175A or Physiological Science M180A or Psychology M117A) or Physiological Science 111A or Psychology 115. General overview and introduction to most exciting and fundamental topics encompassing field of neuroscience. P/NP or letter grading.

17. Science of Music. (4) Lecture, three hours; discussion, one hour. General overview of basic principles of neuroscience, cognitive psychology, and psychoacoustics to relation of music perception. P/NP or letter grading.

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

20. Introduction to Neuroscience Methods. (4) Lecture, four hours; discussion, 90 minutes. Preparation: high school background in either biology or chemistry. Limited to Neuroscience majors. General overview of field of neuroscience to serve as introduction to Neuroscience major. Topics covered include brief history of field, basic neurophysiology and neuroanatomy, research methods, experimental design, data analysis, and career prospects. May not be applied toward elective requirements for major. Letter grading.

Honors Program

The honors program provides exceptional Neuroscience majors with the opportunity to do research culminating in an honors thesis. Majors who have completed all preparation courses with a grade-point average of 3.0 or better and an overall GPA of 3.2 or better may apply for admission to the honors program. Applications and program requirements are available in the Neuroscience Undergraduate Office. Students are to apply before starting their junior year.
higher cognitive function: Development of primate and human brain during past few million years; evolutionary aspects of neuroanatomical structures and effects of behavior and cultural attitudes of modern man. P/NP or letter grading.

M119L. Molecular and Developmental Neurobiology. (4) [Same as Psychology M119L] Lecture, three hours. Recommended requisites: courses M101A and M101C (or Psychology 115), Psychology 120A or 120B. Designed for juniors/ seniors. Survey of experimental and clinical human neurobiology with emphasis on higher cognitive functions. P/NP or letter grading.

M119N. Visual System. (4) [Same as Psychology M119N] Lecture, three hours. Requisite: course M101A or 111B. Recommended requisites: courses M111A and 111B or consent of instructor. Detailed look into science of sleep. Cellular and molecular mechanisms of falling asleep, many discrete brain systems involved in sleep control of sleep-wakefulness, and homeostatic regulation of sleep. How our sleep needs shape by our evolutionary history, age, and gender. Latest insights into question of function of sleep, and why we need it, in memory consolidation and, and close association between sleep and metabolism. Sleep disorders are considered as they provide insights into mechanisms underlying sleep. For background on science of sleep and circuitry rhythms, completion of Physiological Science C126 is highly recommended. Concurrently scheduled with course CM223. Letter grading.

M135. Dynamical Systems Modeling of Physiological Processes. (5) [Same as Physiological Science M135.] Lecture, four hours; laboratory, two hours. Examination of model making and evaluating dynamical models of physiological systems and of dynamical principles inherent in physiological systems. Letter grading.

M145. Neural Mechanisms Controlling Movement. (5) [Same as Physiological Science M145.] Lecture, four hours; discussion, one hour. Requisites: courses M101A, and M111A or Physiological Science 111A or 111B or consent of instructor. Examination of central nervous system organization required for production of complex movements such as locomotion, mastication, and swallowing. P/NP or letter grading.

150. Biotechnology in Neuroscience. (4) Lecture, two and one half hours. Requisites: courses M101A, M101B. Preparation: background in biology and biochemistry. Designed for third- and fourth-year Neuroscience majors. Science advances through development and adaptation of new tools and technologies. Covers commonly used techniques in neuroscience research, from classic RT-PCR, immunohistochemistry to newly emerged optogenetics, single cell RNAseq, and CRISPR. Students gain better understanding of various methods in field today and tools to advance their own potential research in future. Letter grading.

M161C. Clinical Neuropsychology I. (4) [Same as Psychiatry M182.] Seminar, four hours. Basic overview of brain function and consideration of some management methods that exist already, and what future may hold. Neuropsychological examination techniques. Introduction to key principles from science of behavior change, illustrating how important health-related behavioral habits are and how difficult these can be to change and modify. Cognitive-behavioral and other approaches to stress management, long-term goal and value identification, mapping of long-term goals onto immediate actions, reinforcement learning, meditation, neurofeedback, and time management. Critical appraisal of tools to help students distinguish scientifically validated procedures. Offered in summer only. Letter grading.

M170. Music and Brain. (4) [Same as Music Industry M130.] Seminar, three hours; outside study, nine hours. Multidisciplinary approach to understanding brain, music, perception, and cognition. Students’ natural interest in music serves as springboard for learning basic concepts about how brain works. Focus on specific themes including music perception, emotion and meaning in music, and creativity. Designed to help students understand methodologies currently used to investigate brain-behavior correlates. Broad understanding of brain mechanisms in cognitive neuroscience, one of three main subdisciplines of neuroscience; introduction to fundamental principles in neurophysiology, psychophysiology, and neuroanatomy, whose basic form foundation for brain imaging, forensic practice, social psychology research, and marketing research; and specific knowledge about brain mechanisms mediating music-related cognitive and emotional functions. Letter grading.

C172. Neuroimaging and Brain Mapping. (4) Lecture, three hours. Requisite: course M101A (or Molecular, Cell, and Developmental Biology M175A or Physiological Science 127A) or Psychological Science 111A or Psychology 115. Strongly recommended, course 102. Theory, methods, applications, assumptions, and limitations of neuroimaging procedures in cognitive and emotional functions. Letter grading.

M176. Auditory Neuroscience of Speech Perception and Vocal Communication. (4) [Same as Psychological Science M176.] Lecture, two and one half hours; discussion, 90 minutes. Requisite: course M101A or Psychology 115. Interdisciplinary approach to understanding how humans and other animals communicate emotion and meaning using sound. Weekly research topics in disciplines of systems neuroscience, cognitive neuroscience, psychophysics, and psycholinguistics. Emphasis on fundamental principles in neurophysiology, neuroanatomy, neuroimaging, psychology, and neurology. Letter grading.

C177. Drugs of Abuse: Translational Neurobiology. (4) Lecture, four hours. Requisite: course M101A. Course ranges from synapse to society. Provides intensive tract on molecular and scientific techniques for understanding substance abuse and blends that material with relevant topics such as epidemiology, occurring disorders, treatment options, prevention, and public policy. Interdisciplinary examination of course materials to public concern. Concurrently scheduled with course C277. Letter grading.

178. Human Electrophysiology and Evoked Potentials in Research and Clinical Diagnosis. (4) Seminar, four hours. Enforced requisite: course M101A. Not open for credit to students with credit for course 191A, seminar 1. Emphasis on human electroencephalogram (EEG) and various forms of sensory-evoked potentials. Introduction to number of experimental paradigms that allow for recording of different brain signals from brainstem to cortex. Letter grading.


180. Genetic, Molecular, and Genomic Approaches to Studying Mental Health. (4) Seminar, three hours. Enforced requisites: courses M101A, M101B. Not open for credit to students with credit for course 191C, seminar 1. In-depth study of genetic, molecular, and genomic methods to studying nervous system development and disease. Overview of current technologies used to generate mouse models for genetic and pharmacological analysis. Review of technological advances from studying development and diseases. Integrate genomic approaches for identifying and characterizing gene(s) involved in these processes. Emphasis on mouse models, but other model organisms considered as well. Letter grading.

181. Cellular and Molecular Mechanisms of Learning and Memory. (4) Seminar, four hours. Enforced requisite: course M101A. Not open for credit to students with credit for course 191C, seminar 2. Cellular mechanisms of learning and memory. Genetic and molecular approaches to learning and memory. Learning and memory deficits in neuropsychiatric diseases. LTP and LTD models. Letter grading.


186. Neural Stem Cells: Biology, Diseases, and Therapies. (4) Lecture, two and one half hours. Prerequisites: background in biology and biochemistry. Enforced requisites: courses M101A, M101B. Designed for third- and fourth-year Neuroscience majors. Comprehensive coverage of stem cells of nervous systems and their potential applications involving use of stem cells in diseases (e.g., brain tumors, Alzheimer’s, Parkinson’s), and use of stem cells for therapy. P/NP or letter grading.

M167. Neurology of Bias and Discrimination. (4) [Same as Physiological Science M106 and Psychology M166.] Lecture, four hours. Limited to junior/ senior neuroscience, physiological science, and psychology students. Exploration of aspects of mammalian brain function that generate preference, bias, and discrimination. Consideration of research at multiple levels of analysis from genetics to neural circuits to behavior. Discussion of societal implications of these research findings, including their relevance to public policies and criminal justice system. Letter grading.

188SA. Individual Studies for USIE Facilitators. (1) Tutorial, to be arranged. Enforced corequisite: Honors Collegium 101E. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to discuss selected USIE seminar topic, conduct preparatory research, and begin preparation of syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.

188SB. Individual Studies for USIE Facilitators. (1) Tutorial, to be arranged. Enforced requisite: course 188SA. Enforced corequisite: Honors Collegium 101E. Limited to junior/senior USIE facilitator. Individual study in regularly scheduled meetings with faculty mentor to finalize course syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.

188SC. Individual Studies for USIE Facilitators. (2) Tutorial, to be arranged. Enforced requisite: course 188SB. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor while facilitating USIE syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.

189AH. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

189HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to undergraduate lecture course. Individual study with course instructor. May be repeated for credit to a maximum of 4 units. Individual contract required. Honors content noted on transcript. Letter grading.
Topics on one or more aspects of neuroscience. Reading, discussion, and development of culminating project. May be applied as elective only in specific area of grade 2. Each course may be repeated once for credit. P/NP or letter grading. 191A. Behavioral and Cognitive Neuroscience. Requisite: course M101A or Psychological Science 111A. 191B. Systems and Integrative Neuroscience. Requisite: course M101A or Psychological Science 111A. 191C. Molecular, Cell, and Developmental Neuroscience. Enforced requisite: course M101B.

191H. Honors Seminars: Neuroscience. (4) Seminar, four hours. Preparation: one statistics course (Statistics 10 or equivalent). Limited to neuroscience honors program students. Instruction in principles of scientific method, ethics, and written and oral communication; critique of current journal articles and research projects. Presentation of individual research. May not be applied toward elective requirements for major. Must be taken during Winter Quarter of academic year that students enroll in courses 198A and 198B. Letter grading.

192A. Practicum in Neuroanatomy for Undergraduate Assistants. (2) Seminar, three hours; laboratory, one hour. Requisite: courses M101A and 102, with grades of A. Limited to senior Neuroscience majors. Training and supervised practicum in neuroanatomy for undergraduate assistants. Students assist faculty members and teaching assistants in laboratory only. May not be applied toward elective requirements and may not be repeated for credit. P/NP or letter grading.

192B. Project Brainstorm: Neuroscience K–12 Outreach. (4) Seminar, one hour; fieldwork, three hours. Limited to juniors/seniors. Course to be supervised by faculty and teaching assistant advisers. Project Brainstorm is K–12 science education outreach program of Brain Research Institute (BRI) and Neuroscience PhD and undergraduate programs that stimulates interest in science for children and young adults in grades K–12 by providing hands-on learning experiences that emphasize function and importance of brain. Students expected to prepare age-appropriate lesson plans to be used in Project Brainstorm classroom visits. Students meet on regular basis with supervisors and provide periodic reports of their experience. Letter grading.

192C. Drug Abuse and Society: Conveying Concepts to High School Students. (4) Seminar, for 21 hours (seven weeks); fieldwork, four hours (three weeks). Enforced requisite: courses M101A, C177. Limited to junior/senior Neuroscience majors selected for DOPA Team capstone option. Preparation of students to give accurate, knowledgeable, and age-appropriate lectures in area of drug abuse to students at local high schools. Designed as followup to course C177 where students learned didactic material on mechanisms of action and transactional aspects of drugs of abuse. Students meet on regular basis with supervisors and provide periodic reports of their experience. Letter grading.

193. Journal Club Seminars: Current Research in Neuroscience. (4–4–4) Seminar, three hours. Topics on one or more aspects of neuroscience. Reading, discussion, and development of culminating project. May be applied as elective only in specific area of grade 2. Each course may be repeated once for credit. P/NP or letter grading. 194A. Molecular Neurobiology of Neural Plasticity. (4) Seminar, four hours. Preparation: course M101B. Limited to junior/senior Neuroscience majors and minors with grades of B (3.0) or better. Supervised individual research or investigation under guidance of faculty mentor. Culminating paper or project required. Maximum of 8 units of courses 198A, 198B, 199A, 199B may be applied toward major. Individual contract required. Letter grading.

194B. Directed Research in Neuroscience. (4) Tutorial, 12 hours minimum. Enforced requisite: courses M101A. Limited to junior/senior Neuroscience majors and minors with grades of B (3.0) or better. Supervised individual research or investigation under guidance of faculty mentor. Culminating paper or project required. Maximum of 8 units of courses 198A, 198B, 199A, 199B may be applied toward major. Individual contract required. In Progress grading (credit to be given only on completion of course 199B).

198A. Honors Research in Neuroscience. (4) Tutorial, 12 hours minimum in laboratory. Requisite: course 198A. Continued reading and research that culminate in honors thesis under direct supervision of faculty member. For departmental honors, students must also take course 191H. Maximum of 8 units of courses 198A, 198B, 199 may be applied toward major. Individual contract required. In Progress grading (credit to be given only on completion of course 1988).

198B. Honors Research in Neuroscience. (4) Tutorial, 12 hours minimum in laboratory. Requisite: course 198A. Continued reading and research that culminate in honors thesis under direct supervision of faculty member. For departmental honors, students must also take course 191H. Maximum of 8 units of courses 198A, 198B, 199 may be applied toward major. Individual contract required. Letter grading.

199A. Directed Research in Neuroscience. (4) Tutorial, 12 hours minimum. Enforced requisite: courses M101A. Limited to junior/senior Neuroscience majors and minors with grades of B (3.0) or better. Supervised individual research or investigation under guidance of faculty mentor. Culminating paper or project required. Maximum of 8 units of courses 198A, 198B, 199A, 199B may be applied toward major. Individual contract required. Letter grading. 199B. Directed Research in Neuroscience. (4) Tutorial, 12 hours minimum. Enforced requisite: course 199A. Limited to junior/senior Neuroscience majors and minors with grades of B (3.0) or better. Continued supervised individual research or investigation under guidance of faculty mentor. Culminating paper or project required. Maximum of 8 units of courses 198A, 198B, 199A, 199B may be applied toward major. Individual contract required. Letter grading.

NEUROSCIENCE, GRADUATE

Interdepartmental Program David Geffen School of Medicine 1329 Gonda Center Box 95761 Los Angeles, CA 90095-1761 Neuroscience Graduate IDP 310-825-8153 Program e-mail felix.e.schweizer@usc.edu Thomas J. O’Dell, PhD, Vice Chair Faculty Committee

Hugh T. Blair, PhD (Psychology)
Dean V. Buonomano, PhD (Neurobiology, Physiology)
S. Thomas Carmichael, Jr., MD, PhD (Neurology)
David L. Glanzman, PhD (Integrative Biology and Physiology, Neurobiology)
Ming Guo, MD, PhD (Molecular and Medical Pharmacology, Neurology)
Karen H. Gylys, RN, PhD (Nursing)
Paul E. Micevych, PhD (Neurobiology)
Thomas J. O’Dell, PhD (Physiology)
Alessandro Sagasti, PhD (Molecular, Cell, and Developmental Biology)
Felix E. Schweizer, PhD (Neurobiology)
Stephanie A. White, PhD (Integrative Biology and Physiology)

Scope and Objectives

The interdepartmental Neuroscience PhD program prepares students for careers in neuroscience research and education. The hallmark of the program is an integrated approach to study of the nervous system, using the multilevel analytical tools of molecular, cellular, systems, and/or behavioral biology, as well as quantitative approaches from the fields of mathematics, physics, and engineering. Students working at one or two analytical levels nevertheless learn to appreciate the methods and advantages of other levels of analysis. Emphasis is both on mechanisms of neural function and the biological basis of disease. Students select their research mentor from the list of all neuroscience faculty at UCLA.

Information on the undergraduate program in this discipline can be found in the Neuroscience undergraduate interdepartmental program section.

Graduate Study

Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Division website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Graduate Degree

The Neuroscience Program offers the Doctor of Philosophy (PhD) degree in Neuroscience.

Neuroscience

See the Neuroscience undergraduate interdepartmental program for more undergraduate courses.

Lower-Division Courses

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Graduate Courses

M201. Cell, Developmental, and Molecular Neurobiology. (6) (Same as Neurobiology 200B). Lecture, six hours. Fundamental topics concerning cellular, developmental, and molecular neurobiology, including intracellular signaling, cell–cell communication, neurogenesis and migration, synapse formation and elimination, programmed neuronal death, and neurotrophic factors. Letter grading.

M202. Cellular Neurophysiology. (4) (Same as Neurobiology 200F and Physiological Science 200C). Lecture, three hours; discussion, two hours. Requisites: Physiological Science 111A (or M180A or Physics SC), 166. Advanced course in cellular physiology of neurons. Action potentials, membrane potentials, channels and channel blockers, gates, ion pumps and neuronal homeostasis, synaptic receptors, drug-receptor interactions, transmitter release, modulation by second messengers, and sensory transduction. Letter grading.

M203. Anatomy of Central Nervous System. (4) (Same as Bioengineering M263Q). Lecture, 75 minutes; discussion/laboratory, two hours. Prior to first laboratory meeting, students must complete Bloodborne
the current literature related to neuroengineering research. Computer Engineering M256A-M256B-M256C. Introduction to principles and technologies of bioelectricity and neural signal recording, processing, and stimulation. Topics include bioelectricity, electrophysiology (action potentials, localized EEG, ECoG), intracellular and extracellular recording, microelectrode technology, neural signal processing (neural signal frequency bands, filtering, spike detection, spike sorting, stimulus artifact removal), brain-computer interfaces, deep-brain stimulation, and prosthetics.

205. Systems Neuroscience. (4) Lecture/discussion, four hours. Introduction to systems neuroscience, with emphasis on integration of molecular mechanisms, cellular processes, anatomical circuits, and behavioral analysis to understand function of neural systems. Letter grading.

206. Neuroengineering. (4) Same as Bioengineering M260 and Electrical and Computer Engineering M255S. Lecture, four hours; laboratory, three hours; outside study, five hours. Requisites: Mathematics 19 or 20. Introduction to principles and technologies of bioelectricity and neural signal recording, processing, and stimulation. Topics include bioelectricity, electrophysiology (action potentials, localized EEG, ECoG), intracellular and extracellular recording, microelectrode technology, neural signal processing (neural signal frequency bands, filtering, spike detection, spike sorting, stimulus artifact removal), brain-computer interfaces, deep-brain stimulation, and prosthetics.

207. Integrity of Scientific Investigation: Education, Research, and Career Implications. (2) Discussion, two hours. Discussion of topics related to ethical conduct of scientific investigation, with emphasis on critical thinking. Topics include scientific misconduct, mentoring, data ownership, authorship, peer review, use of animals and humans in biomedical research, conflicts of interest, technology, and scientific integrity. S/U grading.


215. Variable Topics Research Literature Seminars: Neuroscience. (1) Seminar, two hours. Critical discussion and analysis of current literature for various neuroscience research topics. Only one topic may be taken twice for credit and applied toward neuroscience graduate requirements. S/U grading.

220. Biology of Learning and Memory. (4) Same as Neurobiology M220G and Psychology M220B. Lecture, four hours. Cellular, circuit, systems neuroscience, anatomy, theory, and models of learning and memory. Cross-disciplinary focus on learning and memory to provide integrative view of subject that emphasizes the need to take advantage of novel groundbreaking models. Letter grading.

221. Sensory Systems Neurobiology. (4) Same as Neurobiology M200C. Lecture, two hours; discussion, two hours. Fundamental topics in sensory systems neurobiology, including transduction and olfaction, audition, vision, and somatosensory system. Letter grading.

233. Neurobiology of Sleep. (4) Same as Physiological Science CM233. Lecture, three hours; discussion, one hour. Detailed look into science of sleep. Cellular and molecular mechanisms of falling asleep, many discrete brain structures involved in control of sleep wakefulness, and homeostatic regulation of sleep. How our sleep needs shape our evolutionary history, age, and gender. Latest insights into question of function of sleep, critical role sleep plays in memory formation and consolidation, relationship between sleep and metabolism. Sleep disorders are considered as they provide insights into mechanisms underlying sleep. For background on science of sleep and circadian neurobiology, see course CM126 is highly recommended. Concurrently scheduled with course CM123. Letter grading.

240. Phenotypic Measurement of Complex Traits. (4) Lecture, three hours. Preparation: background in human genetics helpful. Integrative approach to understanding gene to behavior pathways via examination of levels of organization across systems (cell, brain, organism), across species (invertebrate, fly, mouse, human), and throughout development across varying environmental milieus. Using examples from human disorders such as schizophrenia and Alzheimer’s disease, linking of these diverse approaches in genetic research to map out integrative system of understanding basis of complex human behavior. Emphasis is placed on understanding of mechanisms used at each level of phenotype analysis, along with major resources that can be accessed to gain insight to gene-behavioral links. Letter grading.

245. Optical Approaches in Neuroscience. (4) Lecture, four hours. State-of-art, light-microscopy-based approaches in neuroscience. Background material on basic optical principles and microscopic design, as well as confocal and two-photon microscopes. Technical approaches commonly used in study of nervous system, including imaging modalities such as two-photon microscopy, methods for imaging and stimulating neuronal activity, and advanced microscopy approaches such as FRET and FLIM. Letter grading.


255. Functional Organization of Behavior. (2) Lecture, two hours. Changes in neuronal properties supporting changes in learned behavior. Different types of learning. Role of neurotransmitters and second messengers in changing ion channels of neurons to support associative learning versus long-term potentiation of neurotransmission. Introduction to principles of signal processing, demonstration of signal processing and state of the art of brain-computer interfaces, co-occurring disorders, treatment options, prevention, and public policies, with emphasis on communication of course materials to general public. Concurrently scheduled with course CM265. Letter grading.

264A-264B. Principles of Neuroimaging I, II. (4–4) Same as Psychiatry M284A and M284B. Lecture, four and one half hours. Preparation: competence in integral calculus, ordinary differential equations (any language), general statistics. Requisites: Psychiatry 292. Course M284A is requisite to M284B. Instrumental approaches for functional neuroimaging, with emphasis on quantitative understanding and data interpretation and features common to modalities. X-ray computed tomography, magnetic resonance imaging, positron emission tomography, magnetoencephalography, transcranial magnetic stimulation, near infrared imaging. Letter grading.

266. Psychoimaging Methods and Analysis I. (4) Lecture, three hours. Preparation: recommended pre- and post-class preparation: one term of graduate level statistics, biostatistics. Understanding of current research in imaging, MRI and electrophysiological methods, data acquisition, and analysis, experimental design, and statistical analysis. Comprehensive understanding of data obtained thus far in human systems. Strong focus on understanding technologies, how to design activation imaging paradigms, and how to interpret results. Laboratory visits and design and implementation of functional MRI experiment. S/U or letter grading.

266A. Electroencephalography Methods and Analysis I. (4) Lecture, three hours. Preparation: recommended pre- and post-class preparation: one term of graduate level statistics, biostatistics. Understanding of current research in imaging, EEG, and advanced methods for experiment designs, EEG recording and noise reduction, data processing, feature extraction, and bio-marker development. Students design simple experimental paradigms to answer some fundamental perceptual and cognitive questions, de-noise already recorded EEG and extract useful information using psychophysiological data processing, and testing of EEGlab and BrainStorm, perform several common statistical tests on the extracted data and implemented results and review design of single-run experiments and meta-analysis of findings.
understand use of EEG in research and applications, explain current limitations and controversies of EEG, and navigate through state-of-the-art analyses and applications of EEG. Letter grading.

M287. Dynamics of Neural Microcircuits. (4) (Same as Neurobiology M287.) Lecture, two hours; discussion, two hours. Development of integrative understanding of neural microcircuits that underlie specific functions of sensory processing, generation, and coordination of motor activity, as well as generation and modulation of neural rhythms. Letter grading.

375. Teaching Apprentice Practicum. (1 to 4) Seminar, to be arranged. Preparation: apprentice personnel employment as teaching assistant, associate, or fellow. Teaching apprenticeship under active guidance and supervision of regular faculty member responsible for curriculum and instruction at UCLA. May be repeated for credit. S/U grading.

596. Directed Individual Study or Research. (2 to 12) Tutorial, to be arranged. S/U grading.

597. Preparation for PhD Qualifying Examinations. (2 to 12) Tutorial, to be arranged. S/U grading.

599. Dissertation Research for PhD Candidates. (2 to 12) Tutorial, to be arranged. Designed for students requiring special instruction or time to work on dissertation. S/U grading.

Neurology

Lower-Division Courses

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating paths of discovery at UCLA. P/NP grading.

99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Course

199. Directed Research in Neurosurgery. (2 to 8) Tutorial, two hours. Limited to juniors/seniors. Supervised individual research or investigation under guidance of faculty mentor. Culminating paper required. May be repeated for credit. Individual contract required. P/NP or letter grading.

Nursing

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Nursing

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Benissa E. Salem, RN, MSN, PhD, CNL, PHN

Rita L. Secola, RN, PhD

Elizabeth Anne Thomas, RN, PhD, ANP-BC, COHN-S, FAAONH

Scope and Objectives

A strong scientific basis underlies the teaching of nursing practice, leadership, and research. Related clinical experiences are arranged within the Reagan UCLA Medical Center, its affiliates, other major medical centers, or in selected community sites.

At the bachelor’s level, nurses are prepared as generalists with special skills in primary, secondary, and tertiary prevention and care within a population-based context, leadership, and evidence-based practice. At the master’s level, nurses are prepared as generalists in hospital-based care or for advanced
nursing practice as nurse practitioners, or clinical specialists, or administrators in a variety of settings and specialized areas of healthcare. The PhD program prepares scholars who do original research, generate new theories, and build the scientific basis for professional nursing practice. Research is both basic and applied.

**Undergraduate Study**

The Nursing (Prelicensure) major is a designated capstone major. Students complete a clinically based scholarly project that is approved by a designated faculty member. In completing the capstone course, students should select, evaluate, and apply appropriate theory and research findings concerning individual- and population-based health promotion and disease prevention, biobehavioral and health systems, and social environmental, cultural, and human diversity to the nursing process. They should utilize the nursing process to promote biopsychosocial health and disease prevention and to support the resources of culturally diverse clients and families in community- and/or hospital-based settings.

Through their work, students should demonstrate effective communication and collaboration skills with clients and their families, research participants, other health professionals, colleagues, and policymakers. They also should identify practice-based problems and hypotheses and critique research on issues of importance to nursing and health care delivery; participate effectively in relevant professional and community organizations and/or interest groups; demonstrate leadership as a member of the health team to plan, manage, and evaluate care of individuals, families, and communities; and practice their work based on the principles of ethics, social justice, and law.

**Nursing BS Prelicensure**

**Capstone Major**

The focus of the prelicensure program is on the preparation of nurse generalists with special skills in primary, secondary, and tertiary prevention and care within an individual- and population-based context while developing the basics for a strong leadership role. Students learn the art and science of nursing using the latest research findings to guide their practice.

**Learning Outcomes**

The Nursing major has the following learning outcomes:

- Selection, evaluation, and application of appropriate theory and research findings concerning individual- and population-based health promotion and disease prevention, biobehavioral and health systems, social environmental, and cultural and human diversity to the nursing process with a variety of clients, families, and communities from diverse cultural backgrounds
- Use of the nursing process to promote biopsychosocial health and disease prevention, and to support client resources in community and hospital settings
- Demonstrated effective communication and collaboration skills with clients, families, research participants, health professionals, and policymakers
- Identification of practice-based problems and hypotheses, and critique research on issues of importance to nursing and health care delivery within hospital and community settings
- Effective participation in professional and community organizations and interest groups relevant to health care delivery and modification of nursing standards and practices in keeping with current trends
- Demonstrated leadership as a health team member to plan, manage, and evaluate care of individuals, families, and communities
- Practice of hospital- and community-based nursing using principles of ethics, social justice, and law

**Admission**

The School of Nursing strives to attract a culturally and ethnically diverse student population. Admission is designed for freshet students and transfer students at the junior level. Freshman applicants are expected to fulfill the University of California admission requirements. Transfer applicants are expected to fulfill the Intersegmental General Education Transfer Curriculum (IGETC). Students must have a grade of C or better in each requisite course and an overall grade-point average of 3.5 or better.

Two recommendation forms and a written statement of purpose are also required. Diverse life experiences, including previous employment, volunteer work, and community service that reflect leadership, responsibility, multicultural involvement, multilingual abilities, and other unusual skills and knowledge are evaluated for all applicants. Consideration is also given to students who are socially, economically, and educationally disadvantaged. Completed applications should reflect clearly identified career goals and documentation of potential for nursing practice.

**Preparation for the Major**

Required: Chemistry and Biochemistry 14A, 14B, 14C, Communication 1 or 10, Life Sciences 7A, 7C, Mathematics 3A or 31A, Microbiology, Immunology, and Molecular Genetics 10, Nursing 3, 10, 13, 20, 50, 54A, 54B, Psychology 10.

**Transfer Students**

Transfer applicants to the Nursing major with 90 or more units must complete the following introductory courses prior to admission to UCLA: calculus, communications, human anatomy, human physiology, inorganic and organic chemistry, cells, tissues, and organs, microbiology, molecular biology, and introductory or general psychology. Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

**The Major**

Required: Biostatistics 100A, Nursing 115, 150A, 150B, 152A, 152B, 160, 161, 162A through 162D, 163, 164, 165, 168, 171, 173W, 174, and completion of a capstone senior scholarly project (course 169). Transfer students must complete Nursing 10, 20, 50, 54A, and 54B on entry. Students may request to pursue a minor in a related field if the coursework can be completed within the 216-unit limit.

The curriculum at UCLA must be completed with a minimum overall grade-point average of 2.0 (C) or better in all courses taken while a student in the School of Nursing.

Each required nursing course in the school must be completed with a grade of C or better (C– grade is not acceptable).

**Graduate Study**

Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Division website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

**Graduate Degrees**

The School of Nursing offers the Master of Science in Nursing (MSN) degree, the Master of Science (MS) and Doctor of Philosophy (PhD) degrees in Nursing, and the Doctor of Nursing Practice (DNP) degree. A concurrent degree program (Nursing MSN/Management MBA) is also offered.

**Nursing Lower-Division Courses**

3. Human Physiology for Healthcare Providers. (5) Lecture, three hours; laboratory, two hours. Basic understanding of human physiological processes, with emphasis on applications to patient evaluation and care. Concepts underlying normal function and how alterations in these normal functions can affect body systems. Knowledge and understanding of these normal human processes is basic to providing quality nursing care. Examination of system variations across lifespan. Letter grading.

10. Introduction to Nursing and Social Justice I. (2) Lecture, two hours. Within context of history of nursing, introduction to practice of nurses, including role of advocacy. Discussion of effective use of self as professional nurse in relation to ethics, cultural competence, and human diversity. Introduction to ethical principles (justice, autonomy, veracity, beneficence, confidentiality) and professional values (altruism, autonomy, human dignity, integrity, and social justice) in relation to nursing practice throughout history in health/illness and end-of-life contexts. Letter grading.

13. Introduction to Human Anatomy. (5) Lecture, three hours; laboratory, two hours. Structural presentation of human body, including musculoskeletal, nervous, circulatory, respiratory, digestive, renal, and reproductive systems. Laboratory uses virtual cadaver dissection and examination. Letter grading.

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

20. Introduction to Nursing and Social Justice II. (2) Lecture, two hours. Requisite: course 10. Advanced discussion on history of nursing, with focus on role of contemporary nursing in relation to ethics and social justice. Analysis of ethical principles (justice, autonomy, veracity, beneficence, confidentiality) and professional values (altruism, autonomy, human dignity, integrity, and social justice) in relation to nursing practice throughout history in health/illness and end-of-life contexts. Evaluation of social, cultural, legal,
and political forces in relation to paternalism for professional nurses working with diverse patient populations in the 21st century. Letter grading.

50. Fundamentals of Epidemiology. (4) Lecture, three hours; laboratory, three hours. Epidemiology focuses on distribution and determinants of health-related states or events in specified populations. Fundamentally, epidemiology seeks to control health problems in communities and institutions. Letter grading.

54A. Pathophysiology I. (3) Lecture, three hours. Requisite: course 54. Designed to provide students with basic under-standing of pathophysiological changes that occur within the internal environment of individual. Concepts under-lying process across all body systems are presented. Understanding these alterations is basic to providing quality nursing care. System variations across lifespan are addressed. Letter grading.

54B. Pathophysiology II. (2) Lecture, two hours. Requisite: course 54A. Designed to provide students with understanding of pathophysiological changes that occur at cellular, tissue, and organ level across selected body systems within internal environment of individual. Concepts under-lying processes across all body systems are presented. Understanding these alterations is basic to providing quality nursing care. System variations across lifespan are addressed. Letter grading.

99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week; clinical, three hours; lab, six hours. Requisite: course 54A. Designed to provide students with unique opportunity to explore those critical thinking skills and diagnostic reasoning. Letter grading.

150A. Fundamentals of Professional Nursing I. (4) Lecture, three hours; laboratory, three hours, Requisite: courses 10, 20, 54A. Focuses on theoretical foundations of primary, secondary, and tertiary preven-tion as they relate to nursing care management in acute care settings for nursing students. Emphasis is on application of relevant theories to nursing behavior, practice and process. Focus on selected body systems within internal environment of individual. Concepts underlying process across all body systems are presented. Understanding these alterations is basic to providing quality nursing care. System variations across lifespan are addressed. Letter grading.

150B. Fundamentals of Professional Nursing II. (4) Lecture, three hours; laboratory, three hours; Requisite: courses 150A, 152A, 152B, 174. Continuation of course 150A. Emphasis on student knowledge and understanding of professional nursing. Theory based on community, interpersonal relationships and collaboration, interprofessional relationships, cultural competence, and nursing process with critical thinking skills as decision-making strategies. Letter grading.

152A. Health Promotion: Growth and Development in Culturally Diverse Populations. (2) Formerly numbered 152W. Lecture, two hours. Introduction to primary prevention strategies as they pertain to health and wellness across lifespan, using population-based approach to nursing care of diverse populations. Primary emphasis in growth and development and reproductive health, including issues related to contraception and parenthood; well-child care, school-age health, and chronic illness-prevention strategies for young- and middle-aged adults; elderly who live independently in communities or within institutions. Analysis of influence of overarching political, societal, and governmental systems within U.S. Letter grading.

152B. Health Promotion: Nutrition in Culturally Diverse Populations. (2) Lecture, two hours. Examination of primary prevention strategies involving nutrition using population-based and clinical approaches. Nursing care of diverse populations is examined with focus on nutrition in relation to prevention of disease and re-covery from disease. Focus on biologic, public health, and clinical aspects of major macro- and micronutrients, obesity, malnutrition, dietary assessment, nutri-tional therapies, and exercise using candidate disease prevention. Examination of influences of overarching political, societal, and governmental systems within U.S. and outside the U.S. on observed nutritional pat-ters. Letter grading.


156. Secondary Prevention. (4) Lecture, four hours. Requisites: courses 150A, 150B, 152A, 152B. Screen and early detection of illness to prevent chronic or acutely deteriorating illness. Expanding on concepts of health and human development and using nursing process, application of nursing role in pro-viding care to individuals and their families to screen, diagnose, and treat illness at earliest possible time to prevent disability or premature mortality. Examination of health problems of individuals within context of family, social and community systems, and inter-disciplinary healthcare systems. Emphasis on differences in developmental stages in response to screening for early and late signs and symptoms of illness in ambu-latory and chronic care settings, including acute care units, rehabilitation units, outpatient specialty clinics and surgical units, and home and community settings. Letter grading.

161. Psychiatric/Mental Health Nursing. (5) Lec-ture, three hours; clinical, six hours. Requisites: courses 160, 162B. Knowledge development and skill assessment to promote mental health of individuals. Exploration of research underlying assessment, diag-nosis, and therapeutic intervention with emphasis on drug therapy, psychosocial intervention, clinical reasoning, and legal and ethical issues. Letter grading.


162B. Maternity Nursing. (5) Lecture, two hours; clinical, six hours. Requisites: courses 160, 160B. Nursing assessment, identification and management of selected acute and emergent problems in maternal/newborn patients, with emphasis on social, physical, and psychological influences. Letter grading.


163. Nursing Care of Geriatric Patients and Families. (3) Lecture, two hours; clinical, one hour. Requisi-tie: course 162A. Addresses prevention and management of acute and chronic health problems of older adults. Letter grading.

164. Maternity Nursing. (5) Lecture, three hours; clinical, six hours. Requisites: courses 160, 160B. Nursing assessment, identification and management of selected acute and emergent problems in maternal/newborn patients, with emphasis on social, physical, and psychological influences. Letter grading.


166. Clinical Internship: Integration. (12) Lecture, three hours; clinical, six hours; laboratory, three hours. Requisites: courses 160, 162B. Nursing assessment and management of acute, chronic, critical, and emergent illnesses in infants, children, and adolescents with emphasis on social, cultural, and developmental influences. Integration of basic knowledge of pathophysiology, diagnostics, pharmacology, therapeutic interventions, and family-centered care concepts as applied to care of infants, children, and adolescents. Application of nursing process, evidence-based practice, and problem-solving and critical-thinking strategies to improve patient safety, quality, care, and health outcomes. Supervised practicum experience within a multidimensional team for clinical interpretation, assessment, and diagnostic data for purpose of planning, implementing, and evaluating nursing care for children, infants, and adolescents. Letter grading.

174. Physical Assessment. (4) Lecture, three hours; laboratory, three hours. Requisites: courses 3, 13. Designed to provide in-depth review and synthesis of physical assessment skills and knowledge covering lifespan. Individual study; use of audiovisual aids, physical assessment skills practice in laboratory, and required text are mandatory. Letter grading.

175. Physical Assessment for Advanced Practice. (4) Lecture, three hours; laboratory, three hours. Com- plementary clinical practicum experience within setting of multidimensional team for application of theory to clinical decision making, evidenced-based practice, and problem-solving and critical-thinking strategies to improve patient safety, quality, care, and health outcomes. Supervised practicum experience within a multidimensional team for clinical interpretation, assessment, and diagnostic data for purpose of planning, implementing, and evaluating nursing care for children, infants, and adolescents. Letter grading.

186. Special Topics in Nursing. (4) Lecture, three hours; discussion, one hour. Limited to junior/senior Nursing majors. Mandatory:繳納課費. Letter grading.

196. Research Apprenticeship in Nursing. (2 to 4) Tutorial, four hours per week per unit. Limited to juniors/seniors. Entry-level research apprenticeship for upper-division students under guidance of faculty mentor. May be repeated for credit. P/NP or letter grading.


199. Directed Research or Senior Project in Nursing. (2 to 4) Tutorial, two hours. Limited to juniors/seniors. Supervised individual research or investigation under guidance of faculty mentor. Letter grading.

Graduate Courses


202. Philosophy of Nursing Science. (4) Lecture, four hours. Focus on philosophy of nursing science by exploring generic concepts that underpin epistemo- logical assumptions about knowledge. Examination of philosophical concepts that shape discipline of nursing in relation to their influence on scientific reasoning and the types of questions that can be addressed using quantitative and qualitative methods. Letter grading.


204. Research Design and Critique. (4) Lecture, 90 minutes; discussion, 90 minutes. Complex research designs and analysis of multiple variables and re- search evaluation. Emphasis on techniques for control of variables, data analysis, and interpretation of re- sults. Focus on in-depth analysis of interrelationship of theoretical frameworks, design, sample selection, data collection, data analysis, and data interpretation. Scientific rigor and ethical concerns for research with human participants critically examined. Letter grading.

205A. Introduction to Qualitative Methods in Research. (4) Lecture, four hours. Requisite: course 202. Introduction to qualitative research design in nursing science. Examination of major methodologies that guide qualitative research in relation to various strate- gies for data collection (interviews, participant observa- tion, focus groups), data analysis, and data interpre- tation. Scientific rigor and ethical concerns for re- search with human participants critically examined. Letter grading.

205B. Advanced Qualitative Research: Grounded Theory Methodology I. (4) Lecture, four hours. Requi- site: course 205A or equivalent approved by instructor. Advanced techniques for qualitative project study based on grounded theory methodology. Symbolic interactionism and constructivism as foun- dation with grounded theory as guide to research. Letter grading.

205C. Advanced Qualitative Research: Grounded Theory Methodology II. (4) Lecture, four hours. Requi- site: courses 205A, 205B, or equivalent as approved by instructor. Advanced techniques for simul- taneous collection and analysis of qualitative data. Letter grading.

206A. Nursing Concept Development. (2) Lecture, two hours. Requisites: course 202 or philosophy of science (may be taken concurrently), four units of nursing theory. Examination of history of conceptual and theoretical thinking in nursing and the development of methods for conceptualizing and operationalizing concepts that are part of each step of research pro- cess. Students critique published research. Study by example of relationship between theory and nursing research. Satisfies Writing II requirement. Letter grading.

206B. Nursing Theory Development. (2) Formerly numbered 206L.) Lecture, two hours. Requisites: courses 202 or philosophy of science (may be taken concurrently), 208A. Preparation: 4 units of nursing theory. Critical analysis of role of theory and theoret- ical frameworks in developing nursing research. Application of skills fundamental to concept analysis and develop- ment in nursing and integrated use in nursing theory and research. Letter grading.

207. Quantitative Research Designs of Clinical Phenomena. (3) Lecture, two hours; discussion, one hour. Requisites: courses 202, 206A, 210A, 210B, Bi- ostatistics 100B. Introduction to wide array of quantita- tive research study designs. In-depth examination of dynamic interaction between research question and potential theoretical hypotheses to experimental- and many quasi-experimental- and non-experimental- study designs. Examination of potential threats to va- lidity and other design characteristics that are asso- ciated with research study designs. Letter grading.

ysis of psychometrics, reliability, and internal validity of research instruments in relation to outcomes in nursing research. Letter grading.

209. Human Diversity in Health and Illness. (4) Lecture, four hours. Human diversity in response to illness that nurses diagnose and treat, centering on culture, and human-related systems associated with diverse orientations related to ethnicity and gender. Provides conceptual base that nurses can use in clinical practice, research, teaching, and administration. Letter grading.

210A. Critical Review of State of Science in Nursing Research. (3) Lecture, three hours. Requisite: doctoral standing or consent of instructor. In-depth exploration of state of science literature, logical, vulnerable populations, and biobehavioral research topics. Students explore research on particular phenomena, analyze current and historical scholarly findings in literature, critique significance of focus on this phenomenon for nursing science, identify crucial techniques of evaluation in relation to management of healthcare organizations, with emphasis on organizational structure, processes, and outcomes. Letter grading.


218A. (4) Lecture, four hours. Synthesis and evaluation of organizational theory in leadership and management of healthcare organizations, with emphasis on organizational structure, processes, and outcomes. Letter grading.


218C. (4) Lecture, four hours. Requisite: course 218B. Project management, organizational communication, governance, development, diverse relationships within state of science, risk management, liability, and ethics of administration decision making. Emphasis on issues affecting local, national, and international healthcare organizations. Letter grading.


219A. Essentials of Accounting and Budgeting in Healthcare Organizations. (4) Lecture, four hours. Theories of management, organization, and administration presented in relation to techniques of accounting, budgeting, finance, and healthcare economics. Focus on specific roles and concepts, followed by practical applications within variety of healthcare settings. Letter grading.


220. Theories of Instruction and Learning in Nursing. (3) Lecture, four hours. Emphasis on learning theories, curricula, and program development, and principles and techniques of evaluation. Examination of educator roles of advanced practice nurse in variety of settings and with diverse cultural and socioeconomic groups. Opportunities provided for skill development in use of computer-based information systems and development of instructional aids. Letter grading.

223A. Critical Review of State of Science in Nursing Research. (3) Lecture, three hours. Requisite: doctoral standing or consent of instructor. In-depth exploration of state of science literature, logical, vulnerable populations, and biobehavioral research topics. Students explore research on particular phenomena, analyze current and historical scholarly findings in literature, critique significance of focus on this phenomenon for nursing science, identify crucial techniques of evaluation in relation to management of healthcare organizations, with emphasis on organizational structure, processes, and outcomes. Letter grading.

224. Course 216A is requisite to 216B, which is required for admission to the following courses: 222A, 222B, 222C.

225A-225B. Advanced Pharmacology I, II. (3–2) Lecture, three hours (course 225A) and two hours (course 225B). Emphasizes basic pharmacological principles in addition to principles of specific therapeutic agents. Letter grading.

226. Seminar: Aging Research. (1 to 2) Seminar, two hours. Preparation: completion of first-year coursework. Discussion and conceptualization of gerontological nursing concepts within context of specialty areas of research (acute care, oncology, occupational health, and gerontological nursing). Provides opportunities for students to integrate gerontological nursing concepts into their everyday practice and to examine state of science in their areas of focus. Core faculty from all specialty areas participate in discussions. May be repeated for maximum of 10 units. S/U grading.

227. Ethnogeriatric Nursing. (4) Lecture, three hours. Requisite: course 209. Identification of unique content related to minority aging using Giger and Davidhizar’s “Cultural Assessment Model.” Emphasis on transcultural nursing viewed as culturally competent practice that is both client centered and research focused. Exploration of difference between Eurocentric and nonEurocentric lenses of thinking care to ethnically and racially diverse elders. In-depth examination of issues related to conducting research with elders who are racially and ethnically diverse in variety of healthcare settings. Study of conducting research, issues surrounding informed consent of minority elders, and data collection techniques, including critique and use of data collection instruments used in community and/or long-term care settings, behavioral observations, interviews, and surveys. Letter grading.

228. Research Methods for Aging Populations. (4) Lecture, three hours. Requisites: courses 204, 256A, 227A. Emphasizes research design and execution of issues related to conducting research with elders in variety of healthcare settings. Study designs for conducting research in community and long-term care settings, issues surrounding informed consent, planning for mortality and morbidity, data collection techniques for frail elders, including use of assessment tools used in community and long-term care settings, behavioral observations, interviews, and surveys, and statistical analysis techniques related to missing data, longitudinal data analysis, clustering, and repeated measures. Letter grading.

229A-229B. System-Based Healthcare I, II, III. (1–1–1) Seminar, two hours. System-based health care where students focus on context of medical decision making, including team, hospital, culture, politics, and economics. Includes issues in healthcare setting, organizational issues related to minority aging using Giger and Davidhizar’s “Cultural Assessment Model.” Emphasis on synthesizing organizational and management theories in relation to strategic planning and management, changing care delivery systems, human and financial resource management, decision making, management information systems, professional practice, and meeting accreditation and legal standards. Letter grading.

230A. Advanced Pathophysiology I. (3) Lecture, three hours. Requisites: courses 3, 13, or equivalent taken within last three years. Course 230A is requisite to 230B. In-depth examination of general pathophysiological processes that underlie human illness and disease across all body systems including cellular adaption, fluid and electrolyte balance, acid-base balance, immunity, inflammation, infection, wound healing, genetics, neuroendocrine regulation, somatosensory and pain processing, stress and disease, and activity and fatigue regulation. Detailed study and analysis of manifestations of, and responses to, processes which cause or contribute to systemic and organ pathologies. Emphasis on interpretation of what constitutes conflict of interest. Consideration of how medical decisions are influenced by context of care (system-based practice) and personalization of care and emotional responses and preferences (professionalism). S/U grading.

230B. Advanced Pathophysiology II. (2) Lecture, two hours. Requisite: course 230A. In-depth examination of the physiological processes that underlie human illness and disease, with detailed study of these in major body systems. Examination of manifested
231. Advanced Pathophysiology for Advanced Practice Registered Nurses. (4) Lecture, four hours. In-depth examination of pathophysiological and medical-surgical concepts that underlie many pediatric illnesses, with detailed study of these in major body systems. Analysis of manifestations of, and responses to, processes of cellular and molecular pathology at cellular, tissue, system, and human levels. Letter grading.


233. Human Responses to Aging and Chronic Illness. (2 or 4) Lecture/discussion, four hours. Pathophysiological, psychological, and social aspects of common pediatric illnesses. Examination of evidence-based research in pediatric nursing. Letter grading.

236. Pediatric Primary Care for Family Nurse Practitioners. (4) Lecture, four hours. Requisite: course 200P. Preparation of nurse practitioners to assume responsibility for health promotion and illness prevention, and maintenance and management of common chronic health problems of infants, children, and adolescents in primary healthcare settings. Presentation of condition or disease, etiology and incidence, clinical findings, differential diagnosis, pharmacologic and treatment management, complications, and preventive and patient education measures. Examination of primary child health delivery model reliant on evidence-based knowledge, practice protocols, consultation, referral, and community resources. Letter grading.


239A-239B-239C. Adult/Gerontology Primary Healthcare for Advanced Practice Registered Nurses I, II, III. (4–4–4) Lecture, four hours. Requisites: courses 200, 224, 231. Course 239A is requisite to 239B, which is requisite to 239C. Assessment, diagnosis, and management of common episodic and chronic adult health problems and conditions, including urgent care, for family and adult/gerontology primary care nurse practitioners. Application and evaluation of evidence-based interventions and clinical guidelines in diverse adult populations (late adolescence through old age). Analysis of health promotion, maintenance, and restoration approaches in special populations, including developmental, cultural, gender, life-stage perspectives, and functional impairment. Letter grading.

242F. Biobehavioral Foundations of Neuropsychiatric Nursing Care. (4) Lecture, four hours. Biologic and behavioral research from variety of disciplines, including nursing, for application to treatment of neuropsychiatric conditions. Exploration of research under- derlying treatment interaction in cognitive, addictive, and affective dysfunctions, with emphasis on developing a biobehavioral nursing approach. Letter grading.

245. Theoretical Foundations of Clinical Nurse Specialist Practice. (4) Lecture/discussion, four hours. Theoretical foundations of clinical nurse specialist practice roles in healthcare systems through case study analysis, with focus on application to clinical practice settings which include culturally diverse populations. Letter grading.

246. Meeting Health-Related Needs in Under-Served Populations. (4) Lecture, four hours. Examination of systematic barriers within healthcare settings that limit access to those in greatest need of culturally appropriate interventions. Unmet healthcare needs often reflect disparities and compromised quality of life among underserved, low income, uninsured, marginalized populations. Analysis of current evidence-based strategies and interventions designed to reduce health inequities and improve health outcomes in culturally competent manner. Presentation of context of healthcare financing, limited access, and public policy. Letter grading.

250. Ethical Issues, Social Justice, and History of Nursing. (5) Lecture, five hours. Interplay of social, economic, cultural, legal, and political forces in the U.S. form background for study of ethical issues related to health and illness. Social justice and safe, effective, high-quality patient-centered care in contemporary society today. Analysis situated within context of history of nursing, with emphasis on human rights, civil rights, and patient rights. Discussion of issues related to health disparities and healthcare access. Letter grading.

252A. Health Promotion: Growth and Development in Culturally Diverse Populations. (2) Formerly numbered 252.) Lecture, two hours. Introduction to primary prevention strategies as they pertain to health and wellness across lifespan, using population-based approach to nursing care of diverse populations. Includes priorities in reproductive health including issues related to contraception and parenting; well-child care, school-age health, and chronic illness prevention strategies for young and middle-aged adults and elderly who live independently in communities or within institutions. Analysis of influence of overarching political, societal, and governmental systems within U.S. Letter grading.


254A. Theoretical Foundations of MSN/MECN Role and Fundamentals of Professional Nursing Lecture/Clinical Seminar I. (4) Lecture, three hours; laboratory, three hours. Focus on theoretical foundations of primary, secondary, and tertiary prevention as they relate to nursing care management in acute care settings for master’s entry clinical nurse (MECN). Emphasis on application of relevant theories to MECN practice roles in health care systems through case study analysis, with focus on application to clinical practice settings that include culturally diverse populations. Letter grading.

254B. Theoretical Foundations of MSN/MECN Role and Fundamentals of Professional Nursing Lecture/Clinical Skills Practicum II. (4) Lecture, three hours; laboratory, three hours. Enforced requisite: course 254A. Focus on student knowledge of practice of professional nursing as theory-based goal-directed method for assisting patients to meet basic human needs at various levels of health continuum, with emphasis on application of relevant theories to master’s entry clinical nurse (MECN) practice roles in healthcare systems. Expansion of concepts of communication, interdisciplinary communication and collaboration, interpersonal relationships, cultural competence, and nursing research as decision-making strategy essential to practice of professional nursing. Letter grading.

C255. Global Health Elective: Globalization, Social Justice, and Human Rights. (2) Lecture, five hours. Exploration of theories, issues, debates, and pedagogy associated with globalization, social justice, and human rights and how these perspectives influence human health and wellness. Complex problems and unique opportunity to explore these topics within classroom, via Internet and other technologies, and in other classrooms located around globe. Students, through collaborative projects around world, reflect on how globalization shapes and transforms local communities and national cultures. Currently scheduled with course C155. Letter grading.

256. Secondary Prevention. (4) Lecture, four hours. Review of courses 252A, 252B. Review of theory and evidence-based secondary prevention screening strategies for early detection of disease to reduce morbidity and mortality across lifespan and to develop nursing care interventions. Use of integrative conceptual frameworks addressing individual, family, community, health care systems factors, social environmental systems, and policies to identify factors influencing screening and utilizing strategies in order to adapt plans for care. Nursing interventions for promoting screening address barriers and facilitators, controversies, as well as utilize existing strengths and social mechanisms for change. Discussion and application of specific micro-level factors including screening for physical health and mental health disorders along with associated behavioral factors and macro-level, built environment influences. Letter grading.

256. Professional Role Issues in Advanced Practice Registered Nursing. (3) Lecture, three hours. Requisite: course 418A or 438A or 439A. Assessment of organizational, legal, ethical, and healthcare policy issues in relation to delivery of healthcare services by advanced practice registered nurses in evolving healthcare system. Letter grading.

256. Healthcare Systems/Organizations. (3) Lecture, three hours. Analysis of evolving healthcare delivery systems in terms of effects of policy, economic factors, structure and financing of organizations, characteristics of patients/patients’ families, and services provided, all of which shape reform in relation to role and practice of clinical nurse leaders. Letter grading.

257. Health Care Policy. (3) Lecture, three hours. Requisites: for MECN students, courses 266, 268, 269; for dual MN/PHS students, courses 245, 269, 445. Analysis of health care policies and how policies impact patient outcomes, clinical practice, health care delivery, and clinician well-being. Concepts related to policy analysis, formulating, funding, political factors, how affect political processes, and stakeholder involvement in policy decision making and implementation. Development of understanding of increasing levels of


289B. Nursing Research Mentorship. (1) Seminar/discussion, one hour; research/laboratory, three hours. Requisites: courses 202, 205A, 206B, 207, 208, 210A, 210B, 295A, Biostatistics 100A, 210A. Special topics course for junior and senior standing who have completed required coursework and are preparing to advance to doctoral candidacy. Discussion topics range from identifying areas of research/laboratory experiences, and engagement in planning for and evaluation of students’ mentored experiences on weekly basis. Letter grading.

299A. Ethical Conduct in Research. (2) Seminar, two hours. Examination of historical and current issues of ethical integrity at each stage of research process in relation to conflicts of interest, data sharing, responsible authorship, data management, and handling of misconduct in research with both human and animal subjects. Systematic instruction on ethical and responsible conduct of research and protection of research subjects as students create their own application for doctoral standing. Letter grading.

299B. Nursing Research/Laboratory Experiences. (4) Seminar/discussion, one hour; research/laboratory, three hours. Requisites: courses 202, 206, 207, 208, 210A, 210B, 295A, Biostatistics 100A, 210A. Special topics course for junior and senior standing who have completed required coursework and are preparing to advance to doctoral candidacy. Discussion topics range from identifying areas of research/laboratory experiences, and engagement in planning for and evaluation of students’ mentored experiences on weekly basis. Letter grading.

299D. Nursing Education Seminar. (2) Seminar, two hours; discussion, one to two hours. Seminar to assist students to prepare for careers in academic settings, with focus on teaching and learning. Letter grading.

375. Teaching Apprentice Practicum. (1 to 4) Seminar, two hours. Requisites: courses 210A, 210B, 210C, 210D. Seminar to assist students to prepare for careers in academic settings, with focus on teaching and learning. Letter grading.


402. Clinical Scholarship for Evidence-Based Practice. (3) Lecture/seminar, three hours. Requisite: doctoral standing. Develops critical thinking skills of DNP students in evaluating state of nursing science and its impact on advanced nursing practice at doctoral level. Introduction and exploration of role of DNP in broader health care environment and contribution to advanced practice nursing roles. Discussion of scientific theories and conceptual frameworks forming foundations of knowledge and clinical scholarship in doctoral nursing practice. Theoretical concepts and strategies that integrate practice inquiry into various roles of advanced practice are emphasized through focus on core components of advanced practice. Letter grading.

403. Organizational and Systems Leadership for Quality Improvement. (3) Lecture/seminar, three hours. Requisite: doctoral standing. Provides interdisciplinary background in sciences of quality improvement and patient safety within health care settings. Addresses history and evolution, theories and thought leaders, current quality of care issues, eliminating health disparities, culturally and linguistically appropriate services, research and innovation, interprofessional strategies, and instruments, as well as analysis of quality management system models in health care. Evaluation of principles of change theory, strategic planning, organizational culture, program development and implementation, Special focus placed on role of DNP leader in developing and leading clinical quality and safety initiatives. Letter grading.

404. Analytical Methods for Evidence-Based Practice. (3) Lecture/seminar, three hours. Requisite: doctoral standing. Advanced concepts on research methods and measurement strategies that are applicable to support advanced practice nurse to access, evaluate, and deliver information from various sources including research, quality improvement initiatives, and information technology origins to achieve improvements in care delivery and practice. Letter grading.


406. Clinical Prevention and Population Health. (3) Lecture/seminar, three hours. Requisite: doctoral standing. Enables DNP students to integrate, synthesize, and apply key concepts introduced in previous coursework in order to incorporate core components into practice. Emphasis on evidence-based preventive service and health promotion, health systems and policy, and population health and community aspects of practice are emphasized through focus on core components of advanced practice. Letter grading.


430. Interprofessional Collaboration for Improving Patient and Population Health Outcomes. (3) Lecture/seminar, three hours. Requisite: doctoral standing. Designed to acquaint DNP students with current issues in interprofessional collaboration and expose students to interprofessional collaborative practice concepts and competencies. Debate of barriers and facilitators to achieving model collaborative practice and exploration of options to change current practice. Exploration of students’ personal belief systems about high-level collaboration and team performance. Addresses relationship between interprofessional education, practice, and health care outcomes and processes to prepare DNP graduate to assume leadership roles. Letter grading.


41A. Information Technology for Nursing Practice (Lecture, two hours. Requisite: doctoral standing. Prepares students to obtain knowledge and skills related to information technology and patient care technology. Prepares DNP graduates to apply new knowledge, manage individual and aggregate information, and assess efficacy of patient care technology appropriate to specialized area of practice. Allows students to use information technology/system resources to implement new patient management initiatives, support practice administrative decision-making. Students gain ability to demonstrate conceptual and technical skills to develop and execute plan evaluation including data extraction from practice systems and databases. Letter grading.

414A-414B. Clinical Practicum: Adult/Gerontology Acute Care Oncology Nurse Practitioners. (6–8) Clinic practicum, 16 hours (course 414A) and 22 hours (course 414B). Enforced requisite: course 416C. Course 414A is enforced requisite to 414B. Assessment and therapeutic interventions for selected health problems in acute adult/gerontology populations. Developmental, health promotion, and maintenance needs of clients in relation to family, social, and cultural structures. Developmental, health promotion, and maintenance needs of clients in relation to family, social, and cultural structures. Students complete minimum of 160 direct clinical hours; for course 414B, they complete minimum of 200 direct clinical hours. Letter grading.

414A-414B. Adult/Gerontology Acute Care Nurse Practitioner Practicum I, II, (2–6) Clinic practicum, six hours (course 414A) and 16 hours (course 414B). Enforced requisite: course 440. Course 416A is enforced requisite to 416B. Assessment and therapeutic interventions for selected health problems in acute adult/gerontology populations. Developmental, health promotion, and maintenance needs of clients in relation to family, social, and cultural structures. For course 416A, students complete minimum of 40 direct clinical hours. Letter grading. For course 416B, they complete minimum of 160 direct clinical hours. Letter grading.

416C-416D. Adult/Gerontology Acute Care Nurse Practitioner Practicum III, IV, (6 each) Clinic practicum, 16 hours. Enforced requisite: course 416C. Course 416C is enforced requisite to 416D. Assessment and therapeutic interventions for selected health problems in acute adult/gerontology populations. Developmental, health promotion, and maintenance needs of clients in relation to family, social, and cultural structures. Students complete minimum of 160 direct clinical hours. Letter grading.

416E. Adult/Gerontology Acute Care Nurse Practitioner Practicum V. (6 to 8) Clinic practicum, 18 hours. Enforced requisite: course 416E. Assessment and therapeutic interventions for selected health problems in acute adult/gerontology populations. Developmental, health promotion, and maintenance needs of clients in relation to family, social, and cultural structures. Students complete minimum of 160 to 240 direct clinical hours. Letter grading.

416F-416G-416C. Nursing Administration Practicum. (3 or 4 each) Clinic practicum, eight or 11 hours; clinical conference, one hour. Letter grading. Requisites: courses 219A, 219B. Synthesis, evaluation, and practical application of organizational theory principles and interpersonal skills. Focus on leadership and management of clinical practice within the context presented in course 218A, including organizational structure, processes, and outcomes. Requisites: courses 219A, 219A. Experience in organizational role. Requisites: courses 219A, 219A. Experience in organizational role. Experience in organizational setting for synthesizing and evaluating content from course 218B, including strategic planning and management, care delivery systems, resource management, decision making, management information systems, professional role management, and accountability and regulation standards. Requisites: courses 218B, 218B. Experience in organizational setting for synthesizing and evaluating content from course 218B, including strategic planning and management, care delivery systems, resource management, decision making, management information systems, professional role management, and accountability and regulation standards. Letter grading.

41D. Nursing Administration Residency. (12) Clinic practicum, 33 hours; clinical conference, one hour. Requisites: courses 218C, 418C. Experience in organizational setting as students assume leadership role in planning, managing, and evaluating administrative projects. Synthesis of content from course 218D, including assessing community healthcare needs, marketing, media, and political action and healthcare policy. Letter grading.

429A. Family Nurse Practitioner Practicum I. (6) Clinic practicum, 12 hours. Requisites: courses 200, 440. First of five clinical practica designed to prepare family nurse practitioners with knowledge, skills, and competencies necessary to assume role of primary healthcare provider for families and individual patients across lifespan. Use of family-focused framework of care for those who experience common acute and chronic illness, disability, and developmental transitions. Emphasis on family health promotion, maintenance, and risk reduction interventions across wide range of diverse populations. Focus on context of community, cultural awareness, and practice in interdisciplinary teams. Students complete minimum of 80 direct clinical hours. Letter grading.


429C-429D-429E. Family Nurse Practitioner Practicum III, IV, V. (6–8) Clinic practicum, 18 hours (course 429C), 27 hours (course 429D), and 27 hours (course 429E). Requisite: course 429C. For course 429D, course 429E; for 429D: course 429C; for 429E: course 429D. Third, fourth, and fifth of five clinical practica designed to prepare family nurse practitioners with knowledge, skills, and competencies necessary to assume role of primary healthcare provider for families and individual patients across lifespan. Use of family-focused framework of care for those who experience common acute and chronic illness, disability, and developmental transitions. Emphasis on family health promotion, maintenance, and risk reduction interventions across wide range of diverse populations. Preparation in variety of clinical settings to implement evidence-based practice guidelines and to critically analyze and adapt healthcare interventions based on individualized assessment of individual/family needs. Focus on context of community, cultural awareness, and practice in interdisciplinary teams. For courses 429C and 429D, students complete minimum of 160 direct clinical hours; for course 429E, they complete minimum of 240 direct clinical hours. Letter grading.


437C. Acute Care Pediatric Nurse Practitioner Clinical Practicum III. (8) Clinic practicum, 26 hours. Requisites: courses 237A, 237B, 437A, 437B, 441. Offers clinical opportunity to apply advanced knowledge of pathophysiology, pharmacology, current research, and diagnostic skills in caring for infants, children, and adolescents with complex acute, critical or chronic health conditions. Emphasis on integration of acute care pediatric nurse practitioner role in implementation of comprehensive management plan for children with complex acute, critical or chronic health conditions under supervision of faculty and preceptors. Letter grading.

438A. Primary Care Pediatric Nurse Practitioner Clinical Practicum I. (3 to 4) Clinic practicum, 10 to 12 hours. Corequisite: course 238B. Comprehensive assessment and anticipatory guidance for children and families to promote child wellness, clinical practicum, seminar, and other learning activities to demonstrate application and evaluation of evidence-based research and clinical guidelines in promotion of pediatric wellness. Students complete minimum of 100 direct clinical hours. Letter grading.

438B. Primary Care Pediatric Nurse Practitioner Clinical Practicum II. (6 to 8) Clinic practicum, 20 to 24 hours. Corequisite: course 238B. Third course in three clinical practicum sequence with emphasis on advanced comprehensive assessment, diagnosis, and management of common acute and chronic problems. Emphasis on developmental and/or behavioral problems. Clinical practicum, seminar, and other learning activities demonstrate application and evaluation of evidence-based research and clinical guidelines in common pediatric illnesses. Letter grading.

438C. Primary Care Pediatric Nurse Practitioner Clinical Practicum III. (6 to 10) Clinic practicum, 20 to 32 hours. Corequisite: course 238C. Third course in three clinical practicum sequence with emphasis on advanced comprehensive assessment, diagnosis, and management of chronic and acute pediatric illnesses in ambulatory setting. Clinical practicum, seminar, and other learning activities demonstrate application and evaluation of evidence-based research and clinical guidelines in pediatric chronic and acute illnesses. Letter grading.


439B. Adult/Gerontology Primary Care Nurse Practitioner Practicum II. (6) Clinic practicum, 18 hours. Corequisite: course 239B. Continuation of course 439A for advanced practice nurses, with emphasis on nursing management of acute and chronic health problems in selected populations. Developmental, health promotion, and maintenance needs of clients in relation to family, social, and cultural structures. Students complete minimum of 80 direct clinical hours. Letter grading.

439C. Adult/Gerontology Primary Care Nurse Practitioner Practicum III. (8) Clinic practicum, 18 hours. Requisite: course 439A. Offers clinical opportunity to apply advanced knowledge of pathophysiology, pharmacology, current research, and diagnostic skills in caring for infants, children, and adolescents with complex acute, critical or chronic health conditions. Emphasis on integration of acute care pediatric nurse practitioner role in implementation of comprehensive management plan for children with complex acute, critical or chronic health conditions under supervision of faculty and preceptors. Letter grading.

439D. Acute Care Pediatric Nurse Practitioner Clinical Practicum IV. (6) Clinic practicum, 18 hours. Requisite: course 439A. Offers clinical opportunity to apply advanced knowledge of pathophysiology, pharmacology, current research, and diagnostic skills in caring for infants, children, and adolescents with complex acute, critical or chronic health conditions. Emphasis on integration of acute care pediatric nurse practitioner role in implementation of comprehensive management plan for children with complex acute, critical or chronic health conditions under supervision of faculty and preceptors. Letter grading.
439E. Adult/Gerontology Primary Care Nurse Practitioner Practicum V. (3) Clinic practicum, 27 hours. Enforced requisites: courses 439A through 439D. Designed to prepare adult/gerontology primary care nurse practitioners to enhance their comprehensive and integrated critical reasoning. Students conduct individualized patient and symptom-focused assessments of health problems representative of diverse client populations. Emphasis on social, cultural, developmental influences, and integrated critical reasoning. Preparing in variety of clinical settings to implement evidence-based practice guidelines and to critically analyze and adapt healthcare interventions based on individualized assessments, with emphasis on context of community, cultural awareness, and practice in inter-disciplinary teams. Students complete minimum of 160 direct clinical hours. Letter grading.

440. Advanced Assessment and Clinical Diagnosis for Advanced Practice Nurses. (2) Laboratory/practicum, six hours. Practice foundations for advanced practice registered nurses. The assessment and diagnostic framework of care for those who experience common acute and chronic illness, disability, and developmental transitions. Preparation in variety of clinical settings to implement evidence-based practice guidelines and to critically analyze and adapt healthcare interventions based on individualized assessments, with emphasis on context of community, cultural awareness, and practice in inter-disciplinary teams. Students complete minimum of 240 direct clinical hours. Letter grading.

441. Advanced Pediatric Diagnostics. (3) Lecture/laboratory, three hours. Requisite: course 440. Designed for acute-care pediatric nurse practitioner students. Advanced diagnostic reasoning and skills in management of infants, children, and adolescents with complex acute and chronic health conditions. Focus on expanding knowledge of pediatric assessment and management of selected health conditions to aspects of diagnostic tests, test interpretation, and invasive procedures to stabilize or monitor acute, critical, or chronic pediatric patient. Lectures and other learning activities demonstrate application and evaluation of evidence-based research and clinical guidelines in pediatric population. Letter grading.


445. Advanced Practice Registered Nursing: Clinical Nurse Specialist Practicum. (2 to 10) Clinic practicum, six to 30 hours. Requisites: courses 220, 245. Practicum/residency where students gain knowledge, skills and competencies to function collaboratively and autonomously to achieve high quality patient outcomes. Clinical nurse specialty (CNS) practice achieves this by working within three spheres of influence: patient/family, nursing personnel, and organizational systems utilizing multidisciplinary approach through application and integration of theory, research, and clinical knowledge. 17 units complete minimum of 500 unique CNS hours required for professional certification. Letter grading.

450. Advanced Practice Registered Nursing: Clinical Elective Independent Study. (2 to 8) Clinic practicum, eight hours. Clinical elective designed to enhance skills and prepare students in selected advanced practice specialty or related practice dimension, with emphasis on application and integration of theory and evidence-based practice knowledge. S/U and letter grading.


462. Maternity Nursing. (5) Lecture, three hours; clinical, six hours. Requisites: courses 220, 260, 465A, 465B. Pathophysiological and psychosocial aspects of assessment and management for selected acute and emergent problems of maternity-newborn patients, with emphasis on social, cultural, and developmental influences and integration of basic knowledge of pathophysiology, diagnostics, pharmacology, therapeutic interventions, patient safety, evidence-based practice, and communication concepts as applied to care of childcare families. Application of theory, nursing process, evidence-based practice, and problem solving in clinical setting, interpretation of assessment and diagnostic data for purpose of planning, implementing, and evaluating care for maternity and newborn patients, both as individuals and cohorts. Assessment, health maintenance, and management of psychosomatic considerations involving childbearing women and families with emphasis on psychosocial, cultural, and developmental influences. Integration of knowledge of pathophysiology, pharmacology, stress and adaptation, adult development theory, therapeutic interventions, and concepts as applied to care of older adult patients and their families. Emphasis on concept of nurse as nurse scientist with critical and contextual thinking skills and diagnostic reasoning. Nursing process, ethical principles, clinical research, evidenced-based practice, and clinical thinking that maximize patient safety and quality care for older adults are employed during clinical experiences. Letter grading.


465A. Foundational Concepts for Tertiary Prevention and Care of Medical-Surgical Patients and Families. (4) Lecture, three hours; clinical, three hours. Requisites: courses 246A, 250, 254A. Examination of nursing assessment and management of common health problems of adults. Theory content in basic assessment, health history, and diagnostic reasoning, with emphasis on social, cultural, and developmental influences. Integration of basic knowledge of pathophysiology, stress and adaptation, adult development theory, therapeutic interventions, and concepts as applied to care of medical and surgical patients and their families across adult lifespan. Introduction to concept of nurses as bedside scientists, with emphasis on application and integration of critical thinking skills and diagnostic reasoning. Nursing process, ethical principles, clinical research, evidenced-based practice and clinical thinking that maximize patient safety and quality care employed during clinical experiences. Letter grading.

465B. Tertiary Prevention and Care of Medical-Surgical Patients and Families. (6) Lecture, four hours; clinical, six hours. Requisites: courses 225A, 230A, 230B, 252A, 252B, 465A. Pathophysiological and psychosocial aspects of assessment and management for selected acute and emergent problems of adult patients with complex illness including multifaceted assessment, health history, and diagnostic reasoning skills, and emphasis on social, cultural, and developmental influences. Integration of knowledge of pathophysiology, diagnostics, pharmacology, therapeutic interventions, patient safety, evidence-based practice, and communication concepts as applied to care of medical-surgical patients. Students experience a supervised practicum experience within settings of multidisciplinary teams directing care of medical-surgical clinical units, with focus on clinical interpretation of assessment and diagnostic data for purpose of planning, implementing, and evaluating course of care for patients, both as individuals and cohorts. Letter grading.


467. Clinical Internship Integration. (12) Clinical, 36 hours. Requisites: courses 268, 461, 462, 466, 463, 466A, 466B, 466C. Supervised practicum experience within clinical setting as part of interdisciplinary health care team, with focus on application of theory in clinical setting and interpretation of assessment and diagnostic data for purpose of planning and implementing, and evaluating course of care for patients, both as individuals and cohorts. Students design and complete quality improvement project that contributes to unit’s goals and objectives. Students implement advanced-level assessment, health status management and care of patients across the lifespan. S/U and letter grading.

470A. DNP Scholarly Project Course I: Project Conceptualization and Planning. (2) Lecture, two hours; clinical, four hours. Requisites: courses 401, 402, 403, 404, 405, 408. Preparation: successful completion of first year of DNP didactic coursework. DNP students gain knowledge, skills, and abilities necessary to develop evidence-based project proposal and project. Students also address how DNP project fits into students’ professional goals and the nurse’s micro-system. Provides structured didactic content and application of student’s DNP scholarly project. Letter grading.

470B. DNP Scholarly Project Course II: Project Implementation. (8) Lecture, two hours; clinical, six hours. Requisite: course 470A. DNP students develop full DNP scholarly project proposal that reflects synthesis of student’s knowledge from prior coursework and work in area of interest or expertise under direction of
470C. DNP Scholarly Project Course III: Project Implementation. (8) Lecture, two hours; clinical, six hours. Requisite: course 470B. Continued development of knowledge, skills, and abilities to implement chosen DNP scholarly project proposal. Students assume role of leadership in interprofessional collaboration, consultation, and partnership. Students receive direction from faculty committee chair and peer feedback as they become engaged in microsystem where they implement their DNP scholarly project. Provides structured didactic content and application of student’s DNP scholarly project. Letter grading.

470D. DNP Scholarly Project Course IV: Project Evaluation. (8) Lecture, two hours; clinical, six hours. Requisite: course 470C. Students complete evidence-based DNP scholarly project. Students complete implementation phase, evaluate project, and write final DNP scholarly project manuscript. Students receive individual direction from faculty committee chair and peer feedback as final DNP scholarly project paper is written. Students are also mentored in making professional presentations and writing for publication. Letter grading.

495. Nursing Education Practicum. (2) Seminar, six hours. Supervised student teaching internship in preparation for academic roles. In-depth opportunity to gain skills in role of nurse educator within university setting, including application of instructional strategies and evaluation methods. S/U grading.

496A–496B–496C. Education Practicum in Nursing Practice I, II, III. (1–1–1 Activity, one hour; discussion, one hour. Corequisites for course 496A: courses 401, 402; course 496A is requisite to course 496C. Focuses on development and implementation of patient education program. Prepares DNP students for teaching roles in variety of different health care settings. Emphasis on application of educational program structure, content, appropriate curriculum development, methods of teaching and evaluation that can be applied in variety of settings in which DNP-prepared nurses teach. In progress (courses 496A, 496B) and letter (496C) grading.

596. Directed Individual Study or Research. (2 to 12) Tutorial, to be arranged. Opportunity for individual graduate nursing students to pursue special studies or research interests. May be repeated for credit, but only 4 units may be applied toward graduate degree requirements. S/U grading.

597. Individual Study for Comprehensive Examinations. (2 to 4) Tutorial, to be arranged. Opportunity for individual graduate nursing students to prepare for comprehensive examination. May be repeated once for credit, but only 4 units may be applied toward MSN degree requirements. S/U grading.

599. Research for and Preparation of PhD Dissertation. (2 to 12) Tutorial, to be arranged. Individualized faculty supervision of PhD dissertation research by student’s chair. May be repeated for credit, but only 8 units may be applied toward PhD degree requirements. S/U grading.

Obstetrics and Gynecology

Deborah Krakow, MD, Chair
Beth Y. Karlan, MD, Vice Chair, Women’s Health Research
Otoniel M. Martinez, PhD, Vice Chair, Academic Affairs
Lauren Nathan, MD, Vice Chair, Education
Jeaninne Rahimian, MD, Vice Chair, Clinical Affairs
Christine H. Holschneider, MD, Vice Chair, Olive View-UCLA
Sarah J. Kilpatrick, MD, PhD, Vice Chair, Cedars-Sinai
Erin N. Saleeby, MD, MPH, Vice Chair, Harbor-UCLA

Scope and Objectives

The medical student program in the Department of Obstetrics and Gynecology is designed to provide students with firm background in the essentials of women’s health. The educational objectives are set forth by the Association of Professors of Gynecology and Obstetrics (APGO). Through a combination of didactic instruction and supervised clinical experience, students acquire the relevant clinical skills of history taking and physical examination and learn reproductive physiology from infancy to the post-menopausal period; antepartum, intrapartum, and postpartum obstetric care; and recognition and management of various gynecologic disorders. Third-year students work in ambulatory clinics and on inpatient services during a six-week core clerkship. Greater depth of experience is provided by elective clerkships during the fourth year that emphasize subspecialties such as maternal/fetal medicine, reproductive endocrinology and infertility, gynecologic oncology, and reproductive health.

For more details on the Department of Obstetrics and Gynecology, see the department website.

Obstetrics and Gynecology

Lower-Division Courses

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Course

199. Directed Research in Obstetrics and Gynecology. (2 to 8) Tutorial, two hours. Limited to juniors/seniors. Supervised individual research or investigation under guidance of faculty mentor. Culminating paper required. May be repeated for credit. Individual contract required. P/NP or letter grading.

Ophthalmology

David Geffen School of Medicine

2-142 Stein Eye Institute
Box 957000
Los Angeles, CA 90095-7000

Ophthalmology

310-825-5053

Bartly J. Mondino, MD (Bradley R. Stratsma, MD, Endowed Professor of Ophthalmology), Chair
Anne L. Coleman, MD, PhD (Fran and Ray Stark Foundation Professor of Ophthalmology), Vice Chair
Anthony C. Arnold, MD, Vice Chair, Education
Alfredo A. Sadun, MD, PhD, Vice Chair, Doheny Eye Centers-UCLA

Scope and Objectives

Ophthalmology is the medical science that encompasses knowledge concerning the eyes and the visual system. Derived from many basic and clinical fields, this knowledge must be synthesized by the physician and applied to the prevention, diagnosis, medical management, and surgical therapy of ocular disease.

In response to the steadily increasing incidence and growing importance of ocular disorders, the Department of Ophthalmology as well as the Stein Eye Institute and Doheny Eye Institute are closely coordinated to form a comprehensive center for research in the sciences related to vision, for the care of patients with disease of the eyes and related structures, and for education in the broad field of ophthalmology, all with community outreach.

The Department of Ophthalmology provides instruction and electives to medical students during the first, second, third, and fourth years at the Stein Eye Institute and the Doheny Eye Centers UCLA. Through lectures, demonstrations, discussions, and the opportunity to observe patients and review data on cases with a variety of ocular conditions, students gain knowledge and experience in ophthalmology.

For more details on the Department of Ophthalmology and courses offered, see the department website.

Ophthalmology

Lower-Division Courses

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.
ORAL BIOLOGY
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Oral Biology
E-mail contact
Cun-Yu Wang, DDS, PhD, Chair
Fariba S. Younai, DDS, MS, PhD, Vice Chair

Professors
Shen Hu, PhD, MBA
Ahadieh Jomeh, MPH, PhD
Mo K. Kang, DDS, MS, PhD (Jack A. Weichman Professor of Endodontics)
Renate Lux, PhD
Diana V. Messadi, DDS, MMSc, DMSc
Renate Lux, PhD
Sockorios Tenta, DDS, PhD
Mo K. Kang, DDS, MS, PhD (Dr. No-Hee Park Professor of Dentistry)

Associate Professors
Reuben Kim, DDS, PhD
Yong Kim, PhD, in Residence

Assistant Professors
Jimmy K. Hu, PhD
Ali Reza Mohssen-Aria, DDS, MS, PhD, FACP

Adjunct Professors
Cari A. Maida, MA, PhD
Ki-Hyuk Shin, MS, PhD

Adjunct Assistant Professor
Fang Wei, PhD

Professor of Clinical Dentistry
Fariba S. Younai, DDS

Scope and Objectives
Oral biology is the area of knowledge that deals with the development, structure, and function of the oral tissues and their interrelationships with other organ systems in normal and disease states. It is a multidisciplinary field that includes cell biology, bone biology, molecular biology, biochemistry, neuroscience, immunology, microbiology, and virology. The objective of the graduate program is to provide students with a sound foundation in these areas in order to pursue an academic or research career.

Graduate Study
Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Division website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Graduate Degrees
The Scope of Oral Biology in the School of Dentistry offers Master of Science (MS) and Doctor of Philosophy (PhD) degrees in Oral Biology. A combined DDS/Oral Biology MS or PhD or advanced certificate training/Oral Biology MS or PhD is also offered.

Oral Biology
Lower-Division Courses
19. Fiat Lux Freshman Seminars, (1 Seminar: one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

98. Student Research Program, (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Graduate Courses

201A. Ontogeny. (3 Lecture, three hours. Evolutionary perspective of cellular development from simple molecules that were formed during first billion years of Earth to development of cells, tissues, and organs of invertebrates and vertebrates. Development of vertebrate feeding apparatus from comparative anatomical and physiological point of view, followed by embryogenesis of orofacial and dental structures of humans. S/U or letter grading.

201C. Pathobiology. (3 Lecture, three hours. Molecular basis for pathogenic processes in tissues of oral cavity. Topics include microbially mediated demineralization of hard tissues, soft tissue infections, carcinogenesis, colonization of mucosal substrates by opportunists, etc. S/U or letter grading.


205A. Methodology in Research Design and Data Analysis. (2) Lecture, two hours. Designed for graduate oral biology students. Integration of didactic lectures in descriptive and inferential statistics and in research design (emphasis on experimental design), presentations of statistical software, and open discussion of specific needs of oral biology students when they design their research. Letter grading.


206C. Advanced Seminar: Comparative Effectiveness and Evidence-Based Research. (2 Seminar, one hour; discussion, one hour. Requisites: courses 205A, 205B (may be taken concurrently). Hands-on experience in process of systematic review, as shared mechanism in comparative effectiveness and evidence-based research. Specialized topics include level and quality of evidence assessments, acceptable sampling analysis, meta-analysis and meta-regression, and Bayesian-derived decision making following utility versus logic model. Students work on examples of their choice and interest in oral biology, medicine, and orthodontics. Letter grading.

206. Current Topics in Oral Immunology, (2) Lecture, two hours. Preparation: basic immunology. Discussion and analysis of current research dealing with immunological issues related to oral health, including HIV, opportunistic oral infections, periodontal pathology, oral immunopathology, caries immunology, endodontic immunology, etc. Letter grading.

208. Genomics and Proteomics in Oral Biology Research. (2) Lecture, one hour; discussion, one hour. Introduction to fundamentals and technical aspects of genomics and proteomics and analysis of data derived therefrom. Discussion of implications and applications of genomics and proteomics in diagnostic protocols such as salivary diagnostics. Letter grading.

209. Scientific Ethics. (2) Seminar, two hours. Required course in scientific ethics for graduate students in Oral Biology MS and PhD programs and for NRSA trainees in School of Dentistry. Letter grading.

211. Biology of Temporomandibular Joint. (2) Lecture, two hours. Anatomy, histology, physiology, and biomechanics of temporomandibular joint (TMJ) and related musculature. Pain mechanisms, sensorimotor integration, and motor mechanisms in TMJ function, and current methods of TMJ imaging. S/U or letter grading.

212. Proseminar: Oral Biology Research. (2 Seminar, one hour; discussion, one hour. Introductory course for graduate MS students. Guest seminars on topics of research in oral biology (pain pathways, immunology, bone biology, microbiology, cancer, and salivary genomics), followed by discussions led by course chair. Letter grading.

214. Current Research in Osteoimmunology. (2 Seminar, one hour; discussion, one hour. Exploration of oral bone biology and immunology and how both systems talk to each other. Topics include immune modulation of bone metabolism, osteoblastic niche for hematopoietic progenitors, adult bone marrow stem cell changes, and osteoimmunology in at-risk populations. Letter grading.

215A. Fundamentals of Immunology. (2) Lecture, two hours. Basic cellular and molecular mechanisms involved in responses mediated by immune effectors, with emphasis on immunopathology involved in autoimmunity, cancer, and immunodeficiency syndromes. Letter grading.

215B. Current Advanced Research Topics in Immunology. (2) Seminar, one hour; discussion, one hour. Overview of rapidly changing discoveries in very important field of immunology. Directed and student-led discussions of current cutting-edge research developments in immunology. Letter grading.

220. Integrative Biology and Biomaterials Science in Relation to Dentistry. (2) Lecture, one hour; laboratory, 90 minutes. Introduction to integrative biology and biomaterials science by bringing together diversity of disciplines that complement one another to unravel complexity of biology in biomaterials in relation to dentistry. Integration of bioengineering, materials sciences, cell biology, and dentistry. Fundamentals of materials science in relation to dentistry, stem cell biology, and knowledge necessary to participate in dental and biomedical research, innovation, and product development. Letter grading.

221. Advanced Dental Materials. (2) Lecture, one hour; laboratory, 90 minutes. Preparation of individuals for academic and research careers in dental ma...
ORTHOPAEDIC SURGERY

Scope and Objectives

The medical student program in the Department of Orthopaedic Surgery is designed to provide students with experience in understanding the diagnosis and management of disorders of the musculoskeletal system. Through a combination of didactic instruction and supervised clinical experience, students acquire the clinical skills of history taking and physical examination of the musculoskeletal system. Diagnosis and orthopaedic management of bone and soft tissue trauma, skeletal development defects, tumor, spinal disorders, hand and foot disorders, and arthritis are primary objectives. Third-year students work in ambulatory clinics and on inpatient services during their core surgical clerkship. Fourth-year electives provide the opportunity for in-depth experience on rotations at the Reagan UCLA Medical Center and affiliated institutions and emphasize subspecialties such as joint replacement, sports medicine, orthopaedic oncology, metabolic bone disorders, hand and foot surgery, spinal surgery, and pediatric orthopaedics.

For more details on the Department of Orthopaedic Surgery and courses offered, contact the Education Office at 310-825-6557 or see the department website.
Pathology and Laboratory Medicine

Lower-Division Courses

19. Fiat Lux Freshman Seminars. (1 Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Courses

110. Introduction to Cytogenetics. (4) Lecture, one hour; discussion, two hours. Limited to upper-division biology students. Cytogenetics is branch of genetics concerned with study of structure and function of cells, especially chromosomes. Coverage of broad range of topics on both clinical aspects and research in cytogenetics. Studies provide important paradigms to understand structure of chromosomes, mechanisms of chromosome segregation, diseases, and problems created for numerical and structural abnormalities of human chromosomes as well as study of new techniques in molecular cytogenetics, including fluorescence in situ hybridization (FISH), comparative genomic hybridization (CGH), and array CGH to diagnose constitutional syndromes and cancer. Journal club sessions include discussion of two journal articles per meeting (one clinical and one basic/translational). Presentation of at least one journal article and leading of one group discussion required. Letter grading.

188SA. Individual Studies for USIE Facilitators. (1) Tutorial, to be arranged. Enforced corequisite: Honors Collegium 101E. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to discuss selected USIE seminar topic, conduct preparatory research, and begin preparation of syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.


188SC. Individual Studies for USIE Facilitators. (2) Tutorial, to be arranged. Enforced requisite: course 188SB. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor while facilitating USIE 88S course. Individual contract with faculty mentor required. May not be repeated. Letter grading.

199. Directed Research in Pathology. (2 to 4) Tutorial, 10 hours. Limited to juniors/seniors. Supervised individual research or investigation under guidance of faculty mentor. Culminating a paper or project required. May be repeated. Individual contract required. P/NP or letter grading.

Graduate Courses


222. Hematopoiesis: Basic Biology and Clinical Implications. (4) Lecture, three hours; discussion, one hour. Seminar under the consideration of case by case basis. In-depth study of concepts and paradigms in hematopoietic development. Mammalian hematopoiesis and normal development, with focus on molecular regulation of cellular development and equal emphasis on current and experimental aspects of knowledge in field. Discussion of important pathological states within hematopoietic system, as well as established and novel avenues for therapy. Topics include hematopoietic stem cells and niche, transcriptional and epigenetic regulation of hematopoiesis, B- and T-lymphocyte development, myeloid, erythroid, and platelet lineages, immune responses, myeloid and lymphoid neoplasias, and bone marrow transplantation/therapy. S/U or letter grading.

M229. Molecular Mechanisms of Host/Pathogen Interaction. (4) (Same as Medicine M229.) Lecture, two hours; discussion, two hours. Enforced requisites: Molecular Biology 254A and 254D. Molecular mechanisms of microbial interactions with eukaryotic host cells that enable pathogen survival. Topics include pathogenesis of common viruses, bacteria, fungi, and parasites, basis of toxin-mediated cellular damage, and immune suppression of microbial tissue damage. Letter grading.

M237. Cellular and Molecular Basis of Disease. (4) (Same as Biological Chemistry M237.) Lecture, two hours; laboratory, two hours, Preparation: one course each in molecular biology, cell biology, and biological chemistry. Discussion of disease mechanisms, with emphasis on experiments leading to understanding of these mechanisms. Identification of important questions still remaining unanswered. Letter grading.

238. Histology and Pathology for Graduate Students. (2) Laboratory, two hours. Designed for UCLA ACCESS or Cellular and Molecular Pathology PhD students. Basic knowledge of normal tissue, pathologic processes, and animal models as observed by light microscopy. Letter grading.

240. Transplantation Immunology from Benchside to Bedside. (4) Lecture, three hours; laboratory, one hour. Preparation: knowledge of basic immunology. Limited to graduate students. New developments in organ transplantation, updates on basic science of immune mechanisms, integration of basic science principles with clinical practice. Letter grading.

M255. Mapping and Mining Human Genome. (3) (Same as Human Genetics M255.) Lecture, three hours. Basic molecular genetic and cytogenetic techniques of gene mapping. Selected regions of human genome, notably, chromosomal regions, particularly gene families and clusters of genes that have remained linked from mouse to human. Discussion of localizations of disease genes. S/U or letter grading.

256. Seminar: Viral Oncology. (2) Seminar, two hours. Advanced research seminar designed to consider current developments in field. Selection of current subjects and publications dealing with tumor viruses, oncogenes, oncogene interference, and control of viral replication. S/U or letter grading.

M257. Introduction to Toxicology. (4) (Same as Pharmacology M257.) Requisite: Pharmacology M241. Biochemical and systemic toxicology, basic mechanisms of toxication: interaction of toxic agents with specific organ systems.

M258. Pathologic Changes in Toxicology. (4) (Same as Pharmacology M258.) Designed to give students experience in learning normal histology of tissues which are major targets of toxins and the range of pathologic changes that occur in these tissues (liver, bladder, lung, kidney, nervous system, and vascular system).

260. Immunopathology. (4) Lecture, two hours; discussion, one hour; laboratory, one hour. Requisite: Microbiology 261. Advanced information for graduate advanced undergraduate students regarding immune system anatomy, lymphocytic development, acute and chronic inflammation, hypersensitivity, and autoimmunity. Letter grading.

262. Cytogenetics and Genomics. (3) Lecture, three hours. Comprehensive guide so students gain sufficient knowledge in conventional and state-of-art cytogenetic and genomic principles and techniques and theoretical and clinical relevance of human genome. Focus on relationship between various chromosomal and genomic abnormalities in humans as identified by basic and advanced technologies such as fluorescence in situ hybridization (FISH), chromosomal microarray analysis (CMA), and next-generation sequencing (NGS). All aspects of molecular cytogenetics and cytogenomics through didactic teaching sessions, journal clubs, and interactive discussions. S/U or letter grading.

270. Basic and Clinical Aspects of Developmental Hematology. (4) Lecture, two hours. Graduate and postgraduate-level course that covers broad range of topics in both basic and clinical aspects of developmental hematology. Pediatric hematologic disorders provide important paradigm to study other developmental systems. Subjects include hematopoiesis, bone marrow cell biology, alternative models to study developmental hematology (zebrafish and Drosophila), basic physiology of normal and abnormal red cells, platelets, and white cells, leukemogenesis and novel therapeutics to treat leukemia, basic and clinical stem cell transplantation, state-of-the-art methods in developmental hematology (genomics, proteomics, and gene therapy, design of clinical trials and biomarkers for treatment outcomes). Letter grading.

280. Clinical Aspects and Molecular Biology of Bone Marrow Failure Syndromes. (4) Lecture, two hours. Limited to graduate students. Coverage of broad range of topics on both clinical aspects and molecular pathogenesis of bone marrow failure syndromes. Studies provide important paradigms to understand fundamental mechanisms of human disease in addition to normal and abnormal blood cell development. Topics include basic biology and clinical features of aplastic anemia, myelodysplastic syndromes, Diamond Blackfan Anemia, Schwachman Diamond Syndrome, Fanconi Anemia, Dyskeratosis Congenita, Paroximal Nocturnal Hemoglobinuria, flow cytometry, and research approaches to study bone marrow failure syndromes. Journal club sessions include discussion of two journal articles per meeting—one clinical and one basic/translational. Students must present at least one journal article and lead group discussion. S/U or letter grading.


296. Research Topics in Pathology. (1 to 2) Requisite: departmental graduate students. Advanced study and analysis of current topics in pathology. Discussion of current research and literature in research specialty of faculty member teaching course. May be repeated for credit. Letter grading.
PEDIATRICS

David Geffen School of Medicine
22-412A Marion Davies Children’s Center
Box 957172
Los Angeles, CA 90095-1752

Pediatrics
310-825-5095
Sherin U. Devaskar, MD, (Mattel Executive Endowed Professor of Pediatrics), Executive Chair
Peter G. Sziglavy, MD, MPH, Executive Vice Chair and Vice Chair, Research
Paul A. Kroglstad, MD, PhD, Executive Vice Chair, Academic Affairs
Carlos F. Lerner, MD, Vice Chair, Clinical Affairs and Advocacy
Kathy L. Perkins, MD, Vice Chair, Education
Richard Findlay, MD, Vice Chair, Drew University
Adam J. Jonas, MD, Vice Chair, Harbor-UCLA Charles F. Simmons, Jr., MD, Vice Chair, Cedars-Sinai
Shannon Thyne, MD, Vice Chair, Olive View-UCLA
Christopher T. Denny, MD, Associate Vice Chair, Academic Affairs
Deborah Lehman, MD, Associate Vice Chair, Education
Andranik Madikians, MD, Associate Vice Chair, Clinical Affairs
Martin G. Martin, MD, MPH, Associate Vice Chair, Translational Research
Theodore B. Moore, MD, Associate Vice Chair, Subspecialties
Anna-Barbara Moscicki, MD, Associate Vice Chair, Translational Research

Scope and Objectives
The Department of Pediatrics has faculty members at seven teaching hospitals: Cedars-Sinai, Harbor-UCLA, Kaiser Permanente Los Angeles, and Olive View-UCLA medical centers; UCLA Mattel Children’s Hospital; UCLA Medical Center, Santa Monica; and Venice Family Clinic. For second-year medical students, the fundamentals of pediatric history and physical examination are taught at all sites as part of the pediatric clinical skills course.

For third-year medical students, the required six-week clinical clerkship in pediatrics is offered at the following five sites: Cedars-Sina, Harbor-UCLA, and Kaiser Permanente Los Angeles medical centers; UCLA Mattel Children’s Hospital/Olive View-UCLA Medical Center; and UCLA Medical Center, Santa Monica. For fourth-year medical students, in-depth subspecialty electives offered by the Department of Pediatrics are listed in the School of Medicine Handbook of Clinical Courses, as are advanced clinical clerkships.

For more details on the Department of Pediatrics and courses offered, see the department website.

Pediatrics

Lower-Division Courses

10. Flat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Courses

188SA. Individual Studies for USIE Facilitators. (1) Tutorial, to be arranged. Enforced corequisite: Honors Colloquium 101E. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to discuss selected USIE seminar topic, conduct preparatory research, and begin preparation of syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.

188SB. Individual Studies for USIE Facilitators. (1) Tutorial, to be arranged. Enforced requisite: course 188SA. Enforced corequisite: Honors Colloquium 101E. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to finalize course syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.

188SC. Individual Studies for USIE Facilitators. (2) Tutorial, to be arranged. Enforced requisite: course 188SB. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor while facilitating USIE 88S course. Individual contract with faculty mentor required. May not be repeated. Letter grading.

199. Directed Research in Pediatrics. (2 to 8) Tutorial, two hours. Limited to juniors/seniors. Supervised individual research or investigation under guidance of faculty mentor. Culumnating paper required. May be repeated for credit. Individual contract required. P/NP or letter grading.

Graduate Course

M215. Interdepartmental Course: Tropical Medicine. (2) Same as Medicine M215 and Pathology M215.) Lecture, two and one half hours. Preparation; basic courses in microbiology and parasitology of infectious diseases in School of Medicine or Public Health. Study of current knowledge about diseases prevalent in tropical areas of world. Major emphasis on infectious diseases, with coverage of problems in nutrition and exotic noninfectious diseases. Syllabus supplements topics covered in classroom. S/U grading.

PHARMACOLOGY
See Molecular and Medical Pharmacology

PHILOSOPHY

College of Letters and Science
321 Dodd Hall
Box 951451
Los Angeles, CA 90095-1451

Philosophy
310-825-4641
Department e-mail
Gavin Lawrence, DPhil, Chair

Professors
David L. Blank, PhD
Tyler Burge, PhD (Mr. and Mrs. C. N. Flint Professor of Philosophy)
John P. Carriero, PhD
Mark D. Greenberg, JD, DPhil
Barbara Herman, MA, PhD (Gloria and Paul Griffin Professor of Philosophy)
Pamela Hieronymi, PhD
David B. Kaplan, PhD (Hans Reichenbach Professor of Scientific Philosophy)
Gavin Lawrence, DPhil
Calvin G. Normore, PhD (Brian P. Copenhaver Professor)
Michael A. Rescorla, PhD
Sheryllyn Rouss, PhD
Seana Shaffer, JD, DPhil, (Pete Kameron Professor of Law and Social Justice)
Sheldon R. Smith, PhD

Professors Emeriti
Robert Merriew Adams, PhD
Joseph Almog, DPhil
Brian P. Copenhaver, PhD (Steven F. and Christine L. Udvar-Hazy Professor Emeritus)
Donald A. Martin, BS
Herbert Morris, LLB, DPhil
Terence D. Parsons, PhD

Associate Professors
Samuel J. Cumming, PhD
Alexander J. Julius, PhD
Sean Walsh, PhD

Assistant Professors
Joshua D. Armstrong, PhD
Adam D. Crager, PhD
Daniela J. Dover, PhD
Katrina J. Elliott, PhD
Gabriel J. Greenberg, PhD

Lecturers
Andrew Hsu, PhD
Steven R. Levy, PhD

Scope and Objectives
Philosophy is concerned with the big questions that face us all as conscious, reflective beings. Questions such as how should we live our lives, and what is the nature of the world we live in. It overlaps with other fields—the sciences, as well as law, politics, and the arts—but is versatile enough to question the foundations of those fields, and indeed the methodol-
ogy of philosophy itself is a species of philosophical inquiry.

The benefits of an undergraduate education in philosophy are those Francis Bacon attributed to reading, conversation, and writing: reading gives us material for our own thought; conversation, facility at sharing and debating ideas; and writing, the ability to fix ideas with precision. A typical philosophy course involves reading: from the center and margins of the major world traditions, to modern thinkers framing today’s urgent issues. It also involves conversation, as philosophers like to test ideas out in company and learn from those who see things differently to them. The final test of a philosophical theory or argument is to submit it to the rigor of writing. Philosophical writing, in the ideal, is clear, exact, and free of the rhetoric that may be able to temporarily sway an opponent in the heat of conversation.

The aim of the graduate program is to produce philosophers of high quality. A graduate degree in philosophy is the usual path to becoming a professional academic philosopher, but the skills attained in the study and practice of philosophy are highly transferable and sought after by enlightened employers across the globe. The focus of the department’s graduate training is original philosophical research, and the PhD program culminates in the production of a long written document (the dissertation). Students in the graduate program also receive training and practice in teaching philosophy at various levels, and to audiences from diverse backgrounds.

The department offers programs leading to the BA and PhD degrees.

Undergraduate Study

Philosophy BA

Learning Outcomes

The Philosophy major has the following learning outcomes:

- Demonstrated solid foundation in logic, the history of philosophy (ancient, medieval, and modern), ethics and value theory, and metaphysics and epistemology
- Critical analysis and evaluation of arguments in historical texts and the contemporary philosophical literature
- Demonstrated ability to formulate and clearly present valid and sound arguments
- Development of oral and written skills that display skill at argument and the ability to engage honestly with difficult and controversial topics

Preparation for the Major

Required: Four lower-division courses, including Philosophy 7 or 21, 22, 31, and one other lower-division philosophy course.

Transfer Students

Transfer applicants to the Philosophy major with 90 or more units must complete as many of the following introductory courses as possible prior to admission to UCLA: one philosophy of mind or skepticism and rationality course, one ethical theory course, one symbolic logic course, and one additional philosophy course.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

The Major

Required: Thirteen upper-division (100 series) or graduate (200 series) philosophy courses (52 units), including Philosophy 100A, 100B, 100C. Seven of the 13 courses must be distributed among the groups into which the undergraduate and graduate courses are divided—history of philosophy; logic, semantics and philosophy of science; ethics and value theory; and metaphysics and epistemology. Students must take two courses in each of three of the groups and one course in the remaining group.

Contract courses (199) may be applied toward the major but not toward a group requirement. A maximum of 8 units of course 199 may be applied toward the major but not toward a group requirement. Courses 100A, 100B, 100C may not be applied toward any group requirement. No course used to satisfy the major or preparation requirements may be taken on a P/NP basis.

Students intending to do graduate work in philosophy should consult with both the graduate and undergraduate advisers.

Honors Program

Admission

To be admitted to the honors program, students must have taken at least three upper-division philosophy lecture or seminar courses at UCLA with an overall grade-point average of 3.7.

Requirements

To be awarded honors in philosophy at graduation, Philosophy majors must (1) have a 3.7 grade-point average in UCLA philosophy courses and a 3.7 GPA in upper-division UCLA philosophy courses; (2) satisfy the honors directed study requirement by taking Philosophy 198A and 198B in conjunction (usually, but not necessarily concurrently) with two different regular upper-division philosophy courses supervised by the instructors of those courses; and (3) receive a grade of A– or better in each course applied toward satisfaction of the honors requirement.

Students may substitute Philosophy 191 for either course 198A or 198B or, alternatively, may complete up to two philosophy graduate seminars in lieu of courses 198A and/or 198B. For an undergraduate or graduate seminar to be applied toward the honors directed study requirement, the consent of both the seminar instructor and the faculty honors adviser is required in advance. Students may also substitute up to one 4-unit Philosophy 199 course in which they produce a substantial paper that represents an original piece of research or its equivalent.

Exceptional work done to satisfy the honors requirement may be submitted to the department chair for consideration for highest honors.

Philosophy Minor

To enter the Philosophy minor, students must have an overall grade-point average of 2.0 or better.

Required Lower-Division Courses (8 units): Philosophy 7 or 21, and 22 or 31.

Required Upper-Division Courses (24 units): Five courses, including at least one from each of three of the four groups into which the undergraduate and graduate courses are divided (Philosophy 100A, 100B, 100C apply toward Group I); one additional upper- or lower-division philosophy course.

A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor.

Each minor course must be taken for a letter grade, and students must have an overall grade-point average of 2.0 or better in the minor. Successful completion of the minor is indicated on the transcript and diploma.

Graduate Study

Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Division website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Graduate Degrees

The Department of Philosophy offers Master of Arts (MA), Candidate in Philosophy (CPhil), and Doctor of Philosophy (PhD) degrees in philosophy. A concurrent degree program (Philosophy PhD/Law JD) is also offered.

Philosophy

Lower-Division Courses

1. Beginnings of Western Philosophy. (8) Lecture, three hours; discussion, one hour. Origins of Greek cosmology and philosophy, beginnings of systematic thought and scientific investigation concerning such questions as origin and nature of the material world, concept of laws of nature, possibility and extent of knowledge. Concentration on pre-Socratic philosophers, particularly Anaximander, Heraclitus, the Pythagoreans, Parmenides, Empedocles, and Greek atomists, during first two thirds of course and on Socrates and some earlier works of Plato in last few weeks. P/NP or letter grading.

2. Introduction to Philosophy of Religion. (5) Lecture, four hours; discussion, one hour. Introductory study of such topics as nature and grounds of religious belief, relation between religion and ethics, nature and existence of God, problem of evil, and what can be learned from religious experience. P/NP or letter grading.

3. Historical Introduction to Philosophy. (5) Lecture, three hours; discussion, two hours. Historical introduction to Western philosophy based on classical texts dealing with major problems, related thematically and studied in chronological order: properties of rational argument, existence of God, problem of knowledge, nature of causality, relation between mind and body, possibility of justice, and others. P/NP or letter grading.
4. Philosophical Analysis of Contemporary Moral Issues. (5) Lecture, three hours; discussion, one hour. Critical study of principles and arguments advanced in discussion of current moral issues. Possible topics include revolutionary violence, rules of warfare, sexual morality, right of privacy, punishment, nuclear warfare and deterrence, abortion and mercy killing, experimentation with human subjects, rights of women. P/ NP or letter grading.

5. Philosophy in Literature. (5) Lecture, three hours; discussion, one hour. Study of some classical or contemporary works in political philosophy. Questions that may be discussed include: What do philosophers mean by justice? Why obey the law? Which form of government is best? How much personal freedom should be allowed in society? P/ NP or letter grading.

6. Introduction to Political Philosophy. (5) Lecture, three hours; discussion, one hour. Study of some classical or contemporary works in political philosophy. Examples of specific topics that may be discussed include: Natural law, theories of government, theories of democracy, theories of political obligation, egoism, utilitarianism, justice, responsibility, and free will, nature of psychological knowledge. P/ NP or letter grading.

7. Introduction to Philosophy of Mind. (5) Lecture, three hours; discussion, one hour. Introductory study of philosophical issues about nature of the mind and its relation to the body, including materialism, functionalism, behaviorism, determinism and free will, nature of psychological knowledge. P/ NP or letter grading.

8. Introduction to Philosophy of Science. (5) Lecture, three hours; discussion, one hour. Study of selected problems concerning the character and reliability of scientific understanding, such as nature of scientific theory and explanation, reality of theoretical entities, inductive confirmation of hypotheses, and occurrence of scientific revolutions. Discussion at non-technical level of episodes from history of science. P/ NP or letter grading.

9. Principles of Critical Reasoning. (5) Lecture, four hours; discussion, one hour. Nature of arguments: how topics of philosophical theories determine the kinds of arguments they represent. Common fallacies that often occur in arguments discussed in light of what counts as good deductive or inductive inference. Other topics include use of language in argumentation to arouse emotions as contrasted with conveying thoughts, logic of scientific experiments and hypothesis-testing in general, and some general ideas about probability and its use in making normative decisions (e.g., betting). P/ NP or letter grading.

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members with expertise in examining many paths of discovery at UCLA. P/ NP or letter grading.

21. Skepticism and Rationality. (5) Lecture, four hours; discussion, one hour. Can we know anything with certainty? How can we justify any of our beliefs? Introduction to some of the major and related issues through works of some great philosophers of modern period, such as Descartes, Hume, Leibniz, or Berkeley. P/ NP or letter grading.

22. Introduction to Ethical Theory. (5) Lecture, three hours; discussion, one hour. Not open for credit to students with credit for course 22W. Recommended or required for many upper-division courses in Group III. Systems of ethical theory, including discussion of egoism, utilitarianism, justice, responsibility, meaning of ethical terms, relativism, etc. P/ NP or letter grading.

22W. Introduction to Ethical Theory. (5) Lecture, three hours; discussion, one hour. Enforced requisite: English Composition 3 or 3H or English as a Second Language 36. Limited to freshmen/sophomores. Not open for credit to students with credit for course 22W. Introduction to ethical theories in Western thought. Examination of works of Plato, Aristotle, Hume, Kant, and Mill. Topics include ideas of virtue, obligation, egoism, relativism, and foundations of morality. P/ NP or letter grading.

23. Meaning and Communication. (5) Lecture, three hours; discussion, one hour. Theory of meaning and its relationship to philosophy more generally; nature, origins, and acquisition of language. Additional topics may include nonlinguistic and nonhuman systems of communication; theories of interpretation in law, literature, and art; use of theoretical terms in science. P/ NP or letter grading.

M24. Language and Identity. (5) Same as Linguistics M7. Lecture, four hours; discussion, one hour (when scheduled). How do we use language to project our own identity? How do we use it to perceive or shape identity of others? Introduction to speech act theories of language that such acts can account for systematic subordination of women; maligning of racial minorities; and, in some cases, incite- ness of violence through hate speech. Provokes foundation for students of linguistic theory, philosophy, sociology, anthropology, and communication studies. P/ NP or letter grading.

31. Logic, First Course. (5) Lecture, four hours; discussion, one hour. Recommended for students who plan to pursue more advanced studies in logic. Elements of symbolic logic, sentential and quantifica- tional; forms of reasoning and structure of language. P/ NP or letter grading.

89. Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to lower-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible stu- dents. Honors content noted on transcript. P/ NP or letter grading.

100. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. De- signed as adjunct to lower-division lecture course. Indi- vidual study with lecture course instructor to explore topics in greater depth through supplemental read- ings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract re- quired. Honors content noted on transcript. Letter grading.

97. Freshman Seminar. (4) Variable topics; consult Schedule of Classes or “Department Announcements” for topics to be offered in a specific term. May be re- peated for credit with consent of instructor.

99. Student Research Program. (1 to 2) Tutorial (su- pervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-divi- sion students under guidance of faculty mentor. Stu- dents must be in good academic standing and en- rolled in an introductory level course. Individual contract required; consult Undergraduate Research Center. May be repeated. P/ NP grading.

Upper-division Courses

100A. History of Greek Philosophy. (4) Lecture, three hours; discussion, one hour. Preparation: one philosophy course. Survey of origins of Greek meta- physics from pre-Socratics through Plato and Aristot- le, P/ NP or letter grading.

100B. Medieval and Early Modern Philosophy. (4) Lecture, three hours; discussion, one hour. Prepara- tion: one philosophy course. Strongly recommended requisite: course 100A. Survey of development and transformation of Greek metaphysics and episte- mology within the history of early and medieval Christian philosophy and transition from medieval to early modern period. Spec- ial emphasis on Augustine, Anselm, Aquinas, and Descartes. P/ NP or letter grading.

100C. History of Modern Philosophy, 1650 to 1800. (4) Lecture, three hours; discussion, one hour. Prepara- tion: one philosophy course. Strongly recommended requisite: course 100B. Courses 100A, 100B, and 100C should be taken in immediately successive terms if permissible. Study of central topics of meta- physics and theory of knowledge from 1650 to 1800, including Locke and/or Berkeley, Malebranche and/or Leibniz, and culminating in Hume and Kant. Topics may include: conceptualization of human knowledge; central issues in metaphysics and epistemology; and transition from early modern to modern philosophy. May be concurrently scheduled with course C208. P/ NP or letter grading.

100D. History of Modern Philosophy, 1800 to 2000. (4) Lecture, three hours; discussion, one hour. Preparation: one philosophy course. Strongly recommended requisite: course 100B. Courses 100A, 100B, and 100C should be taken in immediately successive terms if permissible. Study of the interrelation of idealism and empiricism; 20th-century philosophical theories of mind and body; interaction of science and technology; and central issues in political philosophy. May be concurrently scheduled with course C209. P/ NP or letter grading.

110. Hobbes. (4) Lecture, three hours; discussion, one hour. Preparation: one philosophy course. Hobbes' political philosophy, with special emphasis on Leviathan, with attention to its relevance to contemporary political philosophy. May be concurrently scheduled with course C208. P/ NP or letter grading.

108. Descartes. (4) Lecture, four hours; discussion, one hour. Preparation: one philosophy course. 21st-century philosophical issues. Study of works of Descartes, with discussion of issues such as problem of skepticism, foundations of knowledge, existence of God, relation between mind and body, and connection between science and metaphysics. May be concurrently scheduled with course C209. P/ NP or letter grading.

109. Spinoza. (4) Lecture, three hours; discussion, one hour. Preparation: one philosophy course. Study of philosophical thought of Baruch Spinoza. May be concurrently scheduled with course C210, in which case there is weekly discussion meeting, plus fewer readings and shorter papers for upper-level students. Limited to 30 students when concur- rently scheduled. P/ NP or letter grading.

111. Leibniz. (4) Lecture, three hours; discussion, one hour. Preparation: course 21. Study of philosophy of Leibniz. May be concurrently scheduled with course C211, in which case there is weekly discussion meeting, plus fewer readings and shorter papers for upper-level students. Limited to 30 students when concur- rently scheduled. P/ NP or letter grading.
C127B. Philosophy of Language. (4) Lecture, four hours; discussion, one hour. Required: course 31. Course C127A is not requisite to C127B. Selected topics similar to those considered in course C127A, but at a more advanced and technical level. May be repeated for credit with consent of instructor. Concurrently scheduled with course C228B. P/NP or letter grading.

C127C. Philosophy of Language. (4) Lecture, four hours; discussion, one hour. Required: course 31. Recommended: course C127A or C127B. Selected topics similar to those considered in course C127B, but with a focus on contemporary figures. May be repeated for credit with consent of instructor. Concurrently scheduled with course C228C. P/NP or letter grading.

C128. Topics in Philosophy of Mathematics. (4) Formerly numbered 128.) Lecture, four hours. Required: courses 31, 132, and preferably one additional logic course. Introduction to philosophy of mathematics. Survey of philosophy of mathematics from Kant to Hilbert. Study of content and development of three main schools of logicism, formalism, and intuitionism in their historical context. Study of original texts of philosophy such as Kant, Frege, and Russell, and how their philosophy interacted with contemporary developments in logic. May be repeated for credit with consent of instructor. May be concurrently scheduled with course C223. P/NP or letter grading.

129. Philosophy of Psychology. (4) Lecture, three to four hours; discussion, one hour (when scheduled). Preparation: one 4-unit psychology course, one philosophy course. Selected philosophical issues arising from psychological theories. Nature of perception and issues about perceptual psychology and development of important types of representation (e.g., of body, cause, agency) in early childhood. Relevance of computer simulation to accounts of language and meaning; relationship of philosophy and psychology; psychological aspects of theory of syntax. May be repeated for credit with consent of instructor. P/NP or letter grading.

130. Philosophy of Space and Time. (4) Lecture, three hours; discussion, one hour. Preparation: two philosophy courses or one philosophy course and one physics course. Selected philosophical problems concerning nature of space and time. Philosophical implications of space-time theories, such as those of Newton and Einstein. Topics may include nature of geometry, formalism, absolutist versus relativist views of space and time, philosophical impact of relativity theory.

131. Science and Metaphysics. (4) Lecture, three to four hours; discussion, one hour (when scheduled). Preparation: two philosophy courses. Recommended: one background in basic calculus and physics. Intensive study of one or two metaphysical topics on which results of modern science have been thought to bear. Topics may include nature of causation, reality and direction of time, time-travel, backwards causation, realism, determinism, absolute view of space, etc. May be repeated for credit with consent of instructor. P/NP or letter grading.


133. Topics in Logic and Semantics. (4) Lecture, four hours; discussion, one hour. Enforced requisite: course 31. Possible topics include formal theories, definitions, counter-examples, many-valued logics, deviant logics. May be repeated for credit with consent of instructor. P/NP or letter grading.

133B. Probability and Inductive Logic. (4) Lecture, three hours; discussion, one hour (when scheduled). Required: course 31, or background in logic, computer science, statistics, or mathematics. Topics may include interpretations of probability, Bayesian and non-Bayesian confirmation theory, paradoxes of content, coherence, and conditioning. May be concurrently scheduled with course 222S. P/NP or letter grading.

M134. Introduction to Set Theory. (4) (Same as Mathematics M114S.) Lecture, three hours; discussion, one hour. Required: course 135 or Mathematics 110A or 131A. Axioms of the theory, theory of mathematical concepts; relations and functions, numbers, cardinality, axiom of choice, transfinite numbers. P/NP or letter grading.

135. Introduction to Metaphil logic. (4) Lecture, four hours; discussion, one hour. Enforced requisite: course 31. Strongly recommended requisite: course 132 (or Mathematics 33A or 33B). Metaphilosophy of language, logic, first-order logic, formal languages, logic, formal deductive systems, and models. Compactness and completeness theorems that concern complexity of notion of logical consequences. P/NP or letter grading.

136. Modal Logic. (4) Lecture, four hours. Required: courses 31 (enforced). 136. Introduction to modal theory of modal logic (family of systems that includes logics of possibility and necessity, temporal logics, epistemic logics, and logics of actions/programs). Topics include invariance results, definability theory, completeness theory, game-theoretic methods, and relationship between modal logics and (classical) first- and second-order logic. P/NP or letter grading.

137. Philosophy of Biology. (4) Lecture, three to four hours; discussion, one hour (when scheduled). Preparation: one philosophy course. Intensive study of one or two current topics in philosophy of biology, which may include structure of evolutionary theory, fitness, taxonomy, reductionism, concept of biological species, and biological explanation. P/NP or letter grading.

138. Philosophy of Visual Representation. (4) Lecture, four hours. Preparation: one philosophy course (in philosophy of mind or language recommended). Investigates philosophical issues in visual representation. Possible topics include visual percepts, mental imagery, image versus language, semantics, pictorial representation, comics and film, diagrams, and data visualization. P/NP or letter grading.

Group II: Ethics and Value Theory

150. Society and Morals. (4) Lecture, three hours; discussion, one hour. Required: course 22. Critical study of ethical principles and study in discussion of current moral and social issues. Topics similar to those in course 4, but familiarity with some basic philosophical concepts and methods presupposed. May be repeated for credit with consent of instructor.

151A-C151B-151C. History of Ethics. (4–4–4) Lecture, three hours; discussion, one hour. Preparation: two philosophy courses. Each course may be taken independently for credit. P/NP or letter grading. 151A. Selected Classics in Ancient Ethical Theories: Plato, Aristotle. C151B. Modern. Intensive study of Kant's ethical theory. May be repeated for credit with consent of instructor. May be concurrently scheduled with course C245; 151C. Selected Classics of Medieval Ethics.

152A. Topics in Moral Philosophy. (4) Lecture, three to four hours; discussion, one hour (when scheduled). Study of selected topics in moral philosophy. Possible topics may include role of emotions in moral agency, reactive attitudes and other responses to moral and immoral action, moral motivation, moral relationships, moral character and identity, and moral change and moral transformation. P/NP or letter grading.

M152B. Topics in Moral Philosophy: Evil. (4) (Same as Study of Religion M173B.) Lecture, three to four hours; discussion, one hour (when scheduled). Preparation: one philosophy course. Course 152A is not requisite to M152B. Exploration of philosophical issues raised by topic of evil actions and/or evil people. Issues may include justifications of evil and theodicies, responsibility for evil and problem of free will, causes and motivations for evil action, and variant responses to evil such as forgiveness and punishment. P/NP or letter grading.
15A. Topics in Ethical Theory: Normative Ethics. (4) Lecture, three hours; discussion, one hour. Requi- site: course 22. Study of selected topics in normative ethical theory. Topics may include human rights, vir- tues and vices, principles of culpability and praise-worthiness (rightness and wrongness). May be repeated for credit with consent of instructor. P/NP or letter grading.

C153B. Topics in Ethical Theory: Metaethics. (4) Lecture, three hours; discussion, one hour. Requisite: course 22. Study and analysis of basic concepts, se- lected problems, and contemporary issues in meta- ethics. Topics may include analysis of moral language, justification of moral realism, skepticism, free will, moral motivation, etc. May be repeated for credit with consent of instructor. May be concurrently scheduled with course C253B. P/NP or letter grading.

154. Topics in Value Theory: Rationality and Action. (4) Lecture, three hours; discussion, one hour. Requi- site: course 6 or 7 or 22. Selected topics concerning normative issues in practical rationality or philosophy of action. Topics may include moral and practical di-lemmas, nature of reasons for action, rationality of morality and prudence, weakness of will, freedom of will, and decision theory. May be repeated for credit with consent of instructor. P/NP or letter grading.

C154B. Topics in Value Theory: Moral Responsibili- ty and Action. (4) Lecture, three hours; discussion, one hour. Preparation: one philosophy course. Examination of philosophical problems surrounding moral responsibility and free will, using contemporary or classical readings in at- tempt to better understand kind of freedom required for moral agents. May be repeated for credit. May be concurrently scheduled with course C244B. P/NP or letter grading.

155A. Medical Ethics. (4) (Formerly numbered 155.) Lecture, three to four hours; discussion, one hour (when scheduled). Course 155A is not requisite to 155B. Examination of philosophical issues raised by problems in medicine: physician-patient relationship, distribu- tion and allocation of scarce medical resources, human rights in medical research, and medical experimentation. May be repeated for credit with consent of instructor. P/NP or letter grading.

155B. Topics in Medical Ethics. (4) Lecture, three to four hours; discussion, one hour (when scheduled). Course 155A is not requisite to 155B. Intensive investi- gation of one or two topics or philosophical issues in medical ethics, such as abortion, euthanasia, disci- plinarian-patient relationship, distributive justice, au- tonomy and medical decision making, and research ethics. Topics announced each term. May be repeated for credit with consent of instructor. P/NP or letter grading.

C156. Topics in Political Philosophy. (4) Lecture, three hours; discussion, one hour. Analysis of some basic concepts in political philosophy. May be repeated for credit with consent of instructor. May be concurrently scheduled with course C247. P/NP or letter grading.

157A-157B. History of Political Philosophy. (4-4) Lecture, three hours; discussion, one hour. Prepara- tion: two philosophy courses. May be repeated with consent of instructor. 157A. Reading and discussion of classic works in earlier political theory, especially those by Hobbes, Locke, Hume, and Rousseau. 157B. Reading and discussion of classic works in later polit- ical theory, especially those by Kant, Hegel, and Marx.

161. Topics in Aesthetic Theory. (4) Lecture, three hours; discussion, one hour. Preparation: one philosophy course. Philosophical theories about art and its function, aesthetic experi- ence, and aesthetic values. May be repeated for credit with consent of instructor.

166. Philosophy of Law. (4) Lecture, three hours; dis- cussion, one hour. Preparation: one philosophy course. Theoretical approaches to some of the major legal- philosophical writings, of such topics as nature of law, rela- tionship of law and morals, legal reasoning, punish- ment, and obligation to obey law. May be repeated for credit. P/NP or letter grading.

167. Feminist Issues in Value Theory. (4) Lecture, three hours; discussion, one hour (when scheduled). Preparation: one philosophy course. Study of ethical dimensions of feminist theory. Issues discussed may include contested significance of gender; different models of gender identity and gender equality; gender discrimination, subordination, hierarchy, and resis- tance; gender equality in family and workplace; sexual harassment and violence; reproductive freedom; and lust and unjustified sexual arrangements as they af- fect gender. P/NP or letter grading.

168. Philosophy of Race. (4) Lecture, three hours; discussion, one hour (when scheduled). Preparation: one philosophy course. Examination of theories of race and racism and intersection of race with other so- cial structures. Topics may include metaphysics of race, social construction, racial identity, racial injus- tices, issues of gender and race, and solidarity between race and ethnicity. May be repeated once for credit with consent of instructor.

172. Philosophy of Language and Communication. (4) Lecture, three hours; discussion, one hour. Theo- ries of meaning and communica- tion; how words relate to things; limits of meaningfulness; analysis of speech acts; relation of everyday language to scientific dis- coveries. P/NP or letter grading.

173. Philosophy of Medicine. (4) Lecture, three to four hours; discussion, one hour (when scheduled). Focus on questions like what is health, what is well- being, what is mental disorder, and what is disability. Consideration of naturalistic, normative, and social construc- tivist types of answers, and error theories. Consideration of roles that fact, value, statistical norms, normal variation, normal function, and harm might have in these concepts. Study of consequences of different accounts of these concepts for people with minority bodies, minds, and sexualities, and for decisions about cure, enhancement, and reproduc- tion. P/NP or letter grading.

174. Topics in Theory of Knowledge. (4) Lecture, three to four hours; discussion, one hour (when scheduled). Preparation: course 21. Intensive investiga- tion of one or two selected topics or works in theory of knowledge, such as a priori knowledge, problem of in- duction, bayesian epistemology, semantic externalism, constructivism types of answers, and error theories. Topics announced each term. May be repeated for credit with consent of instructor. P/NP or letter grading.

M175. Topics in Philosophy of Religion. (4) (Same as Religion M175.) Lecture, three hours; discussion, one hour (when scheduled). Preparation: course 21 or 22. Intensive investi- gation of one or two topics or works in philosophy of religion, such as attributes of God, arguments for or against existence of God, or relation between religion and ethics. Topics announced each term. May be repeated for credit with consent of instructor.

176. Metaphysics of Modality. (4) Lecture, four hours; discussion, one hour. Preparation: one or two topics in Philosophy / 655

177. Historical Studies in Existentialism. (4) Preparation: one philosophy course. Study of central philosophical texts of one of the following: Nietzsche, Heidegger, Jaspers, Buber, Sartre, or Camus. Em- phasis on exposition and interpretation of the texts. May be repeated for credit with consent of instructor.

178. Phenomenology. (4) Lecture, three hours; dis- cussion, one hour. Preparation: two philosophy courses. Introduction to phenomenological method of approaching philosophical problems via works of some of the following: Brentano, Husserl, Heidegger, Scheler, Sartre, Merleau-Ponty, Ricoeur. Topics in- clude ontology, epistemology, and particularly philos- ophy of mind.

179. Asian Philosophy. (4) Lecture, three hours; dis- cussion, one hour. Examination of central concepts and arguments in Buddhist or Chinese philosophy. Appropriate parallels to social concepts in Western tradition. May be repeated for credit with consent of department. P/NP or letter grading.

180. Philosophy of Action. (4) Lecture, three to four hours; discussion, one hour (when scheduled). Prepa- ration: two philosophy courses. Study of various con- cepts employed in various theories of action. Topics may include rational choice, desire, intention, weakness of will, and self-deception. May be repeated for credit with consent of instructor. P/NP or letter grading.


182. Elements of Metaphysics. (4) Lecture, three hours; discussion, one hour. Requisite: course 21. Study of basic metaphysical questions; nature of physical world, of minds, and of universals; and an- swers provided by alternative systems (e.g., phenom- enalism, materialism, dualism). P/NP or letter grading.

183. Theory of Knowledge. (4) Lecture, three hours; discussion, one hour. Preparation: course 21. Problem- oriented survey of contemporary classics of episte- mology on topics such as skepticism, justification, foundationalism, epistemic intuitions, tracking, clos- sure, reliabilism, internalism, and externalism, among others. May be repeated for credit with consent of in- structor. P/NP or letter grading.

184. Topics in Metaphysics. (4) Lecture, three hours; discussion, one hour. Preparation: course 21. Intensive investigation of one or two topics or works in meta- physics, such as panchristianism, satisfaction senti- tions, possibility and necessity, universals and particu- lars, causality. Topics announced each term. May be repeated for credit with consent of instructor. P/NP or letter grading.

185. Major Philosophers of 20th Century. (4) Lect- ture, three hours; discussion, one hour. Preparation: two philosophy courses. Study of writings of one or more major modern philosophers (e.g., Russell, Moore, Wittgenstein, Carnap, Quine). May be re- peated for credit with consent of instructor. P/NP or letter grading.

M187. Topics in Feminist Philosophy: Metaphysics and Epistemology. (4) Same as Gender Studies M110C.) Lecture, three hours; discussion, one hour (when scheduled). Preparation: for Gender Studies ma- jors: Gender Studies 10; for other students: one phi- losophy course. Examination in depth of different the- oretical positions on gender and women as they have been applied to study of philosophy. Emphasis on the- oretical contributions made by new scholarship on women in philosophy. Critical study of concepts and principles that arise in discussion of women's rights and liberation. Philosophical approach to feminist the- ories. May be repeated for credit with consent of in- structor. P/NP or letter grading.

Special Studies

188SA. Individual Studies for USIE Facilitators. (1) Tutorial, to be arranged. Enforced corequisite: Honors College 101E: Limited to 25% of USIE facilita- tors. Individual study in regularly scheduled meetings with faculty mentor to discuss selected USIE seminar
Group I: History of Philosophy


203. Seminar: History of Ancient Philosophy. (4) Seminar, four hours. Selected problems and philosophers. May be repeated for credit with consent of instructor. S/U or letter grading.

204. Topics in Medieval Philosophy. (4) Lecture, four hours. Study of philosophy and theology of one or several medieval philosophers such as Augustine, Anselm, Abelard, Aquinas, Scotus, or Ockham or study of single area such as logic or theory of knowledge in several medieval philosophers. Topics announced each term. May be repeated for credit with consent of instructor. S/U or letter grading.

205. Seminar: History of Medieval and Renaissance Philosophy. (4) Seminar, four hours. Selected problems and philosophers. May be repeated for credit with consent of instructor. S/U or letter grading.


Group II: Logic, Semantics, and Philosophy of Science

221A. Topics in Set Theory. (4) Lecture, three hours. Prerequisite: Mathematics M114S. Sets, relations, functions, partial and total orderings, well-orderings. Ordinal and cardinal arithmetic, finiteness and infinity, continuum hypothesis, inaccessible numbers. Formalization of set theory; Zermelo/Fraenkel; von Neumann/ Gödel theory. May be repeated for credit with consent of instructor. S/U or letter grading.

221B. History of Set Theory. (4) Lecture, four hours. Development of concept of set and axiomatic set theory, examining some of Frege, Cantor, Russell, Zermelo, Gödel, and several others. Origins and significance of certain key ideas, such as set theory as logic, axiomatic set theory as reaction to paradoxes, formal first-order axiomatic set theory as opposed to informal axiomatics, type theory and rank hierarchy, ramification and predicativity, proper classes and sets as small classes, and particular Zermelo-Fraenkel axiomatic system. Emphasis on actual expressed ideas and views of various influential authors. S/U or letter grading.


223. Topics in Philosophy of Mathematics. (4) Lecture, four hours. Introduction to philosophy of mathematics. Survey of philosophy of mathematics from Kant to Hilbert. Study of content and development of three main schools of thought: formalism, intuitionism, and logicism. Study of contemporary developments in mathematics and logic. May be repeated for credit with consent of instructor. May be concurrently scheduled with course C128. S/U or letter grading.

224. Philosophy of Physics. (4) Seminar, three hours. Selected philosophical topics related to physical theory, depending on interests and background of participants, including space and time; observation in quantum mechanics; foundations of statistical mechanics; quantum theory, depending on interests and background of participants, including space and time; observation in quantum mechanics; foundations of statistical mechanics; quantum theory, depending on interests and background of participants. May be concurrently scheduled with course C133B. S/U or letter grading.

225. Probability and Inductive Logic. (4) formerly numbered 225.) Lecture, three hours; discussion, one hour (when scheduled). Requisite: course 31, or background in logic, computer programming, or mathematics. Topics may include interpretations of probability, Bayesian and non-Bayesian confirmation theory, paradoxes of confirmation, coherence, and conditioning. May be concurrently scheduled with course C133B. S/U or letter grading.

226. Topics in Mathematical Logic. (4) Lecture, four hours. Content varies from term to term. May be repeated for credit with consent of instructor. S/U or letter grading.

227. Philosophy of Social Science. (4) Lecture, four hours. Examination of philosophical problems concerning concepts and methods used in social sciences. Topics may include relationship between social processes and individual psychology, logic of explanation in social sciences, determinism and spontaneity in history, interpretation of cultures radically different from one's own, social theory, and advanced preparation in social sciences encouraged to enroll. May be repeated for credit with consent of instructor. S/U or letter grading.

228A. Philosophy of Language. (4) Lecture, four hours. Topics in logical, linguistic, and philosophical problems. Prerequisite: course 31. Syntax, semantics, pragmatics. Semantical concept of truth, sense and denotation, synonymy and analyticity, modalities and tenses, indirect discourse, indexical terms, semantical paradoxes. May
be repeated for credit with consent of instructor. Concurrently scheduled with course C127A. S/U or letter grading.

C228B. Philosophy of Language. (4) Lecture, four hours; discussion, one hour. Requisite: course 31. Course C228A is not requisite to C228B. Selected topics in logic to those considered in course C228A, but at more advanced and technical level. May be repeated for credit with consent of instructor. Concurrently scheduled with course C127B. S/U or letter grading.

C228C. Philosophy of Language. (4) Lecture, four hours; discussion, one hour. Requisite: course 31. Recommended: course C228A or C228B. Selected topics similar to those considered in course C228B, but with focus on contemporary figures. May be repeated for credit with consent of instructor. Concurrently scheduled with course C127C. S/U or letter grading.

230. Seminar: Logic. (4) Seminar, four hours. May be repeated for credit with consent of instructor. S/U or letter grading.

231. Seminar: Intensional Logic. (4) Seminar, four hours. Topics may include logic of sense and denotation, modal logic, logic of propositions, epistemic logic, intentional logic of Principia Mathematica, possible worlds semantics. May be repeated for credit with consent of instructor. S/U or letter grading.

232. Philosophy of Science. (4) Seminar, three hours. Selected topics in philosophy of science. May be repeated for credit with consent of instructor. S/U or letter grading.

233. Seminar: Philosophy of Physics. (4) Seminar, four hours. May be repeated for credit with consent of instructor. S/U or letter grading.

234. Topics in Philosophy of Science. (4) Seminar, three hours. One or more selected topics in philosophy of science. May be repeated for credit with consent of instructor. S/U or letter grading.

235. Philosophy of Mathematics. (4) Seminar, three hours. Selected topics in philosophy of mathematics. May be repeated for credit with consent of instructor. S/U or letter grading.

241. Topics in Political Philosophy. (4) Seminar, four hours. Requisites: course 150 or C136 and 157A or 157B or equivalent. Examination of one or more topics in political philosophy (e.g., justice, democracy, human rights, political obligation, alienation). May be repeated for credit with consent of instructor. S/U or letter grading.

244. Topics in Value Theory: Rationality and Action. (4) Seminar, three hours. Selected topics on normative issues in practical rationality or philosophy of action. Topics may include moral and practical dilemmas, nature of reasons for action, rationality of morality and prudence, weakness of will, freedom of will, and decision theory. May be repeated for credit with consent of instructor. S/U or letter grading.

244B. Topics in Value Theory: Moral Responsibility and Free Will. (4) Lecture, three hours; discussion, one hour. Preparation: one philosophy course. Examination of philosophical problems regarding moral responsibility and free will, using contemporary or classical readings in attempt to better understand kind of freedom required for moral agents. May be repeated for credit. May be concurrently scheduled with course C154B. S/U or letter grading.

245. History of Ethics: Modern. (4) Lecture, three hours; discussion, one hour. Intensive study of Kant’s ethical theory. May be repeated for credit with consent of instructor. May be concurrently scheduled with course C151B. S/U or letter grading.

246. Seminar: Ethical Theory. (4) Seminar, four hours. Selected topics. Content varies from term to term. May be repeated for credit with consent of instructor. S/U or letter grading.

247. Topics in Political Philosophy. (4) Lecture, three hours; discussion, one hour. Analysis of some basic concepts in political theory. May be repeated for credit with consent of instructor. May be concurrently scheduled with course C156. S/U or letter grading.

248. Problems in Moral Philosophy. (4) Seminar, four hours. Intensive leading current problems in moral philosophy. May be repeated for credit with consent of instructor. S/U or letter grading.

C253B. Topics in Ethical Theory: Metaethics. (4) Lecture, three hours; discussion, one hour. Requisite: course 22. Study and analysis of basic concepts, selected problems, and contemporary issues in metaethics. Topics may include analysis of moral language, justification of moral beliefs, moral realism, skepticism, free will, moral motivation, etc. May be repeated for credit with consent of instructor. May be concurrently scheduled with course C153B. S/U or letter grading.

254. Legal Theory Workshop, (1 to 8) Seminar, three hours. Students engage with work in progress on philosophical issues in law of leading scholars from around country. Presentation of works in progress by visiting scholars every two weeks. Study by students of papers to be presented in background in view of recent relevant topics and to be prepared for speakers’ presentations. Presentation of student papers to class for discussion. Substantial analytical paper required. S/U or letter grading.

254A-254B. Legal Theory Workshop. (3–1) Seminar, three hours. Course 254A is requisite to 254B. Students engage with work in progress on philosophical issues in law of leading scholars from around country. Presentation of works in progress by visiting scholars every two weeks. Study by students of papers to be presented to gain background in relevant topics and to be prepared for speakers’ presentations. Presentation of student papers to class for discussion. Substantial analytical paper required. Concurrently scheduled with Law 555. In Progress (254A) and S/U or letter (254B) grading.

255. Seminar: Aesthetic Theory. (4) Seminar, four hours. Selected topics. May be repeated for credit with consent of instructor. S/U or letter grading.

M256. Topics in Legal Philosophy. (4) (Same as Law M217) Lecture, three hours. Examination of topics such as concept of law, nature of justice, problems of punishment, legal reasoning, and obligation to obey the law. May be repeated for credit with consent of instructor.

M257. Philosophy Legal Theory. (1 to 8) (Same as Law M524.) Seminar, three hours. Selected topics in philosophy of law. May be repeated for credit with consent of instructor. S/U or letter grading.

M257A-257B. Philosophy Legal Theory. (1 to 8) (Same as Law M524.) Seminar, three hours. Course M257A is requisite to 257B. Selected topics in philosophy of law. May be repeated for credit with consent of instructor. In Progress (M257A) and S/U or letter (257B) grading.

258. Contemporary Philosophy of Law. (4) Seminar, three hours. Limited to graduate students. Recent contributions to theoretical literature on contract law. Possible topics include purpose or function of contract law, relationship of contracts to promises, whether fault should play larger (or smaller) role in contract law, remedial approaches to breach including larger role for unjust enrichment, and contract law’s treatment of fraud and deception. Readings from legal and philosophical literature. S/U or letter grading.

259. Philosophical Research in Ethics and Value Theory. (2 to 4) Seminar, two hours. Preparation: completion of proposition requirement. Presentation of ongoing research by graduate students. Participants make presentations, analyze and discuss presentations of others, and read and discuss philosophical texts related to presentations. Must be taken for 4 units in quarter in which student presents own research. May be repeated for credit with consent of instructor. S/U grading.

Group IV: Metaphysics and Epistemology

271. Seminar: Topics in Metaphysics and Epistemology. (4) Seminar, three hours. May be repeated for credit with consent of instructor. S/U or letter grading.

272. Topics in Philosophy of Mind and Language. (4) Seminar, three hours. One or more selected topics in philosophy of mind and/or language. May be repeated for credit with consent of instructor. May be repeated for credit with consent of instructor. May not be repeated for credit with consent of instructor. S/U or letter grading.

275. Human Action. (4) Preparation: two upper-division philosophy courses. Examination of theories, concepts, and problems of human actions. Topics may include analysis of intentional actions; deontological and other forms of intentional actions. May be repeated for credit with consent of instructor.

280. 20th-Century Continental Philosophy. (4) Seminar, three hours. Selected topics in 20th-century continental European philosophy. May be repeated for credit with consent of instructor. S/U or letter grading.

281. Seminar: Philosophy of Mind. (4) Seminar, three hours. May be repeated for credit with consent of instructor. S/U or letter grading.

282. Seminar: Metaphysics. (4) Seminar, three hours. May be repeated for credit with consent of instructor. S/U or letter grading.

283. Seminar: Theory of Knowledge. (4) Seminar, three hours. May be repeated for credit with consent of instructor. S/U or letter grading.

284. Seminar: Philosophy of Perception. (4) Seminar, three hours. Examination of topics such as nature and validity of psychoanalytic explanations and interpretations, psychoanalysis and language, metaphysical concepts such as the unconscious, id, super ego, defense mechanisms, and psychoanalytic conception of human nature. S/U or letter grading.

286. Philosophy of Psychology. (4) Seminar, four hours. Relevance of computer simulation to accounts of thinking and meaning; relations between semantical theory and learning theory; psychological aspects of theory of syntax; behaviorism, functionalism, and alternatives; physiology and psychology. S/U or letter grading.

287. Seminar: Philosophy of Language. (4) Seminar, three hours. May be repeated for credit with consent of instructor. S/U or letter grading.

288. Seminar: Wittgenstein. (4) Seminar, three hours. May be repeated for credit with consent of instructor. S/U or letter grading.

289. Seminar: Philosophy of Religion. (4) Seminar, four hours. May be repeated for credit with consent of instructor. S/U or letter grading.

Special Studies

290. Workshop: Philosophy of Language. (2 or 4) Seminar, two hours. Ongoing discussion of current issues in philosophy of language based on contemporary texts and current research. Presentations of ideas by attending faculty and graduate students with open discussion. May be repeated for credit with consent of instructor. S/U grading.

291. Workshop: Philosophy of Mathematics. (4) Seminar, three hours. Ongoing discussion of current issues in philosophy of mathematics based on contemporary texts and current research. Presentations of ideas by attending faculty and graduate students with open discussion. May be repeated for credit with consent of instructor. S/U grading.

291. Workshop: Philosophy of Mathematics. (4) Seminar, three hours. Ongoing discussion of current issues in philosophy of mathematics based on contemporary texts and current research. Presentations of ideas by attending faculty and graduate students with open discussion. May be repeated for credit with consent of instructor. S/U grading.
PhD, Astronomy Endowed Professor of Astrophysics)
Michael Gutperle, PhD
Bradley M. Hansen, PhD
Jay Hauser, PhD
Károly Holczer, PhD
Huan Z. Huang, PhD
Eric R. Hudson, PhD
Frank S. Jenko, PhD
David C. Jewitt, PhD
Hong-Wen Jiang, PhD
Per J. Kraus, PhD
Alexander Kusenko, PhD
James E. Larkin, PhD
Alexander J. Levine, PhD
Matthew A. Malkan, PhD
Jean-Luc Margot, PhD
Thomas G. Mason, PhD
Mayank R. Mehta, PhD
Jean T. McIntosh, PhD
Warren B. Mori, PhD
Mark R. Morris, PhD
Pietro Musumeci, PhD
William I. Newman, PhD
Christoph Niemeyer, PhD
Rene A. Ong, PhD
Seth J. Putterman, PhD
Brian C. Regan, PhD
James Rosenzweig, PhD
David Saltzberg, PhD
Alice E. Shapley, PhD
E.T. Tomboulis, PhD
Tommaso L. Treu, PhD
Yaroslav Tserkovnyak, PhD
Jean-L. Turner, PhD
Vladimir Vassilev, PhD
Kang L. Wang, PhD
Gary A. Williams, PhD
Giovanni Zocchi, PhD
Professors Emeriti
Ernest S. Abers, PhD
Eric E. Becklin, PhD
Charles D. Buchanan, PhD
W. Gilbert Clark, PhD
John M. Cornwall, PhD
Ferdinand V. Coroniti, PhD
Robert D. Cousins, PhD
Sergio Ferrara, PhD
Robert J. Finkelstein, PhD
Christian Fronsdal, PhD
Rene A. Ong, PhD
Ian S. McLean, PhD
George J. Morales, PhD
Claudio Pellegrini, PhD
Reiner L. Stenzel, PhD
Roger K. Ulrich, PhD
Alfred Y. Wong, PhD
Chun Wai Wong, PhD
Edward L. Wright, PhD (David S. Saxon Presidential Professor Emeritus of Physics)
Benjamin M. Zuckerman, PhD
Associate Professors
Wesley C. Campbell, PhD
Michael P. Fitzgerald, PhD
Snead Tao, PhD (Howard and Astrid Preston Term Professor of Astrophysics)
Ni Ni, PhD
Rahul Roy, PhD
Hilke E. Schlichting, PhD
Assistant Professors
Michail Bachtis, PhD
Tuan H. Do, PhD
Thomas T. Dumitrescu, PhD (Mani L. Bhaumik Presidential Endowed Professor of Theoretical Physics)
Christopher Gutiérrez, PhD
Paul Hamilton, PhD
Zhongbo Kang, PhD
Anahui Kogar, PhD
Erik A. Petigura, PhD
Mikhail P. Solon, PhD
Shenhsen Wang, PhD
Nathan Whitehorn, PhD
Adjunct Professors
David Schriner, PhD
Slava G. Turyshev, PhD
Scope and Objectives
Since the time of the ancient Greeks, a natural affinity has existed between astronomy and physics, and the intellectual development of the two disciplines has often proceeded synergistically. Newton’s discovery of the laws of mechanics and universal gravitation not only explained motion on Earth, but brought the heavens and Earth into a single quantitative framework in which both are governed by the same laws. The revolutionary discoveries of twentieth-century physics—quantum mechanics and nuclear physics—were rapidly adopted by astronomers to interpret the spectroscopic observations of the stars and to construct accurate models of stellar structure. Einstein’s general theory of relativity predicted the expansion of the universe and that most awesome compaction of matter—the black hole.

Today astronomers study the accretion of matter onto supermassive black holes in quasars and search the most distant regions of the universe to learn about the exotic physical conditions that existed when the universe’s expansion was only fractions of a second old. By measuring the gravitational interactions on distance scales from galaxies to the vast superclusters of galaxies, astronomers have concluded that most of the universe’s matter is dark or nonluminous; physicists have speculated that this dark matter may consist of yet-undiscovered exotic particles that are predicted by the most advanced theories of elementary particle physics. Department of Physics and Astronomy faculty members and students are able to study the universe in the holistic manner that is demanded by the breadth of these two disciplines.

Undergraduate Study
The Department of Physics and Astronomy offers a choice of four undergraduate majors: Astrophysics BS, Biophysics BS, Physics BS, and Physics BA. Each course taken to fulfill any of the requirements for the majors must be taken for a letter grade.

Astronomy Courses
The department offers general courses to all UCLA students, including those who are not science oriented.

Astronomy 3 is the fundamental one-term course for students who do not major in physical sciences and should be taken in the first or second year.

Astronomy 4, 5, and 6 develop the topics covered in course 3 to somewhat greater depths but are still aimed at nonscience majors. Course 4 discusses
stellar and supermassive black holes; course 5 concentrates on the problem of life in the universe; course 6 discusses the structure and evolution of the universe.

Astronomy 81 and 82 are general survey courses recommended for science majors in their second year. They systematically introduce astrophysics and require a good background in physics and mathematics (at least two terms of the Physics 1 series and two terms of the Mathematics 31and 32 series).

Students of junior and senior standing in Physics or related sciences are invited to select any of these courses: Astronomy 115, 117, 127, 140, 180.

Physics Courses

Students who wish to use physics to satisfy part of the general education requirements in the physical sciences and who have no mathematics background beyond the high school mathematics required for admission to UCLA may take Physics 10.

Physics 1Q is intended for entering freshman Physics majors and other interested students. Although it is not a required course or a part of or requisite to any general physics sequence of courses, its purpose is to indicate the nature of current research problems in physics on a level intended to be attractive to entering students with a good high school science and mathematics background.

Physics 1A, 1B, and 1C, or 1AH, 1BH, and 1CH form sequences of courses in general physics for majors in Physics.

The department takes into account prior preparation in physics. If students feel their background would permit acceleration, they may be exempted from one course in the 1A, 1B, 1C sequence by taking the final examination with a class at the end of any term. This serves as a placement examination. A satisfactory score on one or both parts of the College Board Advanced Placement Physics C Test may also serve as a placement examination, but placement is not automatic. Students should discuss such possibilities with their departmental adviser.

Physics 5A, 5B, 5C form a one-year sequence of courses in basic physics for students in the biological and health sciences.

Any two or more courses from Physics 1A, 1AH, and 5A, are limited to a total of 6 units of credit.

Astrophysics BS

Learning Outcomes

The Astrophysics major has the following learning outcomes:

- Ability to make accurate and precise physical measurements using modern laboratory instruments and computerized data acquisition
- Ability to critically analyze and interpret data in order to draw valid scientific conclusions
- Ability to present clear written and oral accounts of scientific results
- Scientific, mathematical, computing, and laboratory skills that enable pursuit of career objectives in graduate or professional schools, in a teaching career, or in a scientific career in government or industry

Preparation for the Major

Required: Astronomy 81, 82; Physics IA or IAH, 1B or 1BH, 1C or 1CH, 4AL, 4BL, 17, 18L, Mathematics 31A or 31AL, 31B, 32A, 32B, 33A, 33B; Program in Computing 10A or demonstrated ability to program. Systematic study of astrophysics should begin with Astronomy 81 and 82, taken in the second year. Recommended: Chemistry and Biochemistry 20A.

Transfer Students

Transfer applicants to the Astrophysics major with 90 or more units must complete as many of the following introductory courses as possible prior to admission to UCLA: two astrophysics courses, two years of calculus, one and one half years of calculus-based physics with laboratory for majors, and one programming course.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

The Major


Honors Program

Senior majors in Astrophysics with a 3.5 grade-point average in all astronomy, mathematics, and physics courses are eligible for the honors program in astrophysics. In addition to completing all courses required for the major, students must complete two terms of Astronomy 199. To receive honors and highest honors at graduation, the grade-point average must remain at 3.5 and 3.75 or better, respectively, and work in course 199 must reflect original research and be accepted by the departmental honors committee.

Biophysics BS

The goal of the Biophysics major is to provide students with an undergraduate background that will enable them to enter competitive graduate programs in biophysics, molecular biology, and biological physics. It also aims at providing students with a solid, quantitative background for careers in the medical field of the future as well as in molecular biology, neuroscience, and biological physics which are all emerging as important and rapidly developing areas of physics. The major is designed to provide students with a flexible scientific/technical training that allows them to explore these different career paths and tailor their class work to their scientific interests. The program aims at providing an opportunity to the students to become scientific leaders, bringing the analytic and experimental techniques of different fields to bear on the fascinating world of the physics of living systems.

Learning Outcomes

The Biophysics major has the following learning outcomes:

- Ability to apply knowledge of classical mechanics, electromagnetism, quantum mechanics, and thermal physics to understand and analyze a broad variety of physical phenomena
- Application and improvement of proficiency in mathematics skills in calculus, differential equations, and linear algebra
- Ability to understand and analyze basic phenomena in biological science
- Ability to make accurate and precise physical measurements using modern laboratory instruments and computerized data acquisition
- Ability to critically analyze and interpret data in order to draw valid scientific conclusions
- Ability to present clear written and oral accounts of scientific results
- Scientific, mathematical, computing, and laboratory skills that enable pursuit of career objectives in graduate or professional schools, in a teaching career, or in a scientific career in government or industry

Preparation for the Major

Required: Physics IA or IAH, 1B or 1BH, 1C or 1CH, 4AL, 4BL, 17, Chemistry and Biochemistry 20A, 20B; Life Sciences 7A; Mathematics 31A or 31AL, 31B, 32A, 32B, 33A, 33B. Recommended: Physics 18L.

Transfer Students

Transfer applicants to the Biophysics major with 90 or more units must have completed the following introductory courses prior to admission to UCLA: two years of calculus, one and one half years of calculus-based physics with laboratory for majors, one year of general biology with laboratory for majors, and one year of general chemistry with laboratory for majors.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

The Major

Required: Physics 10SA, 110A, 110B, 112, 115A, 115B, 131, M180G, C187A, C187B; either course 144 or C186; three additional upper-division elective courses selected from one group or among the three groups.


Group B (Biological Physics): Physics 117, 144, Mechanical and Aerospace Engineering C286.

Group C (Molecular and Cellular Biophysics): Chemistry 153A, 153L, Molecular, Cell, and Developmental Biology 100 or 165A.

Students will be advised when a course has additional lower-division requirements.
An overall 2.0 grade-point average in all upper-division courses is required.

Physics BS
The Physics BS major should be pursued if students intend to continue toward the PhD in Physics.

Learning Outcomes
The Physics major has the following learning outcomes:

- Ability to apply knowledge of classical mechanics, electromagnetism, quantum mechanics, and thermal physics to understand and analyze a broad variety of physical phenomena
- Application and improvement of proficiency in mathematics skills in calculus, differential equations, and linear algebra
- Ability to understand and analyze physical phenomena in one or more specialized areas of physics, which facilitates subsequent research
- Ability to make accurate and precise physical measurements using modern laboratory instruments and computerized data acquisition
- Ability to critically analyze and interpret data in order to draw valid scientific conclusions
- Ability to present clear written and oral accounts of scientific results
- Scientific, mathematics, computing, and laboratory skills that enable pursuit of career objectives in graduate or professional schools, in a teaching career, or in a scientific career in government or industry

Preparation for the Major
Required: Physics 1A or 1AH, 1B or 1BH, 1C or 1CH, 4AL, 4BL, 17, 18L; Chemistry and Biochemistry 20A; Mathematics 31A or 31AL, 31B, 32A, 32B, 33A, 33B. A detailed brochure on the major is available from the Undergraduate Office, 1-707A Physics and Astronomy Building.

Transfer Students
Transfer applicants to the Physics BS major with 90 or more units must complete the following introductory courses prior to admission to UCLA: two years of calculus, one and one half years of calculus-based physics with laboratory for majors, and one general chemistry course for majors.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

The Major
Required: Physics 105A, 105B, 110A, 110B, 112, 115A, 115B, 115C, 131. The remainder of the course of study consists of a plan, to be worked out by students in consultation with their designated departmental adviser, that details which courses they take to complete the degree. There are four overall requirements: (1) the plan must be worked out five terms before students expect to graduate; (2) the plan must include two courses from Physics 118 and 180A through 180Q, which should be taken in the senior year; (3) there must be three additional upper-division courses in the plan, preferably selected from Physics 108, 114, 117, M122, 123, 124, 126, 127, 128, 132, 140A, 140B, 144, 150, C187A; (4) there must be written rationale for the plan. Except for the Physics 180 laboratories, the courses need not be in the Physics and Astronomy Department. However, it is expected that the courses fit into a coherent structure. It is important that the structure and rationale are thought out carefully, as the plan must be endorsed by the designated adviser and be approved by the departmental academic affairs committee. Preapproved plans of study are available from the undergraduate advisers. A C average is required in all courses taken to satisfy the major requirements.

Students preparing for graduate school should take additional courses in physics and mathematics. Physics 108, 114, 117, M122, 123, 124, 126, 132, 140A, and 140B are recommended.

Honors Programs
The department offers three honors programs leading to graduation with honors or highest honors in physics. Students are eligible after completing the preparation for the major and four upper-division physics courses with an overall grade-point average of 3.0 and a 3.5 GPA in upper-division physics and mathematics courses. Contact the Undergraduate Office for a complete description of the programs and an application.

Physics BA
The Physics BA major is intended to provide students with a strong background in physics, yet allow students flexibility to study other fields as well. It should be of particular interest to students who want to double major or who want to teach science. Students who intend to continue work toward the PhD in Physics are advised to pursue the Physics BS.

Learning Outcomes
The Physics major has the following learning outcomes:

- Ability to apply knowledge of classical mechanics, electromagnetism, quantum mechanics, and thermal physics to understand and analyze a broad variety of physical phenomena
- Application and improvement of proficiency in mathematics skills in calculus, differential equations, and linear algebra
- Ability to critically analyze and interpret data in order to draw valid scientific conclusions
- Ability to present clear written and oral accounts of scientific results
- Scientific, mathematics, computing, and laboratory skills that enable pursuit of career objectives in graduate or professional schools, in a teaching career, or in a scientific career in government or industry

Preparation for the Major
Required: Physics 1A or 1AH, 1B or 1BH, 1C or 1CH, 4AL, 4BL, 17, 18L; Chemistry and Biochemistry 20A; Mathematics 31A or 31AL, 31B, 32A, 32B, 33A, 33B. A detailed brochure on the major is available from the Undergraduate Office, 1-707A Physics and Astronomy Building.

Transfer Students
Transfer applicants to the Physics BA major with 90 or more units must complete the following introductory courses prior to admission to UCLA: two years of calculus, one and one half years of calculus-based physics with laboratory for majors, and one general chemistry course for majors.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

The Major

Graduate Study
Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Division website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Graduate Degrees
The Department of Physics and Astronomy offers the Master of Arts in Teaching (MAT) degree in Astronomy and Astrophysics, Master of Science (MS) and Doctor of Philosophy (PhD) degrees in Astronomy and Astrophysics, Master of Arts in Teaching (MAT) degree in Physics, and Master of Science (MS) and Doctor of Philosophy (PhD) degrees in Physics.

Astronomy
Lower-Division Courses

3. Nature of Universe. (5)
   Lecture, three hours; discussion, two hours. Not open to students with credit for or currently enrolled in course 81 or 82. No special mathematical preparation required beyond that necessary for admission to UCLA in freshman standing. Course for general UCLA students, normally not intending to major in physical sciences, on development of ideas in astronomy and what has been learned of nature of universe, including recent discoveries and developments. P/NP or letter grading.

4. Black Holes and Cosmic Catastrophes. (4)
   Lecture, three hours; discussion, one hour. Essentially nonmathematical course for general UCLA students that discusses black holes and related cosmic catastrophes. White dwarfs, neutron stars, and black holes are compact objects formed in violent events that terminate lives of stars and are associated with some of most energetic and explosive phenomena in astronomy: planetary nebulae and novae (white dwarfs), supernovae, pulsars, galactic X-ray sources, and gamma ray bursts. Supermassive black holes form in nucleus of young galaxies, and gravitational accretion of matter onto black holes powers most energetic objects in universe—quasars. Universe was born in ultimate cosmic explosion—Big Bang—that may have derived its energy from quantum mechanical vacuum. P/NP or letter grading.

5. Life in Universe. (4)
   Lecture, four hours; discussion, one hour. Preparation: prior introduction to astronomy. Life on Earth and prospects for life elsewhere in context of evolution of universe from simple to complex. Course material primarily from astronomy and bi-

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current importance, taught by faculty members in their areas of expertise and illustrating many paths of discovery at UCLA. P/NP grading.

81. Astrophysics I: Stars and Nebulae. (4) Lecture, three hours; discussion, one hour. Requisites: Mathematics 31A, 31B, and Physics 1A or 1AH. Open to qualified sophomore and upper-division students. Survey of our knowledge about stars: their distances, masses, luminosities, temperatures, and interactions between mass, energy, and matter. Important tools and techniques for understanding stars. Stellar and galactic evolution. Introduction to cosmology. P/NP or letter grading.

82. Astrophysics II: Stellar Evolution, Galaxies, and Cosmology. (4) Lecture, three hours; discussion, one hour. Requisites: Mathematics 31A, 31B, and Physics 1A or 1AH. Offered as adjunct to lower-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

180. Astrophysics Laboratory. (4) Lecture, two hours; laboratory, four hours. Designed for juniors/seniors in Astrophysics and Physics majors. Preparation of research in a wide range of fields. Participation in an ongoing research project. P/NP or letter grading.

189. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

278. Special Topics in Astronomy. (2 or 4) Tutorial, two hours per week per unit. Limited to 4 units. Individual honors contract required. Letter grading.

Upper-Division Courses


Graduate Courses


279. Seminar: Current Astronomical Research. (2) Seminar, one hour. Astronomy and astrophysics colloquium with lectures on current research by local and visiting researchers. S/U grading.


281. Quantum Mechanics for Astrophysicists. (4) Lecture, four hours. Designed for departmental graduate students. Quantum mechanical topics in areas of interest for astrophysics applications. Hydrogen atom, radiative transitions, complex atoms, molecular spectroscopy including electronic, vibrational, and rotational transition, nuclear reaction theory. Letter grading.


283. Numerical and Statistical Methods. (4) Lecture, three hours. Topics selected by instructor in mathematical, numerical, and statistical methods of relevance to astrophysical research. Topics include Fourier transforms, filtering, and power spectra, numerical algorithms, N-body codes, maximum likelihood, Bayesian inference, and error estimation. Letter grading.

284. Order of Magnitude Astrophysics. (4) Lecture, three hours. Practice in real-time problem solving covering all fields of astrophysics. Topics selected by instructor. Students work together and individually to solve problems on blackboard using basic physics and order of magnitude estimations. Letter grading.

M285. Origin and Evolution of Solar System. (4) (Same as Earth, Planetary, and Space Sciences M285.) Lecture, four hours. Dynamic problems of solar system; chemical evidences from geochemistry, meteorites, and solar atmosphere; nucleosynthesis; solar origin, evolution, and termination; solar nebula, hydromagnetic processes, formation of planets and satellite systems. Content varies from year to year. May be repeated for credit. S/U grading.


289. Research Topics in Astronomy. (2) Discussion, two hours. Advanced study and analysis of current topics in astronomy. Discussion of current research and literature in research specialty of faculty member teaching course. May be repeated for credit. S/U grading.

297. Practice of Scientific Presentations in Astronomy. (2) (Formerly numbered M297.) Lecture, one hour. Training and practice in giving scientific presentations in context of astronomy and astrophysics. Includes brief review of basic principles of effective scientific communication. Students give talks on their research and other topics and receive detailed feedback from both peers and instructor. May be repeated for credit. S/U grading.

357. Teaching Apprentice Practicum. (1 to 4) Seminar, to be arranged. Preparation: apprentice personnel engaged in teaching assistant, associate, or fellow. Teaching apprenticeship under active guidance and supervision of regular faculty member responsible for curriculum and instruction at UCLA. May be repeated for credit. S/U grading.

596A. Directed Individual Studies. (4 to 10) Tutorial, to be arranged. May be repeated at discretion of department. S/U grading.

596L. Advanced Study and Research at Lick Observatory. (4 to 12) Tutorial, to be arranged. Designed for graduate students who require observational experience, as well as those working on observational problems for their thesis. May be repeated at discretion of department. Letter grading.

599. PhD Research and Writing. (10 to 12) Tutorial, to be arranged. May be repeated at discretion of department. S/U grading.

### Physics

#### Lower-Division Courses


1BH. Physics for Scientists and Engineers: Oscillations, Waves, Electric and Magnetic Fields (Honors). (5) Lecture/demonstration, four hours; discussion, one hour. Enforced requisites: course 1A or 1AH or 1A, Mathematics 31B, 32A. Enforced corequisite: Mathematics 32B. Advanced preparation for upper-division physics courses. Same material as course 1B but in greater depth; recommended for Physics majors and other students desiring such coverage. P/NP or letter grading.


1CH. Physics for Scientists and Engineers: Electrodynamics, Optics, and Special Relativity (Honors). (5) Lecture/demonstration, four hours; discussion, one hour. Enforced requisites: courses 1A and 1AH or 1AH or 1B, 1BH or 1CH, Mathematics 32A, 32B. Enforced corequisite: Mathematics 33A. Recommended corequisite: Mathematics 33B. Enriched preparation for upper-division physics courses. Same material as course 1C but in greater depth; recommended for Physics majors and other students desiring such coverage. P/NP or letter grading.

4AL. Physics Laboratory for Scientists and Engineers: Electricity and Magnetism. (2) Laboratory, four hours. Enforced requisites: courses 1A or 1AH, 1B or 1BH. Enforced corequisite: course 1C or 1CH. Sound waves and electric circuits, taken by digital oscilloscopes and analyzed by Fourier transformation. Geometrical and physical optics. Conception, execution, and presentation of creative projects involving sound waves or electric circuits. Letter grading.

5A. Physics for Life Sciences Majors: Mechanics and Energy. (2) Lecture, three hours; laboratory, one hour. Required, two hours. Requisites: Life Sciences 30A, 30B, or Mathematics 3A, 3B, 3C (3C may be taken concurrently). Statics and dynamics of forces, motion, energy including applications to biological and biochemical systems. P/NP or letter grading.

5B. Physics for Life Sciences Majors: Thermodynamics, Fluids, Waves, Light, and Optics. (5) Lecture, three hours; discussion, one hour; laboratory, two hours. Requisite: course 5A. Thermal properties of matter, free energy, fluids, ideal gas, diffusion, oscillations, waves, sounds, light, and optics, with applications to biological and biochemical systems. P/NP or letter grading.

5C. Physics for Life Sciences Majors: Electricity, Magnetism, and Modern Physics. (5) Lecture, three hours; discussion, one hour. Requisite: course 5A. Electricity, circuits, magnetism, quantum, atomic and nuclear physics, radioactivity, with applications to biological and biochemical systems. P/NP or letter grading.

10. Physics. (4) Lecture, three hours; discussion, one hour. Not open for credit to students with credit for course 1A, 1AH, 1A, 1B, or 6A. Special mathematical preparation beyond that necessary for admission to University in freshman standing not required. Topics include planetary motion, Newton’s laws, gravitation, electricity and magnetism, wave motion, light, sound, heat, radioactivity, quantum mechanics, atoms, and subatomic particles. As time permits, development of physical ideas placed in cultural and historical perspective.

11. Revolutions in Physics. (4) Lecture, three hours; discussion, one hour. Survey of modern physics intended for general UCLA students. Overview of classical physics from late 19th century and its growing set of dilemmas. Revolutions of relativity and quantum mechanics that have led to much deeper understanding of structure and evolution of our Universe. Specific topics include special and general relativity, quantum mechanics, atomic and nuclear physics, origin of elements, and quantum mechanics. P/NP or letter grading.

12. Physics of Sustainable Energy. (4) Lecture, three hours; discussion, one hour. Special mathematical preparation beyond that necessary for admission to UCLA in freshman standing not required. Discussion of physics underpinnings of energy sources and consumption, with emphasis on renewables. Global view of energy balance in our lives from point of view of physical processes. Ways in which energy is used in everyday life (transportation, heating, cooling), and ways in which it is produced, covering all common energy sources directly or indirectly relating to solar, wind, nuclear, and fusion. Fundamental physical limitations of each technology to master concepts such as efficiency of thermodynamic cycles and of chemical and nuclear reactions. Quantitative estimation of amount of energy students use in their daily lives and what physical processes could produce it. P/NP or letter grading.

17. Elements of Quantum Mechanics and Statistical Mechanics. (4) Lecture, three hours; discussion, one hour. Enforced requisites: courses 1A, 1B, and 1C or 1AH, 1BH, and 1CH. Mathematics 32A, 32B. Enforced corequisite: Mathematics 33A. Basic theory of quantum mechanics and its applications to quantum-electric effect, uncertainty principle Bohr atom, Schrödinger equation, hydrogen atom, Gaussian and Poisson distributions, temperature, entropy, Maxwell/Boltzmann distribution, kinetic theory of gases, laws of thermodynamics, black body radiation, P/NP or letter grading.
48. Seminars in Physics. (1) May be repeated three times, but only 1 unit may be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

49. Workshop: Numerical Computational Physics. (1) Laboratory, one hour. Introductory presentations on three most common mathematical software packages—Mathematica, Mathcad, and MATLAB. After some familiarization with most common software functions, development of student personal preferences and assessment of advantages and strong points and weak points in solving problems in computational physics. P/NP grading.

90A. PEERS Collaborative Learning Workshops for Life Sciences Majors. (1) Laboratory, three hours. Corequisite: associated undergraduate lecture course in physics for life sciences majors. Limited to Program for Excellence in Education and Research in Science (PEERS) students. Development of problem-solving skills and intuition in collaborative learning environment. May be repeated three times, but only 1 unit may be applied toward graduation. P/NP grading.

90B. PEERS Collaborative Learning Workshops for Physical Sciences and Engineering Majors. (1) Laboratory, three hours. Corequisite: associated undergraduate lecture course in physics for physical sciences and engineering majors. Limited to Program for Excellence in Education and Research in Science (PEERS) students. Development of problem-solving skills and intuition in collaborative learning environment. May be repeated three times, but only 1 unit may be applied toward graduation. P/NP grading.

99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Courses

105A. Analytic Mechanics. (4) Lecture, three hours; discussion, one hour. Requisite: courses 1A, 1B, and 1C (or 1AH, 1BH, and 1CH), 32B, 33A, 33B. Corequisite: Mathematics 33B. Newtonian mechanics and conservation laws, gravitational potentials, calculus of variations, Lagrangian and Hamiltonian mechanics, central force systems, linear and nonlinear oscillations. P/NP or letter grading.

105B. Analytic Mechanics. (4) Lecture, three hours; discussion, one hour. Requisite: courses 1A, 1B, and 1C (or 1AH, 1BH, and 1CH), 105A, Relativity with four vectors, nonintentional reference frames, dynamics of rigid bodies, coupled oscillators, normal modes of oscillation, vibrating strings, and wave propagation. P/NP or letter grading.

108. Optical Physics. (4) Lecture, three hours; discussion, one hour. Requisites: courses 1A, 1B, and 1C (or 1AH, 1BH, and 1CH), 105B. Interaction of light with matter, quantum aspects of light; wave and particle aspects; quantum states; coherence and superposition; interference and diffraction; applications. P/NP or letter grading.

110A. Electricity and Magnetism. (4) Lecture, three hours; discussion, one hour. Requisites: courses 1A, 1B, and 1C (or 1AH, 1BH, and 1CH), 131, Mathematics 32B, 33A, 33B. Electrostatics and magnetostatics. P/NP or letter grading.


112. Thermodynamics. (4) Lecture, three hours; discussion, one hour. Requisites: courses 1A, 1B, and 1C (or 1AH, 1BH, and 1CH), 17, 105A, 131, 105B, 105C. Systems and processes; state functions and their properties; first law of thermodynamics; second law of thermodynamics; thermodynamic systems and wave propagation in gases, liquids, and solids, including elements of hydrodynamics and elasticity. Applications in ultrasonics, low-temperature physics, and various scientific and technological fields. P/NP or letter grading.

114. Mechanics of Wave Motion and Sound. (4) Lecture, three hours; discussion, one hour. Requisites: courses 1A, 1B, and 1C (or 1AH, 1BH, and 1CH), 17, 105A, 131, 105B, 105C. Vibration of systems and wave propagation in gases, liquids, and solids, including elements of hydrodynamics and elasticity. Applications in ultrasonics, low-temperature physics, and various scientific and technological fields. P/NP or letter grading.


126. Cosmology and Particle Astrophysics. (4) Lecture, three hours; discussion, one hour. Requisites: courses 115A, 115B, 115C, 126. Introduction to cosmology and high energy particle astrophysics, based on latest developments of both experiment and theory. Special emphasis on unified picture of universe that emerges from particle physics, astronomy, and cosmology. Extensive discussion of unsolved problems and future prospects to help students determine their opportunities in future. Letter grading.

131. Mathematical Methods of Physics. (4) Lecture, three hours; discussion, one hour. Requisites: courses 1A, 1B, and 1C (or 1AH, 1BH, and 1CH), 32B, 33A, 33B. Vectors and fields in space, linear transformations, matrices, and operators; Fourier series and integrals. P/NP or letter grading.

132. Mathematical Methods of Physics. (4) Lecture, three hours; discussion, one hour. Requisites: courses 1A, 1B, and 1C (or 1AH, 1BH, and 1CH), 131, 32B, 33A, 33B. Functions of a complex variable, including Riemann surfaces, analytic functions, Cauchy theorem and formula, Taylor and Laurent series, calculus of residues, and Laplace transforms. P/NP or letter grading.

140A. Introduction to Solid-State Physics. (4) Lecture, three hours; discussion, one hour. Enforced requisites: course 112. Introduction to basic theoretical concepts of solid-state physics with applications. Crystal symmetry, band theory, free electron, neutron, and electromagnetic waves in a lattice; reciprocal lattice; phonons and their interactions; free electron theory of metals; energy bands. Letter grading.
140B: Properties of Solids. (4) Lecture; three hours; discussion; one hour. Enforced prerequisite: course 140A. Elementary discussion of properties of solids. Use of theory of electrons and the lattice to examine properties of semiconductors, metals, and superconductors, together with the magnetic and dielectric properties of materials. Properties of noncrystalline solids. Letter grading.

144. Polymer Physics. (4) Lecture, three hours; discussion, one hour. Enforced prerequisites: courses 105A, 110A, and 110B. How physical properties of polymers can be derived from mathematical models of chains and coils. Comparison of these models to simulations on random walk problem and used to predict mechanical characteristics of large molecules. Study of networks of polymers and polymeric fluids, with focus on their viscoelastic properties. Discussion of movement of individual polymers within melts. Study of examples of more complex structures, such as polymer fractals. Consideration of applications of this work to biology, with focus on their potential role in evolution and development hypotheses on origins of life. P/NP or letter grading.

150. Physics of Charged-Particle and Laser Beams. (4) Lecture, three hours; discussion, one hour. Requisites: courses 1A, 1B, and 1C (or 1AH, 1BH, and 1CH), 110A, 110B, and 110C. Physics of charged-particle and laser beams presented as a unified subject. Basics of physics of charged-particle beams, covering relativistic particle motion in electromagnetic fields, transverse revolution mechanics, linear and circular accelerators, and advanced topics. Some fundamentals of laser physics, including gain and broadening mechanisms, linear light optics, laser resonators, and advanced topics and applications. P/ NP or letter grading.

180A. Nuclear Physics Laboratory. (4) Laboratory, four hours. P/NP or letter grading.

180C. Solid-State Laboratory. (4) Laboratory, four hours. P/NP or letter grading.

180D. Accelerator Laboratory. (4) Laboratory, four hours. P/NP or letter grading.

180E. Plasma Physics Laboratory. (4) Laboratory, four hours. P/NP or letter grading.

180F. Elementary Particle Laboratory. (4) Laboratory, four hours. P/NP or letter grading.

180G. Soft Matter Laboratory. (4) (Same as Chemistry M120.) Laboratory, four hours. P/NP or letter grading.

180N. Computational Physics and Astronomy Laboratory. (4) (Formerly numbered 188N.) Lecture, one hour; laboratory; requisites: courses 105A, 105B, 110A, 110B, 112 (or Astronomy 115), 115A, 115B. Prior experience in working with computers helpful but not required. Designed to give first-hand experience in solving physics and astronomy problems on computers. Project-based course, with projects selected from core areas of classical mechanics, electrodynamics, quantum physics, statistical physics, and astrophysics. Introduction to problems and to required numerical methods in lectures so students can write programs in one modern programming language of their choice (Python recommended) and carry out numerical experiments with it, with results documented in reports. P/NP or letter grading.

180Q. Quantum Optics Laboratory. (4) Lecture, two hours; laboratory, six hours. Requisite or corequisite: course 115C. Limited to junior/senior Astrophysics and Physics majors. Use of techniques of quantum optics to demonstrate concepts of quantum mechanics, including superposition, quantum measurement, hidden variable theories, and Bell's inequality. Examination and use of modern optics, including lasers, optics, fibers, polarization manipulation, and photon counting. Letter grading.

C186. Neurophysiology: Brain-Mind Problem. (4) Lecture, three hours; discussion, one hour. Requisites: courses 1A, 1B, and 1C, or 5A, 5B, and 5C, or 6A, 6B, and 6C. Chemistry 14A or 20A, Mathematics 3A, 3B, 3C, 33A. How does mind emerge from brain? Provides summary of basic neuroanatomy, synapses, and plasticity. Introduction to commonly used experimental and theoretical techniques of measuring, quantifying, and modeling neural activity, and their relationship to behavior and the use of brain machine interfaces. Letter grading.
Letter grading.

Write simple codes to quantify neural activity patterns. These coding approaches and underpinning technologies for different imaging modalities may be repeated twice for credit. S/U grading.

C286. Neurorheology: Brain-Mind Problem. (4) Formerly numbered CM286.) Lecture, three hours; discussion, one hour. Required of each graduate student doing research in this field. May be repeated for credit. S/U grading.

C291. Research Tutorial: Elementary Particle Theory. (2 or 4) Lecture, one hour; discussion, two hours. Required of each graduate student doing research in this field. May be repeated for credit. S/U grading.

C292. Research Tutorial: Spectroscopy, Low-Temperature Physics, and Solid-State Physics. (2 or 4) Required of each graduate student doing research in these fields, ordinarily during second or third year. Seminar and discussion by staff and students on problems of current research interest in spectroscopy, low-temperature, and solid-state physics. May be repeated for credit. S/U grading.

C293. Research Tutorial: Current Topics in Physics. (2) Lecture, one hour. Seminar and discussion by faculty, postdoctoral fellows, and graduate students on topics of current interest in accelerator physics. May be repeated for credit. S/U grading.

C294. Research Tutorial: Accelerator Physics. (2 or 4) Lecture, one hour; discussion, two hours. Required of each graduate student doing research in this field. May be repeated for credit. S/U grading.

C295. Research Tutorial: Soft Matter/Biological Physics. (2) Tutorial, one hour. Required of each graduate student doing research in this field. One-hour presentation by students on their ongoing research or on agreed-on topics. Students answer critical questions and participate in critical examination of research. May be repeated for credit. S/U grading.

C296. Research Topics in Physics. (2) Advanced study and analysis of current topics in physics. Discussion of current research and literature in research specialty of faculty member teaching course. May be repeated for credit. S/U grading.

M370A. Integrated Science Instruction Methods. (4) (Same as Chemistry M370A and Earth, Planetary, and Space Sciences M370A.) Lecture, two hours; discussion, one hour; laboratory, one hour. Preparation: one introductory lower-division year (including laboratory) each of chemistry, life sciences, and physics and at least two Earth science courses, preferably one with field experience. Classroom management, lesson design, assessment, history of science education. S/U or letter grading.

M370B. Integrated Science Instruction Methods. (4) (Same as Chemistry M370B and Earth, Planetary, and Space Sciences M370B.) Lecture, two hours; discussion, one hour; laboratory, one hour. Preparation: course M370A or Chemistry M370A or Earth, Planetary, and Space Sciences M370A. Application of learning theory to science instruction and classroom management, including use of technology, collaborative learning, laboratory safety, ethical issues, field experiences, and professional development. S/U or letter grading.

375. Teaching Apprentice Practicum. (1 to 4) Seminar, to be arranged. Preparation: apprentice personnel employment as teaching assistant, associate, or fellow. Teaching apprenticeship under active guidance and supervision of regular faculty member responsible for curriculum and instruction at UCLA. May be repeated for credit. S/U grading.

490. Scientific Writing. (2) Seminar, 90 minutes. Practical guidelines for improved scientific writing and oral presentation. Writing of several short papers with subsequent analysis in class. Short blackboard and/or viewgraph presentations. Topics vary. S/U grading.

495. Teaching College Physics. (2) Seminar, two hours; multi-day intensive training at beginning of Fall Quarter. Ordinary during second or third year. Seminar for teaching assistants designed as an introduction to teaching college physics, with emphasis on applied discussion in classroom. Ideas and skills learned are evaluated in the sections of each teaching assistant. May be repeated for credit. S/U grading.

596. Directed Individual Studies. (2 to 12) Tutorial, to be arranged. May be repeated for credit. S/U grading.

587. Preparation for Master's Comprehensive Examination or PhD Qualifying Examinations. (4) Tutorial, to be arranged. May be repeated twice for credit. S/U grading.

588. Master's Thesis Research and Writing. (4) Tutorial, to be arranged. May be repeated twice for credit. S/U or letter grading.

599. PhD Research and Writing. (4 to 12) Tutorial, to be arranged. May be repeated for maximum of 18 units. S/U grading.

PHYSICS AND BIOLOGY IN MEDICINE
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Magnus Dahlbom, PhD (Molecular and Medical Pharmacology)
Diter R. Enzmann, MD (Radiological Sciences)
Michael McNitt-Gray, PhD (Radiological Sciences)
Michael L. Steinberg, MD (Radiation Oncology)

Scope and Objectives
The Physics and Biology in Medicine MS/PhD Program is a CAMPEP-accredited interdepartmental graduate program supported by the departments of Molecular and Medical Pharmacology, Radiation Oncology, and Radiological Sciences. It offers training in four specialties: medical imaging, molecular and cellular oncology, molecular imaging, and therapeutic medical physics. Specialized facilities for training and research are available in the departmental laboratories, as well as in the Crump Institute for Molecular Imaging, Center for Medical Countermeasures against Radiation, and Center for Computer Vision and Imaging Biomarkers, among others. Highly specialized equipment includes state-of-the-art medical imaging modalities such as MRI, CT angiography, and PET/CT in both clinical and preclinical settings, as well as advanced radiotherapy treatment and planning facilities. The program prepares students for careers as independent researchers or professional medical physicists, and graduates pursue academic, industrial, governmental, and clinical careers, regardless of which specialty they pursue.

Graduates in physics and biology in medicine can expect to engage in any combination of research, teaching, clinical service, and consultation. Biomedical physicists are usually employed in hospitals frequently associated with a medical school, where they are members of the academic staff. They are also in demand in high-technology private industry engaging in research and development of diagnostic equipment. In government agencies, biomedical physicists are involved in the formulation and en-
 forcement of regulations applied to the use of radia-
tion in health care delivery.

Graduate Study

Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Division website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Graduate Degrees

The Physics and Biology in Medicine Program offers Master of Science (MS) and Doctor of Philosophy (PhD) degrees in Physics and Biology in Medicine.

Physics and Biology in Medicine

Lower-Division Courses

19. Fiat Lux Freshman Seminars. (1) Seminar. One hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

99. Student Research Program. (1 to 2) Tutorial (su-

ervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-divi-
sion students under guidance of faculty mentor. Stud-
ents must be in good academic standing and en-
rolled in minimum of 12 units (excluding this course).
Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Course

199. Directed Research in Biomedical Physics. (2 to 4) Tutorial, two hours. Limited to juniors/seniors. Supervised individual research or investigation under guidance of faculty mentor. Culminating paper re-
quired. May be repeated for credit. Individual contract required. P/NP or letter grading.

Graduate Courses

200A. Physics and Chemistry of Nuclear Medicine. (4) Lecture, three hours; discussion, one hour. Nuclear structure, statistics of radioactive decay, nuclear radi-
ations and their interaction with matter, nuclear decay processes, nuclear reactions, and compartment models. Physical and chemical properties of radioactive-

tive preparations used in nuclear medicine. Basic prin-
ciples of nuclear medicine imaging, SPECT, and PET. S/U or letter grading.

200B. Nuclear Medicine Instrumentation. (4) Lec-
ture, one hour; laboratory, three hours. Requisite: course 200A. Introduction to nuclear medicine instru-
mentation, including well ionization chambers, probe and well scintillation detectors, scintillation cameras, and single photon and positron emission computed tomography, S/U or letter grading.

201. Medical Radiation Accelerator Design. (4) Lecture, three hours. Requisite: course 216. Overview of physics involved in design of current par-
ticle accelerators (electron, proton, heavy particle) and analysis of characteristics of current accelerators and facility design. S/U or letter grading.

sion of strategies for reducing artifacts and lowering patient dose. Review of specialty systems and regula-


204. Introductory Radiation Biology. (4) Lecture, four hours. Effect of ionizing radiation on chemical and biological systems. S/U or letter grading.

205. Physics of Diagnostic Radiology. (4) Lecture, three hours; laboratory, one hour. Radiofrequency X-ray interactions, X-ray beam generation, and image formation methods, structure of pulse sequences, form imaging methods, structure of pulse sequences, and image formation. Emphasis on hardware, Bloch theory, and image formation. Introduction to recent advances in digital diagnostic imaging systems, with topics centered on instrumenta-
tion including digital subtraction angiography (DSA) methods of producing three-dimensional images. S/U or letter grading.

207. Monte Carlo Methods with Applications for Radiological Sciences. (4) Lecture, two hours; lab-

oratory, one hour. Requisites: courses 200A, 205, 216. Introduction to Monte Carlo methods of com-
pilation to radiation transport of charged and uncharged parti-
cles. Specific applications in radiological sciences. Letter grading.

208A. Medical Physics Laboratory: Medical Imaging. (4) Lecture, two hours; laboratory, one hour. Requisite: course 205. Hands-on experience per-
foming acceptance testing and quality control checks of imaging equipment such as fluoroscopy, digital subtraction angiography, mammography, ultrasound, magnetic resonance imaging, computed tomography, and computed radiography. S/U or letter grading.

208B. Medical Physics Laboratory: Radiation Ther-

apy. (4) Lecture, three hours; laboratory, one hour. Requisites: courses 209 and 216. An introduction to radiation therapy equipment. S/U or letter grading.

M209. Signal and Image Processing for Biomedi-
cine. (4) (Formerly numbered 209.) (Same as Bioen-
geering M209.) Lecture, three hours. Preparation: basic calculus or linear algebra and undergraduate probability. Mathematics and statistical fundamentals necessary. Overview of biomedical image processing. Motion and basic descriptions of linear shift-invariance and point spread functions in continuous and discrete time. Sampling theory and Fourier analysis. Signal repre-
sentation of vector spaces, projection theorem, and least-squares approximations. Discussion of signal subspace methods, correlation and independence, principal component analysis, and independent compo-

tent analysis. Basic ideas in inverse problems and optimization. Application in medical and signal pro-

210. Computer Vision in Medical Imaging. (4) Lec-
ture, three hours; discussion, one hour. Recom-

mended requisites: Mathematics 155, Program in Computing 10A. Study of image segmentation, feature extraction, object recognition, classification, and visu-
alization with biomedical applications. Topics include region-growing, edge detection, mathematical mor-

graphy, clustering algorithms, and volume ren-
dering in lectures, case studies, and programming pro-
jects. S/U or letter grading.

211. Medical Ultrasound. (4) Lecture, 90 minutes; laboratory, two hours. Preparation: one calculus course, and Introduction to Image Processing 11A. Introduction to ultrasound physics, transducer modeling and design, Doppler and color flow instrumentation, biophysics of ultrasound, ultra-

sound phantom design, and ultrasound tissue charac-
zerization techniques. Laboratory included. S/U or letter grading.

212. Biochemical Basis of Positron-Emission To-
mography (PET). (4) Lecture, three hours; discussion, one hour. Introduction to biochemical processes and application of radioactive isotopes non-
invasively by positron-emission tomography (PET). Validation of kinetic models to derive quantitative in-
formation from PET. Introduction to clinical and exper-
imental application of PET. S/U or letter grading.

213. Quantitative Autoradiography. (4) Lecture, three hours; discussion, one hour. Application of quantitative autoradiography for estimating brain and heart function. Topics include 2-deoxyglucose method for metabolic rate; iododantypine method for blood flow; amino acid method for protein synthesis; quantitative receptor autoradiography; neurotransmitter and receptor autoradiography. S/U or letter grading.

214. Medical Image Processing Systems. (4) Lec-
ture, three hours; discussion, one hour. Requisites: courses 209, 210. Advanced image processing and image analysis techniques applied to medical images. Discussion of approaches to computer-aided diag-

nosis and image quantitation, as well as application of pattern classification techniques (neural networks and discriminant analysis). Examination of problems from several imaging modalities (CT, MR, CR, and mam-
mography). S/U or letter grading.

215. Breast Imaging Physics and Instrumentation. (4) Lecture, two hours; laboratory, two hours. Requi-
site: course 205. Special requirements of mammmog-

raphy, design of dedicated mammography X-ray units from generators and tubes through screen/film cas-
settes. Stereotactic biopsy units. Cost/benefit contro-

dversy of screening mammography, digital mammog-

raphy, computer-aided diagnosis, telemammography, breast MRI, and breast ultrasound. S/U or letter grading.

217. Fundamentals of Dosimetry. (4) Lecture, three hours; laboratory, one hour. Review of fundamental in-

teractions of radiation and matter and introduction to fundamentals of radiation dosimetry. Overview of do-
simetry instrumentation as well as radiation sources. S/U or letter grading.

218. Radiologic Functional Anatomy. (4) Lecture, three hours; discussion, one hour. Introduction to human anatomy, cell biology, and physiology as visual-
ized through methods of molecular imaging, radiog-

raphy, CT, MRI, ultrasonography, PET, and SPECT. Letter grading.

M219. Principles and Applications of Magnetic Resonance Imaging. (4) (Same as Bioengineering M219.) Lecture, three hours; discussion, one hour. Basic principles of magnetic resonance (MR), physics, and image formation. Emphasis on hardware, Bloch equations, analytic signal, and contrast mechanisms, spin and gradient echoes, Fourier trans-
form imaging methods, structure of pulse sequences, and various scanning parameters. Introduction to ad-
anced techniques in rapid imaging, quantitative im-

aging, and spectroscopy. Letter grading.

220A-220D. Laboratory Rotations in Biomedical Physics. (2-2) Laboratory, two hours. Laboratory proj-

ects to provide students with introduction to field. One or two 2-hour laboratories per week. P/NP grading. 220A. Biophysics; 220B. Medical Imaging; 220C. Therapeutic Medical Physics; 220D. Radiation Biology and Experimental Radiation Therapy.


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223. Seminar: Radiation Biology. (4) Seminar, four hours. Exploration of physiological and molecular mechanisms that impact on treatment and radiation to malignant tissues to improve radiation, with particular emphasis on critical and high in-depth analysis of approaches through which such responses can be modified in therapeutic setting. Understanding of parameters integral to integrating biological information into process of treatment planning and delivery. S/U grading.

225. Contrast Mechanisms and Quantification in Magnetic Resonance Imaging. (4) Lecture, four hours. Recent developments in M219. Introduction to magnetic resonance contrast mechanisms and quantification techniques in magnetic resonance imaging. Topics include exogenous and endogenous contrast mechanisms, perfusion and permeability, advanced diffusion and q-space analysis, chemical exchange and magnetization transfer imaging, and relaxometry. Letter grading.

267. Human Disease: Current and Future Roles of Biomedical Physics. (4) Lecture, three hours; discussion, one hour. Present and future roles of biomedical physics in diagnosis and treatment of human disease, with focus on interdisciplinary nature of this field. Exploration of two diseases in depth with detailed description of roles of physics-based diagnostic imaging and therapeutic options for each disease. Description of current and future technologies, as well as techniques that expand interaction between diagnosis and therapy. Letter grading.

M229. Advanced Topics in Magnetic Resonance Imaging. (4) (Formerly numbered 229.) (Same as Bioengineering M229.) Lecture, four hours. Requisite: course M219. Designed for students interested in pursuing research related to development or translation of new magnetic resonance imaging (MRI) technique. Basic tools and understanding of recent MRI developments that have had high impact on field, involve novel pulse sequence design or image reconstructions, and enable imaging of anatomy or function in way that was not previously possible with modality. Topics include in-depth sequence simulation, RF pulse design, rapid image acquisition, parallel imaging, compressed sensing, image reconstruction and processing, and compensation, chemical-shift imaging and understanding, and understanding/avoiding artifacts. Programming exercises in MATLAB to provide hands-on experience. Letter grading.

M230. Computed Tomography: Theory and Applications. (4) (Same as Biomathematics M230.) Lecture, four hours. Computed tomography is three-dimensional imaging technique being widely used in radiology and in biomedical research and therapy. Basic principles of computed tomography (CT), various reconstruction algorithms, special characteristics of CT, physics in CT, and various biomedical applications. S/U or letter grading.

231. Advanced Treatment Planning in Radiation Therapy. (3) Lecture, four hours. Enforced requisites: courses 203, 216. Designed to provide theoretical and practical understanding of treatment planning techniques utilized in radiation therapy. Topics include clinical treatment planning work flow, general planning principles and strategies, and specific considerations for various treatment delivery modalities and advanced treatment techniques. Detailed discussion on dose calculation algorithms and inversely planned and optimization. Clinical treatment planning demonstration using commercial treatment planning systems used to provide theoretical understanding of clinical applications and implementation. S/U or letter grading.

M248. Introduction to Biological Imaging. (4) (Same as Bioengineering M248 and Pharmacology M248.) Lecture, three hours; laboratory, one hour; outside study, seven hours. Exploration of role of biological imaging in modern biology and medicine, including imaging physics, instrumentation, image processing, and applications of imaging for range of modalities. Practical experience provided through series of imaging laboratories. Letter grading.


268. Radiopharmaceutical Chemistry. (4) Lecture, two hours; discussion, two hours. Introduction to advanced concepts in chemistry of radiopharmaceuticals and technologies for radiopharmaceutical production and analysis. Areas of focus are (1) radiochemistry with fluorine-18 and other isotopes, (2) techniques for synthesis automation and optimization, (3) analytical instrumentation and tools in radiochemistry, and (4) PET tracer design and development. Introduction to multistep process of target identification, tracer design, radiosynthesis development, in vitro and in vivo tracer evaluation, radiochemistry automation for routine production, and preparation of clinical grade doses (as prerequisite for clinical translation of novel molecular imaging tracers). Lectures covering fundamentals complemented with practical sessions that provide hands-on training with technologies and methods used in routine synthesis, synthesis optimization, analytical methods (quality control testing), and in vitro and in vivo evaluation of PET probes. S/U or letter grading.

269. Seminar: Medical Imaging. (1) Seminar, one hour. Continuous registration required of students in medical imaging specialty. Topics of current interest in medical imaging, with lecturers from department, other universities, and private industry. S/U or letter grading.

M285. Functional Neuroimaging: Techniques and Applications. (3) (Same as Bioengineering M284, Neuroscience M285, Psychiatry M285, and Psychology M278.) Lecture, three hours. In-depth examination of activation imaging, including MRI and electrophysiological methods, data acquisition and analysis, experimental design, and results obtained thus far in human systems. Focus on understanding technological constraints and how to interpret results. Laboratory visits and design and implementation of functional MRI experiments. S/U or letter grading.

286. Image Registration Techniques. (4) Lecture, four hours. Preparation and methods mathematical background. Examination of state-of-art image registration methods that exist today. Mathematical descriptions of each different class of registration methods and two-dimensional/three-dimensional/four-dimensional implementation details. Programming of registration methods in MATLAB/C/C++/CUDA/JAVA interfaces so students learn all registration methods currently investigated. Letter grading.

M424. Functional Magnetic Resonance Imaging Journal Club. (2) (Same as Psychiatry M424.) Discussion, 90 minutes. Limited to 10 students. Current topics in functional neuroimaging, with emphasis on novel applications, analysis, and acquisition methods. Presentation and critique of student papers. Overall emphasis on magnetic resonance imaging. Example areas include tractography through diffusion tensor imaging theory, event-related experimental designs, parallel receiver MRI imaging, integrated electrophysiological and image acquisition. S/U grading.

495. Special Studies in Biomedical Physics. (4) Seminar, by arrangement; laboratory, four hours. Teaching assistance in graduate laboratory courses under supervision of faculty member. S/U grading.

596. Research in Biomedical Physics. (4 to 12) Tutorial, to be arranged. Directed individual study or research. Only one 596 course may be applied toward MS degree requirements. May be repeated for credit. S/U or letter grading.

598. Research for and Preparation of MS Thesis. (4 to 12) Tutorial, to be arranged. Two 598 courses (or 598 and 596 combined) may be applied toward MS degree requirements. May be repeated. S/U grading.


PHYSIOLOGY

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Physiology
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Stephen C. Cannon, MD, PhD, Chair
Thomas J. O’Dell, PhD, Executive Vice Chair

Scope and Objectives
Physiology is the science of the functional activities of the human body. This covers a wide range, including observations on humans and experiments on animals and model systems in order to understand principles. Physiology is the science most directly relevant to human medicine in all its specialties and to understanding all environmental factors affecting human life. It is also a pure science of great challenge because of the complexity of its problems and its extensive interaction with mathematical, physical, biochemical, and engineering sciences, as well as with other branches of biology. Within the prescribed curriculum, students may specialize in cellular and molecular physiology, theoretical and mathematical physiology, and organ systems and integrative phenomena, including neuroscience and behavioral physiology.

The Department of Physiology offers post-doctoral training in research and welcomes students interested in articulated MD/PhD programs. Applicants interested in pursuing graduate study may apply directly to the interdepartmental Molecular, Cellular, and Integrative Physiology PhD program.

Physiology
Lower-Division Courses
19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-divi-
Upper-Division Courses

188SA. Individual Studies for USIE Facilitators. (1) Tutorial, to be arranged. Enforced corequisite: Honors Collegium 101E. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to discuss selected USIE seminar topic, conduct preparatory research, and begin preparation of syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.

188SB. Individual Studies for USIE Facilitators. (1) Tutorial, to be arranged. Enforced corequisite: course 188SA. Enforced corequisite: Honors Collegium 101E. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to finalize course syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.

188SC. Individual Studies for USIE Facilitators. (2) Tutorial, to be arranged. Enforced corequisite: course 188SB. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor while facilitating USIE 88S course. Individual contract with faculty mentor required. May not be repeated. Letter grading.

199. Directed Research in Physiology. (2 to 4) Tutorial, to be arranged. Limited to juniors/seniors. Supervised individual research or investigation under guidance of faculty mentor. Culminating paper or project required. May be repeated for credit. Individual contract required. P/np or letter grading.

Graduate Courses


220. Methods in Cell Physiology. (6) Linear circuit analysis, including admittance, transfer admittance, transfer function, and filters using transform methods. Application of these concepts to electronic analog circuits in lectures and laboratory, with emphasis on operational amplifiers. Applications to electrophysiology include microelectrode amplifiers, voltage clamp and patch clamp techniques, with circuit analysis and noise considerations. Digital electronics cover logic gates, sequential circuits, and A/D and D/A conversion, with introduction to sampling theory.

221. Cell Physiology: Excitability. (6) Requisite: course 220. In-depth coverage of general properties of excitable cells, linear cable properties, nonlinear conductance changes, and generation and propagation of the nerve impulse. Voltage gating and gating currents, as well as relationship between macroscopic conductance and single channel properties discussed in analytical detail using original publications.

296. Current Topics in Physiology. (2 to 4) Lecture, one hour; discussion, one hour. Designed for graduate students. Students read primary literature in a specified area and conduct or participate in discussions on these papers. May be repeated for credit. S/U or letter grading.

596. Directed Individual Study or Research. (2 to 12) Tutorial, to be arranged. S/U grading.

597. Preparation for MS Comprehensive Examination or PhD Qualifying Examinations. (2 to 12) Tutorial, to be arranged. S/U grading.


**Political Science**

**College of Letters and Science**

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**Political Science**

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**Barbara Geddes, PhD, Chair**

**Professors**

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Karen J. Orren, PhD
Anthony R. Pagden, PhD
David Panagia, PhD
Efrin O. Perez, PhD
Mark A. Peterson, PhD
Daniel N. Posner, PhD (Coleman Professor of International Development Studies)

Ronald L. Rogowski, PhD
Michael L. Ross, PhD
Thomas Schwartz, PhD
Gary M. Segura, PhD
Guliya Sissa, PhD
Steven L. Spiegel, PhD
Arthur A. Stein, PhD
James W. Tong, PhD
Daniel S. Treisman, PhD
Lynn Vavreck Lewis, PhD (Marvin Hoffenberg Professor of American Politics and Public Policy)

David O. Wilkinson, PhD
John R. Zaller, PhD

**Professors Emeriti**

Joel D. Aberbach, PhD
James D. DeNardo, PhD
Leonard Freedman, PhD
Robert S. Gerstein, PhD
Edward Gonzalez, PhD
Edmond Keller, PhD
Carole Pateman, DPNI
David C. Rapoport, PhD
Raymond A. Rocco, PhD
Richard N. Rosecrance, PhD
Richard L. Sklar, PhD
Marc Trachtenberg, PhD
David A. Wilson, PhD
Charles E. Young, PhD

**Associate Professors**

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Natalie Matsuoka, PhD
Margaret E. Petersen, PhD
Michael F. Thies, PhD
Robert F. Trager, PhD

**Assistant Professors**

Graeme D. Blair, PhD
Erik K. Hartman, PhD
Chad J. Hazzlett, PhD
Eric Min, PhD

Christopher N. Tausanovitch, PhD
Adjunct Assistant Professor
James A. Desveaux, PhD

**Scope and Objectives**

The undergraduate major in the Department of Political Science aims to provide students with understanding of basic political processes and institutions as these operate in different national and cultural contexts. It also covers the interaction between nation states, the changing character of the relations between citizens and governments, and the values and criteria by which the quality of political life is judged. The program may be individually focused to serve the needs of the liberal arts major, the student seeking preparation for graduate work in political science, public administration, law, and other professional fields, and the student preparing for specialized roles in political and public organizations. The graduate program leads to the PhD degree in Political Science (a master’s degree may be earned in the process of completing PhD requirements). It is designed to give students a strong foundation in the discipline while enabling them to acquire additional skills for advancing their professional careers.

**Undergraduate Study**

**Political Science BA**

**Learning Outcomes**

The Political Science major has the following learning outcomes:

- Critical thinking about basic political processes, institutions, and concepts as they operate in different national and cultural contexts
- Impartial evaluation of arguments
- Application of mathematical and logical reasoning to political processes
- Use and evaluation of statistical and other types of evidence in arguments
- Recognition of limits of quantitative and non-quantitative analysis
- Knowledge of diverse theories of politics by engaging critically with texts, media, and contexts
- Employment of cultural, hermeneutical, normative, and historical approaches
- Location, evaluation, and use of information and scholarship needed to place particular political events in broader historical, cross-national, and theoretical contexts
- Demonstrated familiarity with various approaches to the study of politics, and their application to specific questions, puzzles, and debates
- Written and oral arguments using appropriate evidence, with sensitivity to opposing perspectives, about significant political processes, events, and concepts

**Premajor**

All students intending to major in Political Science must enroll as Political Science premajors. After
Preparation for the Major
Required: Four lower-division courses from Political Science 10, 20, 30, 40, 50. Students must also take Political Science 6 or 6R. Statistics 10 or 12 may be substituted for course 6 or 6R.

Students must complete all premajor courses with a 2.0 grade-point average by the time they attain 135 units. Admission to the major is granted only after successful completion of all lower-division requirements.

Transfer Students
Transfer applicants to the Political Science major with 90 or more units must complete the following introductory courses prior to admission to UCLA: one statistics course and four courses from political theory, world politics, game theory, American politics, or comparative politics.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

The Major
Required: Ten upper-division courses (40 units) selected from Political Science M105 through 199, each taken for a letter grade. Students are required to maintain a 2.0 overall grade-point average in all upper-division political science courses.

Upper-division political science courses are organized into six fields: (I) political theory, (II) international relations, (III) American politics, (IV) comparative politics, (V) methods and models, and (VI) race and ethnic politics.

In fulfilling the requirement of 10 upper-division political science courses, students must satisfy the following:

1. A concentration in one field consisting of at least three upper-division courses in that field
2. A distribution requirement of at least one upper-division course in each of three different fields outside the field of concentration; multfield courses from the concentration field may not satisfy a distribution field
3. Four additional political science courses

Courses 191H, 195CE, 198, and 199 may not be applied toward either the concentration or distribution requirement.

Honors Program
The department honors program is open to seniors and to students who (1) have completed five upper-division political science courses (two of which are in one field), (2) have a 3.5 grade-point average in upper-division political science courses, and (3) are eligible for College of Letters and Science honors. Students should have substantial experience in writing research papers before they enter the honors program or course 191H.

Students wishing to qualify for graduation with departmental honors must complete courses 191H and 198, in which a senior thesis is written. Successful completion of the honors program is indicated on the transcript and diploma.

Graduate Study
Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Division website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Graduate Degrees
The Department of Political Science offers Master of Arts (MA), Candidate in Philosophy (CPHIL), and Doctor of Philosophy (PhD) degrees in Political Science.

Political Science
Lower-Division Courses
6. Introduction to Data Analysis. (5) Lecture, three or four hours; discussion, one hour (when scheduled). The use of computer as aid in analyzing data from various fields of political science, among them comparative politics, international relations, American politics, and public administration. P/NP or letter grading.

6R. Introduction to Data Analysis—Research Version. (5) Lecture, three or four hours; discussion, one hour (when scheduled). Enforced corequisite: course 50R. Not open for credit to students with credit for course 6.

7. Introduction to Data Analysis—Research Version. (5) Lecture, three or four hours; discussion, one hour (when scheduled). Enforced corequisite: course 50. Not open for credit to students with credit for course 6R.

8. Introduction to Comparative Politics. (5) Lecture, three or four hours; discussion, one hour. Required of all students concentrating in Field II. Introduction to problems of world politics, P/NP or letter grading.

9. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

11. Politics and Strategy. (5) Lecture, three hours; discussion, one hour. Required of all students concentrating in Field II. Introduction to problems of world politics, P/NP or letter grading.

30. Politics and Strategy. (5) Lecture, three or four hours; discussion, one hour (when scheduled). Introduc-
tion to study of strategic interaction in political applications. Use of game theory and other formal modeling strategies to understand politics. P/NP or letter grading.

40. Introduction to American Politics. (5) Lecture, three hours; discussion, one hour. Basic institutions and processes of democratic politics. Treatment of themes such as constitutionalism, representation, participation, and leadership coupled with particular emphasis on the American case. P/NP or letter grading.

50. Introduction to Comparative Politics. (5) Lecture, three hours; discussion, one hour. Not open for credit to students with credit for course 40. Study of constitutional principles, governmental institutions, and political processes in selected countries. P/NP or letter grading.

50R. Introduction to Comparative Politics—Research Version. (5) Lecture, three or four hours; discussion, one hour (when scheduled). Enforced corequisite: course 6R. Not open for credit to students with credit for course 50.

60. Ethics and Governance. (5) Lecture, three or four hours; discussion, one hour (when scheduled). To study questions of can we all just get along. Students play games of cooperation, coordination, collaboration, and competition and examine whether and how diversity, disagreement, and democracy influence game play, to understand under what conditions diversity feeds productively or counterproductively into group effort. Development of self- and other-awareness of emergent properties of disagreement to appreciate how different kinds of social organization promote or undercut social cognition and collective action. Such understanding needs to develop bottom-up through experiential and interactive learning, active and analytical learning, systems thinking, and real-world application. P/NP or letter grading.

69. Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to lower-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

69HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to lower-division lecture course. In-depth study, with lecture course instructor, designed to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Courses
M105. Economic Models of Public Choice. (4) (Same as Economics M135.) Lecture, three or four hours; discussion, one hour (when scheduled). Prepara-
tion: any lower-division political science course. En-
forced corequisite: Economics 11. Designed for juniors/seniors. Analysis of methods and consequences of ar-
viving at collective decisions through political mecha-
nics. Topics include free-rider problem, voting and majority choice, demand revelation, and political bar-
gaining. P/NP or letter grading.

Field I: Political Theory
M111A. Ancient and Medieval Political Theory. (4) (Same as Classics M121.) Lecture, three or four hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Exposition and critical analysis of major thinkers such as Plato, Aristotle, Thucydides, St. Augustine, Aquinas, Machiavelli, and more and questions such as forms of government, citizenship, justice, happiness, rhetoric, religion, emotion. P/NP or letter grading.

111B. Early Modern Political Theory. (4) Lecture, three or four hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Exposition and critical analysis of major thinkers such as Machia-
velli, More, Montaigne, Hobbes, Locke, Rousseau, Smith, Condorcet, and Kant and questions such as representation, property, autonomy, and political economy. P/NP or letter grading.

111C. Latin Modern Political Theory. (4) Lecture, three or four hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Exposition and critical analysis of major thinkers such as Bentham, De Tocqueville, Hegel, Mill, Marx, Nietzsche, Ar-

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112A. Democratic Theory. (4) Lecture, three or four hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Critical analysis of selected major political texts, with an emphasis on arguments in contemporary democratic theory.

M112B. Invention of Democracy. (5) (Same as Classics M125.) Lecture, three or four hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Democracy was invented in ancient Greece as a political form grounded on equality before law, citizenship, and freedom. It came into existence as struggle by democracy as it has never been. It remains as an expression of its power, kratos. It became not only the regime capable of including all members of community while disregarding wealth, status, and diverging interests. Examination of history and theory of ancient democracy. P/NP or letter grading.

113A. Problems in 20th-Century and Contemporary Political Theory. (4) Lecture, three or four hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Study and interpretation of theorists who have focused their analyses on social and political problems of 20th century. P/NP or letter grading.

113B. Politics, Theory, and Film. (4) Lecture, three or four hours; discussion, one hour (when scheduled). Recommended requisite: course 10. Designed for juniors/seniors. Intense and individualized examination of politically significant films with respect to central issues in political theory such as power and truth in light of relevant political theorists. P/NP or letter grading.

114A. American Political Thought I, 1620 to 1865. (4) Lecture, three or four hours; discussion, one hour (when scheduled). Recommended requisite: course 10. Designed for juniors/seniors. Exposition and critical analysis of American political thinkers from Puritan period to Civil War. P/NP or letter grading.

114B. American Political Thought II, 1865 to Present. (4) Lecture, three or four hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Can’t we all just get along? (4) Lecture, three or four hours; discussion, one hour (when scheduled). Course 114A is not requisite to 114B. Designed for juniors/seniors. Study of ideas of political democracy from Reconstruction to present. P/NP or letter grading.

M115C. Citizenship and Public Service. (4) (Same as Community Engagement and Social Change M115.) Lecture, three or four hours; discussion, one hour (when scheduled). Recommended requisite: course 10. Designed for juniors/seniors. Study of ways in which we have conceived of the relationship between citizenship and public service, how these ideas have changed over time, and frameworks for thinking about citizenship in era of markets and globalization. P/NP or letter grading.

115D. Diversity, Disagreement, and Democracy: Can’t We All Just Get Along? (4) Lecture, three or four hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Can’t we all just get along? Study of diversity, disagreement, and democracy. Diversity covers individual differences, cultural differences, and human universals; groupism, factionalism, and identity politics; multiculturalism and one-world ethics. Disagreement includes moral, ideological, and party-political disagreement; resolvable and irresolvable kinds of disagreement; groupthink and group processes; and belief and information cascades. Democracy stands for political mechanisms of information aggregation; political mechanisms to resolve differences, or to keep peace among people with irreconcilable differences; emergence and spread of democracy, liberty, and rule of law. Letter grading.

115E. Humanist Practice and Civic Culture. (4) Seminar, three hours. Enforced requisites: courses 10, M115C. Designed for juniors/seniors. Exploration of connection between humanist practices (philosophy, sociability, science, republican self-fashioning) and promotion of civic ethics—culture that would promote flourishing civil society. How has humanism informed our Western understanding of republicanism and civic responsibility? What aspects of our humanist heritage maintain relevance for world that many describe as posthumanist? What form of civic culture is most appropriate for North American citizens in 21st century? P/NP or letter grading.

116A. Marxism. (4) Lecture, three or four hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Critical analysis of origins, nature, and development of Marxist political theory. P/NP or letter grading.

116B. Continental Political Thought. (4) Lecture, three or four hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Study of important text in continental political theory, including relationship between politics and reason, skepticism, and political freedom. P/NP or letter grading.

117. Jurisprudence. (4) Lecture, three or four hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Development of law and legal systems; consideration of fundamental legal concepts; contributions and influence of modern schools of legal philosophy in relation to law and government. Letter grading.

118. Laws of War and Peace from Conquest of America to Declaration of Human Rights (1948). (4) Lecture, three hours; discussion, one hour (when scheduled). Recommended requisite: course 10. Designed for juniors/seniors. Examination of theories of international relations and international law, with special emphasis on warfare, from conquest of America to end of World War II. P/NP or letter grading.

119. Special Studies in Political Theory. (4) Lecture, three or four hours; discussion, one hour (when scheduled). Preparation: one course in Field I. Required course: course 10. Designed for juniors/seniors. Intensive examination of one or more special problems appropriate to political theory. Sections offered on regular basis, with topics announced in preceding term. May be repeated for credit with topic change. P/NP or letter grading.

M119A. Modern Receptions of Ancient Political Thought. (4) (Same as Classics M124.) Lecture, three hours. Designed for juniors/seniors. Study of how Western culture has conceived and reinterpreted political thought of ancient Greeks and Romans. Topics include examination of influential case(s) of modern reception of classical antiquity. P/NP or letter grading.

Field II: International Relations

120A. Foreign Relations of U.S. (4) (U.S.) Lecture, three or four hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Study of political aspects of international relations. P/NP or letter grading.

120B. World Politics and U.S. Foreign Policy after September 11. (4) Lecture, three or four hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Video lectures by leading scholars as well as live lectures and discussion on complex problems such as terrorism, nuclear proliferation, and Arab-Israel conflict. P/NP or letter grading.

121A. Studies in Formulation of American Foreign Policy. (4) Lecture, three or four hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Study of formation of American foreign policy with respect to individual cases. Consult Schedule of Classes for topics to be offered in specific term. P/NP or letter grading.

122A. World Order. (4) Lecture, three or four hours; discussion, one hour (when scheduled). Requisite: course 20. Designed for juniors/seniors. Study of problems of international system seen as community capable of cooperation and development. P/NP or letter grading.

M122B. Global Environment and World Politics. (4) (Same as Environment M161.) Lecture, three or four hours; discussion, one hour (when scheduled). Recommended requisite: course 20. Politics and policy of major global environmental issues such as climate change, integrating law, policy, and scientific perspectives. P/NP or letter grading.

123A. International Law. (4) Lecture, three or four hours; discussion, one hour (when scheduled). Requisite: course 20. Designed for juniors/seniors. Study of nature and place of international law in conduct of international relations. P/NP or letter grading.

123B. International Organizations. (4) Lecture, three or four hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Overview of both theory and functioning of international organizations in promoting international cooperation. Required readings include both statistical and formal models. P/NP or letter grading.

124A. International Political Economy. (4) Lecture, three or four hours; discussion, one hour (when scheduled). Recommended requisite: course 20. Designed for juniors/seniors. Study of political aspects of international economic issues. P/NP or letter grading.

124C. Politics of Latin American Economic Development. (4) Lecture, three or four hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Interaction of international and domestic factors in political and economic evolution of Latin America. P/NP or letter grading.

125A. Arms Control and International Security. (4) Lecture, three or four hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Arms control in context of international security in nuclear age. Nuclear arms race; relationship between deterrence and technology and ideology; nuclear proliferation; outer space. P/NP or letter grading.

126. Peace and War. (4) Lecture, three or four hours; discussion, one hour (when scheduled). Recommended requisite: course 20. Designed for juniors/seniors. Theory and research on causes of war and conditions of peace.

127A. Atlantic Area in World Politics: Western Europe. (4) Lecture, three or four hours; discussion, one hour (when scheduled). Designed for juniors/seniors. External relations of United Kingdom, West Germany, France, Italy, and other European members of NATO, in regard to European security in context of Atlantic Alliance. P/NP or letter grading.


128B. International Relations of Post-Communist Russia. (4) Lecture, three or four hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Survey of foreign policy of post-Communist Russia, with special emphasis on Russia’s relations with NATO, the former communist states of East Central Europe, China, and the Commonwealth of Independent States.

129. Diplomacy and War. (4) Lecture, three or four hours; discussion, one hour (when scheduled). Requisite: course 20 or 137A. Designed for juniors/seniors. Analysis of role of diplomacy in great power politics, history of diplomatic institutions, advantages of public and private diplomacy, bilateral and multilateral settings, and theory and practice of deterrence and coercion. Use of game theoretic reasoning and historical analysis. Prior exposure to both useful but not required. P/NP or letter grading.

132A-M132B. International Relations of Middle East. (4-4) Lecture, three or four hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Promotion of civic ethos—culture that would promote flourishing civil society. How has humanism informed our Western understanding of republicanism and civic responsibility? What aspects of our humanist heritage maintain relevance for world that many describe as posthumanist? What form of civic culture is most appropriate for North American citizens in 21st century? P/NP or letter grading.
141E. Elections, Media, and Strategy. (4) Lecture; three or four hours; discussion, one hour (when scheduled). Requisite: course 30. Designed for juniors/seniors. Analysis of elections and media, including game-theoretic analysis, Downs spatial model of elections, valence characteristics in elections, campaign finance, endogeneity problems in social sciences, liberal bias in media, industrial organization of news industry, and effects of media on voter decisions. May be applied toward Field III or V. P/NP or letter grading.

142A. Political Parties and Interest Groups. (4) Lecture; three or four hours; discussion, one hour (when scheduled). Requisite: course 10. Designed for juniors/seniors. Organization and activities of political parties in the U.S. Attention to historical development of the parties, nature of party change, campaign functions and electoral role of the parties, membership problems and party activists, political finance, and policy formulation practices. P/NP or letter grading.

M142D. Understanding Public Issue Life Cycle. (4) (Same as Public Policy M127.) Lecture; three or four hours; discussion, one hour (when scheduled). Recommended preparation: courses 10, 40, and one course from Economics 1, 2, 5, 11, or 101. Examination of how public issue life cycle is shaped by (1) economic and political activities of actors—business, news media, mass, political, organizations. Congress, the president, regulatory agencies, and courts and (2) ideology, cognitive biases, and ethical reasoning. P/NP or letter grading.


143B. Metropolitan Governance. (4) Lecture; three or four hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Specific examples from 20th century of U.S. Suburban development and role of Supreme Court as interpreter of the U.S. Constitution. Reading of Supreme Court decisions. P/NP or letter grading.

143C. Politics of American Suburbanization. (4) Lecture; three or four hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Suburbanization of American suburbs, particularly in post-WWII era. Dominant themes focus primarily on historical patterns and implications of U.S. racial/ethnic inclusion and exclusion; class and gender roles; classic and contemporary theories of metropolitan governance; and civic/political implications of American suburbanization. Select topics and case studies include housing, schools, and taxes; immigrant and ethnic minority suburbanization; suburban sprawl and uneven growth; suburban decline; and regionalism. P/NP or letter grading.

145C. Constitutional Law—Civil Liberties. (4) Lecture; three or four hours; discussion, one hour (when scheduled). Requisite: course 40. Designed for juniors/seniors. Protection of civil and political rights and liberties under constitution. P/NP or letter grading.

145D. Judicial Oversight of Bureaucracy. (4) Lecture; three or four hours; discussion, one hour (when scheduled). Requisite: course 40. Designed for juniors/seniors. Legal controls of administration action. Substantive and procedural limits on administrative discretion imposed by legislation, executive and judicial agencies, and sources of legal powers of administrative bodies within these limits. P/NP or letter grading.

145E. Constitutional Law—Rights of Accused. (4) Lecture; three or four hours; discussion, one hour (when scheduled). Requisite: course 40. Designed for juniors/seniors. Constitutional rights of persons suspected or convicted of criminal offenses. theoretical frameworks and attention to how protections have changed through history. P/NP or letter grading.

146B. Bureaucracy and Public Management. (4) Lecture; three or four hours; discussion, one hour (when scheduled). Preparation: familiarity with American Government. Requisite: course 40. Designed for juniors/seniors. Nature of bureaucracy in modern government, with emphasis on U.S.; examination of why government agencies behave as they do. Focus on real and imagined problems with bureaucratic rule; evaluation of commonly proposed solutions for these problems. Examples from schools, armies, welfare bureaus, regulatory agencies, and legal services, among others. P/NP or letter grading.

146D. Theories of Organization and Decision Making. (4) Lecture; three or four hours; discussion, one hour (when scheduled). Requisite: course 40. Designed for juniors/seniors. Examination of frameworks for studying public and private bureaucracies, with emphasis on ideologies, values, behavioral patterns, and concepts of organization. P/NP or letter grading.

146E. National Policy Development and Implementation. (4) Lecture; three or four hours; discussion, one hour (when scheduled). Requisite: course 40. Designed for juniors/seniors. Investigation of complex process of policy development and implementation in U.S., including institutions of government and policy making; major sources of public policy in modern democracies; and the role of professional policy agencies as well as private organizations. Subsections offered on specific political issues, with topics announced in preceding term. P/NP or letter grading.

147A. Overview. (4) Lecture; three or four hours; discussion, one hour (when scheduled). Requisite: course 40. Designed for juniors/seniors. Introduction to historical development of American politics and ideas and institutions that drive durable change over time. Examination of theories, concepts, and analytical tools at center of developmental inquiry. P/NP or letter grading.

147B. Period Inquiry. (4) Lecture; three or four hours; discussion, one hour (when scheduled). Requisite: course 40. Designed for juniors/seniors. Examination of one period in American political history. Critical features fostering stability and change. Discussion of contributions to structure and content of contemporary American politics. Possible periods: Founding, Reconstruction, Progressive Era, New Deal, and Cold War. Consult Schedule of Classes for topics to be offered in specific term. P/NP or letter grading.

147C. Institutional Development. (4) Lecture; three or four hours; discussion, one hour (when scheduled). Requisite: course 40. Designed for juniors/seniors. Examination of one American political institution and its development over time, or interaction of American Politics and some aspect of policy. Assessment of broader political environment of politics, isolating points of contact, conflict, and pressure for change. Possible topics include party development,
Field IV: Comparative Politics

150. Political Violence. (4) Lecture, three or four hours; discussion, one hour (when scheduled). Designated for juniors/seniors. Examination of one or several different uses of violence in revolutionary process: demonstrations, mass uprisings, coup d’etat, assassination, and terrorism. P/NP or letter grading.

151A-151B. African Politics. (4–4) Lecture, three or four hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Consult Schedule of Classes for topics to be offered in a specific term. Letter grading.

151B. Political Economy of Africa. (4) Lecture, three or four hours; discussion, one hour (when scheduled). Designed for juniors/senior. Examination of interactions of economic and political factors in African development, with special attention to political basis of inappropriate economic policy during early post-independence period and change toward a more appropriate economic strategy in recent times. Letter grading.

151C. Special Topics in African Politics. (4) Lecture, three or four hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Consult Schedule of Classes for topics to be offered in a specific term. Letter grading.

152. Political Economy of Climate Change. (4) (Same as International Development Studies 1510.) Lecture, three hours; discussion, one hour (when scheduled). Examination of how governments at international, national, and regional levels are addressing—or not addressing—extraordinary challenges of climate change. Use of combination of readings, lectures, and discussions to better understand causes, consequences, and policies to address most important political problem of our time—not just in US, but in other major countries as well. Concentration on challenge of mitigating, rather than adapting to, climate change; and concentration on energy use, rather than agriculture, forestry, and land use. Letter grading.

153A. Comparative Government and Politics of Western Europe: West European Government and Politics. (4) Lecture, three or four hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Comparative study of constitutional and political structure of West European states, with particular attention to contemporary problems. P/ NP or letter grading.

154A-154B. Governance and Politics in Latin America. (4–4) Lecture, three or four hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Comparative study of governmental and political of development, organization, and practices. P/ NP or letter grading.

154A. States of Middle America. Enforced prerequisite: course 50 or 50R. 154B. States of South America.

156A. Government and Politics of Post-Communist States: Russia. (4) Lecture, three or four hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Intensive study of institutions and political development in Russia, with special attention to legacy of Soviet ideology and current domestic political, economic, and social questions. P/ NP or letter grading.

156B. Fascism and Right-Wing Extremism: Historical and Present Day. (4) Lecture, three or four hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Historical rise of Fascism in Germany, Italy, Japan, and Eastern Europe; its social support and public response. Focus on Ideology and Nazi economic policy(Tooze, Wages of Destruction). Do today’s xenophobic movements in Europe and U.S. resemble earlier Fascism in ideology and social base? P/ NP or letter grading.

157. Government and Politics in the Middle East. (4) Lecture, three or four hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Comparative study of government in the Arab States, Turkey, Israel, and Iran. P/ NP or letter grading.

158. Southeast Asian Politics. (4) Lecture, three or four hours; discussion, one hour (when scheduled). Requisite: course 50. Designed for juniors/seniors. Survey of political environment in modern Southeast Asian states. Use of comparative analysis to address major problems confronting region, including democratization, economic growth, drug trade, deforestation, and security threats. Letter grading.

159A-159B. Government and Politics of China. (4–4) Lecture, three or four hours; discussion, one hour (when scheduled). Designed for juniors/seniors. China in Reform. (4) Lecture, three or four hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Survey of modern Chinese politics from decline of Manchu dynasty and rise of revolutionary nationalism to death of Mao Zedong, with emphasis on socioeconomic foundations and political dynamics of revolution in modern China.

159B. China in Age of Reform. (4) Lecture, three or four hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Survey of China’s political and ideological transformation in post-Mao era. Assessment of impact of changing socioeconomic conditions on revolutionary policies and programs of Chinese Communist Party. Exploration of etiology of 1989 Tiananmen crisis and consequences for China’s political system. P/ NP or letter grading.

160. Government and Politics of Japan. (4) Lecture, three or four hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Survey of Japan’s political system, with special attention to domestic political forces and problems.

163A. Discourse before Democracy. (4) Lecture, three or four hours; discussion, one hour (when scheduled). Regularity in language used to talk or write about politics across states preceding emergence of universal franchise. Problems of collective action in oppression, contribution of shared identities to organizing collective action, role of discourse in cueing awareness of shared identity, evidence across transnational associations between discursive distancing and undemocratic rule (monarchy, exclusive republics, dictatorships). Letter grading.

163B. Colonialism, Discourse, and Democracy. (4) Lecture, three or four hours; discussion, one hour (when scheduled). Transformation of language used to talk or write about politics during era of European colonialism and resulting shifts in identity ensuing in political change. Theories of democracy, dynamics of colonial encounter between Europeans and peoples living outside Europe, problems of collective action in tyranny, consequences of sharing identity for collective action, transformation of discourse in response to colonialism and ensuing enfranchisement in Europe, North America, and Southwest Pacific, spread of new ideas following discursive transformations in Russia and in selected states emerging in formerly colonized territories. Letter grading.

164A. Roots of Democracy. (4) Lecture, three or four hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Survey of development of democracy around world from its beginnings in ancient Greece to present day. Techniques of comparative political methodology are applied to evaluate many different cases which illustrate why different countries become democratic at different times, and why some remain authoritarian. P/ NP or letter grading.

Field V: Methods and Models

170A. Studies in Statistical Analysis of Political Data. (4) Lecture, three or four hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Use of statistical methods to interpret data and test theories from various disciplines in political science. Emphasis on quantitative evidence in construction of convincing and truthful arguments related to world of politics. Consult Schedule of Classes for topics to be offered in specific term. P/ NP or letter grading.

171A. Applied Formal Models: Collective Action and Social Movements. (4) Lecture, three or four hours; discussion, one hour (when scheduled). Designed for juniors/seniors. How do social and political movements convince people to
participate? Consideration of various theoretical perspectives, including game-theoretic, social network, structural, and identity approaches, illustrated by case studies.

171B. Collective Choice and Majority Rule. (4) Lecture, three or four hours; discussion, one hour (when scheduled). Enforced prerequisite: course 30. Designed for juniors/seniors. How do different ways of counting and casting votes affect political decisions? When can voting rules be manipulated by leaders and voters? Examples in legislative, electoral, and judicial politics. P/NP or letter grading.

171C. Legislative Strategy. (4) Lecture, three or four hours; discussion, one hour (when scheduled). Enforced prerequisites: course 30. Designed for juniors/seniors. How do politicians get policy changes passed by legislatures, city councils, and other voting bodies? Applications of game-theoretic reasoning to common strategies and tactics in legislative bodies. P/NP or letter grading.

171D. Negotiation. (4) Lecture, three or four hours; discussion, one hour (when scheduled). Enforced prerequisites: course 30. Designed for juniors/seniors. How do negotiators get agreements signed or rejected? How do they structure negotiations? Topics include coalition formation, honesty, and role of agents. P/NP or letter grading.

172. Strategy and Conflict. (4) Lecture, three or four hours; discussion, one hour (when scheduled). Enforced prerequisites: course 30. Designed for juniors/seniors. Intermediate topics in game theory applied to political problems, with special attention to strategic consequences of agenda setting and information asymmetries. P/NP or letter grading.

179. Special Topics in Methods and Models. (4) Lecture, three or four hours; discussion, one hour (when scheduled). Enforced prerequisite: course 30. Designed for juniors/seniors. Intensive examination of one or more special problems related to methods and models in political science. Sections offered on regular basis, with topics announced in preceding term. May be repeated for credit with topic change. P/NP or letter grading.

Field VI: Race and Ethnic Politics

M180A. African American Political Thought. (4) Same as African American Studies M114C and Labor Studies M114C.) Lecture, three or four hours; discussion, one hour (when scheduled). Enforced prerequisites: course 30. Designed for juniors/seniors. Focus on understanding historical and political philosophies as they have been applied and interpreted by African Americans. Debates and conflicts in black political thought, historical context of African American social movements, and the role of black political thought and major trends in Western thought. P/NP or letter grading.

181A. Politics of Latino Communities. (4) Lecture, three or four hours; discussion, one hour (when scheduled). Enforced prerequisites: course 30. Designed for juniors/seniors. Focus on understanding historical and political philosophies of Latino communities. P/NP or letter grading.

M181B. U.S. Latino Politics. (5) Formerly numbered 181B.) (Same as Chicana and Chicano Studies M155B.) Lecture, four hours; discussion, one hour (when scheduled). Enforced prerequisite: course 30. Designed for juniors/seniors. Focus on understanding historical and political philosophies of U.S. Latino communities. Topics include historical analysis of Latino immigration and migration; civil rights movements; increases in citizenship rates and political participation; Latino populations in the changing demographics of the U.S. P/NP or letter grading.

M182. Ethnic Politics: African American Politics. (4) Same as African American Studies M144.) Lecture, three or four hours; discussion, one hour (when scheduled). Preparation: one 140-level course or one upper-division course on race or ethnicity from history, psychology, or sociology. Enforced prerequisite: course 40. Designed for juniors/seniors. Examination of dynamics of minority group politics in U.S., touching on conditions facing racial and ethnic groups, with black Americans being the primary case for analysis. Three primary objectives: (1) to provide descriptive information about social, political, and economic conditions of black communities; (2) to study public issues facing black Americans; and (3) to sharpen students’ analytical skills. P/NP or letter grading.

184A. Black Experience in Latin America and Caribbean I. (4) Same as African American Studies M154C.) Lecture, four or five hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Culture, history, politics, and identity of African Americans in Spanish and Lusophone Caribbean, South America, and for Center Africa. Exploration of issues of identity in context of Afro/Latino migration to U.S. P/NP or letter grading.

184B. Black Experience in Latin America and Caribbean II. (4) Same as African American Studies M154D.) Lecture, three or four hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Examination of issues regarding race and ethnicity in Latin America, with emphasis on comparisons to U.S. and with Latin American populations of African and indigenous origins, with emphasis on former. P/NP or letter grading.

186. Special Studies in Race, Ethnicity, and Politics. (4) Lecture, three or four hours; discussion, one hour (when scheduled). Enforced prerequisite: course 40. Designed for juniors/seniors. Intensive examination of one or more special problems related to race, ethnicity, and politics in political science. Sections offered on regular basis, with topics announced in preceding term. May be repeated for credit with topic change. P/NP or letter grading.

Special Studies

188A. Individual Studies for USIE Facilitators. (1) Tutorial. To be arranged. Enforced corequisite: Honors Collegium 101E. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to discuss selected USIE seminar topic, conduct preparatory research, and begin preparation of syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.


188C. Individual Studies for USIE Facilitators. (2) Tutorial. To be arranged. Enforced corequisite: course 188B. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor while fulfilling USIE 885 course. Individual contract with faculty mentor required. May not be repeated. Letter grading.

189. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

189HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to upper-division lecture course. Individual research under faculty mentor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

190. Research Colloquia in Political Science. (1) Seminar, one hour. Designed to bring together students undertaking supervised tutorial research in seminar setting with one or more faculty members to discuss their own work or related work in discipline. Led by one supervising faculty member. May be repeated for credit. P/NP grading.

190H. Honors Research Colloquia in Political Science. (1) Seminar, one hour. Designed to bring together students writing departmental honors theses in seminar setting with one or more faculty members to discuss their thesis work in progress. Led by one supervising faculty member. P/NP grading.

191A-191F. Variable Topics Research Seminars for Juniors/Seniors, three hours. Preparation: two upper-division courses in field in which seminar is offered. Limited to junior/senior Political Science majors with 3.5 grade-point average in upper-division political science courses. Examination of issues and problems for topics to be offered in specific term. Reading, discussion, and development of culminating project. May be applied toward concentration or concentration requirement. May be repeated for credit. P/NP or letter grading. 191A. International Relations; 191B. Political Theory; 191C. Politics; 191D. Comparative Government; 191E. Methods and Models; 191F. Race, Ethnicity, and Politics.

M191DC. CAPPWP Washington, DC, Research Seminars. (8) (Same as Communication M191DC, History M191DC, Public Affairs M191DC, and Sociology M191DC.) Seminar, three hours. Limited to CAPPWP Program students. Seminars for students in Center for American Politics and Public Policy’s program in Washington, DC. Focus on development and execution of original empirical research based on experiences from the nation’s capital. Field placements. Study of variety of qualitative methods (observation, interviewing, etc.), with comparison to quantitative analysis. Examination of features of solid and significant research; intensive writing. Letter grading.

191H. Research Design Seminar for Honors Thesis. (4) Seminar, four hours. Preparation: one course in 150-series, 3.5 grade-point average in upper-division political science courses, eligibility for Latin American Science honors. Required of all students who wish to write honors thesis. Students define their research topic, select suitable research methods, determine appropriate sources of information, prepare research proposal, find thesis director, begin their research, and submit progress reports or preliminary drafts. Class sessions emphasize critical and constructive discussions of students’ topics, methods, and problems in research, as well as general consideration of political science research topics and methods of current or continuing interest. May be repeated for credit. Letter grading.

193. Journal Club Seminars: Political Science. (1) Seminar, two hours. Limited to graduate students. Discussion of readings selected from current literature in field. Consult Schedule of Classes for topics to be offered in specific term. May be repeated for credit. P/NP grading.

194. Research Group Seminars: Political Science. (2) Seminar, three hours. Designed for undergraduate students who are part of research group. Discussion of research methods and current literature in field of research of faculty members or students. May be repeated for credit. P/NP grading.

M194DC. CAPPWP Washington, DC, Research Seminars. (4) (Same as History M194DC and Sociology M194DC.) Seminar, three hours. Limited to CAPPWP Quarter in Washington students and other students enrolled in UC Washington Center Seminars. Seminars for undergraduate students in Center for American Politics and Public Policy’s program in Washington, DC. Focus on development and execution of original empirical research based on experiences from Washington, DC-based field placements. Study of variety of qualitative methods (observation, interviewing, etc.), with comparison to quantitative analysis. Examination of features of solid and significant research; intensive writing. Letter grading.

195CE. Community and Corporate Internships in Political Science. (4) Tutorial, to be arranged; fieldwork, eight to 10 hours. Limited to juniors/seniors. Internship in corporate, governmental, or nonprofit setting coordinated through Center for Community
Lectures combine traditional formal mathematical derivations of various estimators and their properties with Monte Carlo simulations and discussion of applications and practice. S/U or letter grading.

200E. Experimental Design for Social Science. (4) Seminar, three hours; field work, eight hours. Preparation: familiarity with statistics of causal inference at level of course 200D. Covers design, analysis, and implementation of experimental research in social sciences. Emphasis on field experiments, though most issues that are covered are relevant to other modes of investigation: including laboratory, laboratory-in-the-field, and survey experiments. S/U or letter grading.

200F. Advanced Statistical Topics for Social Science. (4) Seminar, three hours; field work, eight hours. Preparation: courses 200A through 200E. Topics vary according to student interest. May be repeated for credit. S/U or letter grading.

200X. Data Analysis Workshop. (4) Seminar, three hours. Enforced requisite: course 200C. Not open for credit to students with credit for course 200Y. Practice in applying statistical techniques to political science data. S/U or letter grading.

200Y-200Z. Data Analysis Workshops. (2–2) Seminar, two hours. Enforced requisite: course 200C. Course 200Y is enforced requisite to 200Z. Not open for credit to students with credit for course 200X. Practice in applying statistical techniques to political science data. S/U or letter grading.

210A. Introduction to Formal Political Analysis. (4) Seminar, three hours. Survey of formal political theory to enhance literacy and provide analytical tools for understanding literatures and applying statistics of causal inference without presupposing mathematical background. Model building, collective goods, unanimity and the social contract, voting rules, paradoxes and impossibility theorems, stability, individual liberty and decentralization, strategic manipulation representation, vote trading.

210B. Theory of Collective Choice. (4) Seminar, three hours. Recommended preparation for political science students: course 210A. Open to any student of politics, economics, philosophy, or mathematics with ability for deductive reasoning. Introduction to abstract, deductive study of voting systems and other collective-choice processes. Axiomatic method applied to politics and political economy, concept of rationality, and agenda control, choice-set or solution concepts.

212. Seminar: Political Theory. (4) Seminar, three hours; discussion, one hour (when scheduled). Examines major political theorists (Hobbes, Locke, Burke, Mill, etc.) in light of alternatives which have been generated by unmeasured latent variables, including latent variable analogues of traditional methods in multivariate analysis. Causal modeling: theory testing via analysis of moment structures. Measurement models such as confirmatory, higher-order, and structural equations. Factor analytic models. Structural equation models, including path and simultaneous equation models. Parameter estimation, latent variables and other statistical issues. Computer implementation. Applications. S/U or letter grading.

214. Political Theory in Transnational Context. (4) Seminar, three hours; discussion, one hour (when scheduled). Critical analysis of selected texts from postcolonial, spatial, feminist, postmodern, and post-structuralist theories that assess impact of processes of globalization on such major concepts and problems of traditional social and political theory as sovereignty, citizenship, rights, community, representation, and democracy. S/U or letter grading.

215. Liberalism and Its Critics. (4) Seminar, three hours; discussion, one hour (when scheduled). Examination of works of one or more major contemporary liberal theorists (Rawls, Dworkin, Habermas, Nussbaum, etc.) in light of alternatives which have been generated by unmeasured latent variables, including latent variable analogues of traditional methods in multivariate analysis. Causal modeling: theory testing via analysis of moment structures. Measurement models such as confirmatory, higher-order, and structural equations. Factor analytic models. Structural equation models, including path and simultaneous equation models. Parameter estimation, latent variables and other statistical issues. Computer implementation. Applications. S/U or letter grading.

216. Multivariate Analysis. (4) (Same as Psychology M257 and Statistics M242.) Lecture, three hours. Preparation: courses 200A through 200E. Subjective probability, introduction to decision theory. Bayesian analysis of regression, sensitivity analysis, simplification of models, criticism. May be repeated for credit. S/U or letter grading.

218. Selected Topics in Political Theory. (4) Seminar, three hours; discussion, one hour (when scheduled). Critical examination of major political theorists (Hobbes, Locke, Burke, Mill, etc.) in light of alternatives which have been generated by unmeasured latent variables, including latent variable analogues of traditional methods in multivariate analysis. Causal modeling: theory testing via analysis of moment structures. Measurement models such as confirmatory, higher-order, and structural equations. Factor analytic models. Structural equation models, including path and simultaneous equation models. Parameter estimation, latent variables and other statistical issues. Computer implementation. Applications. S/U or letter grading.


Political Theory

210A-210B. Political Theory Field Seminar 1, 2. (4–4) Lecture, three hours; field work, eight hours. S/U or letter grading. 210A. Exploration of major texts and issues in political theory. Discussion of texts selected by instructor or exploration of major texts and issues in political theory.


214. Political Theory in Transnational Context. (4) Seminar, three hours; discussion, one hour (when scheduled). Critical analysis of selected texts from postcolonial, spatial, feminist, postmodern, and post-structuralist theories that assess impact of processes of globalization on such major concepts and problems of traditional social and political theory as sovereignty, citizenship, rights, community, representation, and democracy. S/U or letter grading.

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218. Selected Topics in Political Theory. (4) Seminar, three hours; discussion, one hour (when scheduled). Critical examination of major political theorists (Hobbes, Locke, Burke, Mill, etc.) in light of alternatives which have been generated by unmeasured latent variables, including latent variable analogues of traditional methods in multivariate analysis. Causal modeling: theory testing via analysis of moment structures. Measurement models such as confirmatory, higher-order, and structural equations. Factor analytic models. Structural equation models, including path and simultaneous equation models. Parameter estimation, latent variables and other statistical issues. Computer implementation. Applications. S/U or letter grading.


Political Science / 675
International Relations

220A. International Relations Core Seminar I. (4) Seminar, three hours. Introduction to international relations theory, methods of analysis, and research styles. Letter grading.

220B. International Relations Core Seminar II. (4) Seminar, three hours. Further analysis of academic work in international relations and introduction to design of research project in this area. Letter grading.

220C. International Relations Research Seminar. (4) Seminar, three hours; tutorial meetings, to be arranged. Design, implementation, and presentation of research project on international relations within combination of seminar and tutorial settings. Letter grading.

222. Seminar: Strategic Interaction. (4) Seminar, three hours. A strategic move influences the other person's choice by affecting his expectations of how we will behave. Discussion of theories of deterrence, coercive diplomacy, crisis management, war termination, and negotiation. Use of various theoretical approaches to explaining strategic interaction, including psychology, bargaining theory, and game theory.


225. American Foreign Policy. (4) Discussion, three hours. Discussion of approaches used to explain foreign policy-making at individual, small group, bureaucratic, and governmental levels. Application to selected cases in American foreign policy.


230. Contending Perspectives on International Political Economy. (4) Discussion, three hours. Survey of various theoretical approaches to international political economy.

231. International Political Economy I. (4) Seminar, three hours. Interaction between international trade and investment and domestic political economics of both industrialized and industrializing societies.

232. International Political Economy II. (4) Seminar, three hours. Designed to develop PhD students' skills in setting up and solving simple institutional design, political economy macro, signaling, and participation models, as well as two-level game models of domestic politics and international conflict and cooperation, with emphasis on applications in international political economy and comparative politics.

233A-233B. Comparative Political Economy Workshops (4-4-4). Discussion, two hours. Preparation: successful completion of major field examinations. Workshops for students writing or preparing to write dissertations. Reading and discussion of research in progress presented by UCLA faculty, visiting scholars, and advanced graduate students. Research papers of publishable length. S/U or letter grading.

234A-234B. Comparative Political Economy Workshops: National Security, Foreign Policy, and International Relations (0–0–12). Discussion, two hours. Preparation: successful completion of major field examinations. Course 234A is requisite to 234B, which is requisite to 234C. Courses must be taken in sequence. Workshops for students preparing for or working on dissertations. Reading and discussion of research in progress presented by UCLA faculty, visiting scholars, and advanced graduate students. Major research paper required. In Progress (234A, 234B) and letter (234C) grading.

239. Selected Topics in International Relations. (4) Seminar, three hours. S/U or letter grading.

Comparative Politics

240A-240B. Seminars: Comparative Politics. (4–4) Seminar, three hours. Course 240A is not requisite to 240B. Letter grading. 240A. Survey of ideas and approaches that have been historically important in field of comparative politics, with selection of theories and methodologies that have comprised field over time. 240B. Survey of contemporary research approaches and problems in field of comparative politics, with a range of theories and methodologies used by practitioners in the field.


244. Latin American Politics. (4) Seminar, three hours. Survey of contemporary research approaches and problems in Latin American politics. S/U or letter grading.

245. Middle Eastern Politics. (4) Seminar, three hours. Survey of contemporary research approaches and problems in Middle Eastern politics. S/U or letter grading.

246A. Western European Politics. (4) Seminar, three hours. Survey of each approach and problems in Western European politics. S/U or letter grading.

246B. Political Development of Modern Europe. (4) Seminar, three hours; discussion, one hour (when scheduled). Principal phase of political development from high feudalism to the present, together with theories of causation.


247A. Evolution of Soviet and Russian Politics. (4) Seminar, three hours. Seminar, when offered (when scheduled). Seminar discussion surveying political evolution of Soviet Union and its transformation.

247B. Domestic Context of Russian Foreign Policy. (4) Seminar, three hours. Examination of domestic social, political, bureaucratic, and economic conditions of Russian foreign and strategic policy. S/U or letter grading.


251. Political Economy of Economic Reform. (4) Discussion, three hours. Some familiarity with economics helpful. Principal political and economic arguments for economic reform and consideration of political issues that arise from this process. Letter grading.

252. Parties and Party Systems. (4) Seminar, three hours; discussion, one hour (when scheduled). Theories and practices of political parties, party systems, and elections in comparative perspective.

253. Political Change in Communist Systems. (4) Discussion, three hours. Examination of political context and consequences of structural reform in Communist systems; theories of post-Leninist political pluralization and convergence.

254A-254B. Institutions and Comparative Politics. (4–4) Seminar, three hours; discussion, one hour (when scheduled). Use of advances of rational choice theory and new institutionalism to compare and analyze major institutional structures, including presidentialism vs. parliamentarism, unicameralism vs. bicameralism, two-party vs. multiparty systems, cadre vs. mass parties, and plurality vs. proportional electoral systems.

254B. Political Institutions, Delegation, and Policy-Making. (4) Seminar, three hours; discussion, one hour (when scheduled). Analysis of political foundations of policy-making. Characterization of democratic institutions as a series of delegations, from voters to elected officials, within parties and legislatures, and from elected politicians to unelected bureaucrats. Examination of implications of different institutional designs for how those delegations are made and controlled.

255. Seminar: Political Economy of Developing Countries. (4) Seminar, three hours. Interdisciplinary seminar directed toward comparative analysis of political development and modernization. S/U or letter grading.

256. External Sources of Domestic Politics. (4) Discussion, three hours. Theoretical and historical studies of impact of war and trade on domestic cleavages, policy, and institutions. S/U or letter grading.

257. Labor and Working-Class Politics. (4) Discussion, three hours. Questions and topics on comparative labor and working-class politics. S/U or letter grading.


259. Selected Topics in Comparative Politics. (4) Discussion, three hours. Critical examination of major problems in comparative politics. S/U or letter grading.

American Politics


261A. Proseminar: Political Psychology. (4) (Same as History M236A and Psychology M228A.) Seminar, three hours. Introduction to political psychology: psychobiography, personality and politics, mass attitudes, group conflict, political communication, and elites and decision making. S/U or letter grading.

261B. Mass Attitudes and Political Behavior. (4) Seminar, three hours. Requisite: course 141B or 260A. Analysis of development and change of political attitudes in mass publics and their relationship to voting, protest, and violence. S/U or letter grading.

261C. Political Communication. (4) Discussion, three hours. Broad survey of research bearing on role of mass media in the American political process. Topics include theories of persuasion, evolution of “media effects” research, reporting and advertising as determinants of election outcomes, adversarial versus deferential journalism, and analyses of media bias.

261D. Seminar: Political Psychology. (4) (Same as Psychology M228B.) Discussion, three hours. Requisite: course M261A or Psychology 220A. Examination of public opinion, political participation, participation in public life, and political participation in public opinion. S/U or letter grading.

261E. Critical Problems in Political Psychology. (4) (Same as Psychology M228C.) Discussion, three hours. S/U or letter grading.

262. Political Parties. (4) Seminar, three hours. Critical examination of literature on party systems and organization. Special attention to political functions, electoral campaigns, and party cadres. S/U or letter grading.


PSYCHIATRY AND BIOBEHAVIORAL SCIENCES
David Geffen School of Medicine
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Psychiatry and Biobehavioral Sciences
310-206-5110

Alexander S. Young, MD, Interim Executive Chair
Barry H. Guze, MD, Vice Chair
Alex J. Kopelowicz, MD, Vice Chair
Ira M. Lesser, MD, Vice Chair
Stephen R. Marder, MD, Vice Chair
James T. McCracken, MD, Vice Chair
Thomas B. Strouse, MD, Vice Chair
Andrew J. Fuligni, PhD, Associate Chair
Academic Affairs
Margaret L. Stuber, MD, Associate Chair, Medical Student Education

Scope and Objectives
The Department of Psychiatry and Biobehavioral Sciences offers interdisciplinary courses related to the mental health professions of the biobehavioral sciences in addition to its programs for psychiatry interns and residents, and for medical students. Enrollment in department courses is limited to registered UCLA students, students registered in programs officially affiliated with UCLA, and students enrolled concurrently through UCLA Extension. Students who meet these requirements, but who are not affiliated with a departmental training program, must also meet required course requisites determined by specific educational programs.

Doctoral Internship Program in Clinical Psychology
The department offers a 12-month Doctoral Internship Program in Clinical Psychology. Students enrolled in clinical psychology doctoral programs at APA-approved universities are eligible to apply. Applications are accepted from September 1 through November 1. The primary goal of the internship is to provide a year of intensive exposure to a wide variety of clinical experiences. The training is designed to maximize the personal growth of each intern. Interns are expected to develop proficiency in an area of focus as well as gain experience outside of their specific area of interest. At the beginning of the year, trainees design a program, both to supplement and complement previous development. Within the learning settings chosen by the trainee, every effort is made to teach the specific techniques necessary to gain competence. The great variety of resources makes both the individualized choice and the acquisition of skills possible. Students interested in this program should contact the program office at 37-360A Semel Institute, 310-794-5715.

Psychiatry and Biobehavioral Sciences
Lower-Division Courses
19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.
79. Applied Positive Neuroscience: Skills for Improving Productivity and Wellbeing. (5) Lecture, three hours; discussion, one hour. Not open to students with credit for Community Health Sciences 179. Intrapersonal, interpersonal, and extra-personal contributions to wellbeing, and how activity and chemistry of key brain regions contribute to each, e.g., influences of mindfulness on prefrontal cortex activity, or how oxytocin system is altered by social interaction. Students learn to recognize relationship between cognitive, social, and emotional competence for healthy development, and how to apply it to their own lives. Through neuroscientific context, introduction to multidisciplinary perspectives on variety of topics that are widely considered significant maturational tasks for young adults, including emotion regulation, managing social relationships, enhancing productivity, and identity development. Letter grading.
99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in major excluding dual majors. Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper Division Courses

174. Brain and Behavioral Health: Childhood and Adolescence. (5) Seminar, three hours. Limited to junior/senior Neuroscience or Psychology majors. Integration of problem-based learning approach to teach foundational information about application of brain and behavioral science to understanding and promotion of child and adolescent development. Exploration of integration of developmental psychopathology, applied treatment research, and public policy to identity and dismantle barriers to problems. Focus on set of key topics, including stress, resilience, and adolescent risk behaviors; focus on how basic science and problem-based learning approach to teach foundational information about application of brain and behavioral science to understanding and promotion of child and adolescent development can be used to address these areas.

175. Mindfulness Practice and Theory. (4) Seminar, five hours discussion; prior experience with meditation not required. Introduction to mindfulness, including basic mindfulness meditation practices, both sitting and moving, ways to deepen positive emotional states, increase awareness, and cope with stress. Emphasis on working with others. Offered in summer only. P/NP or letter grading.

176. Brain and Behavioral Health: Adulthood and Aging. (5) Seminar, five hours discussion; limited to junior/senior Neuroscience or Psychology majors. Integration of problem-based learning approach to teach foundational information about application of brain and behavioral science to understanding and promotion of adult health and well-being. Exploration of integration of developmental psychopathology, applied treatment research, and public policy to identity and dismantle barriers to problems. Focus on set of key topics, including stress, resilience, and adult risk behaviors; focus on how basic science and problem-based learning approach to teach foundational information about application of brain and behavioral science to understanding and promotion of adult health and well-being can be used to address these areas.

177A-177B. Brain and Behavioral Health Clinical Practicum. (4-4) Fieldwork, six hours; discussion, one hour. Designed to provide students with integrated set of learning experiences related to mental health and wellness across lifespan. Through applied approach to brain and behavioral science, exploration of integration of developmental psychopathology, assessment and treatment research, and public policy to address issues related to psychological health and wellness. Focus on key topics (e.g., different classes of psychiatric illness) during childhood, adolescence, and adulthood and offering direct exposure to health-care settings, clinical populations, and interdisciplinary teams that treat them. Students participate in assigned health and behavior sciences courses and directed field experience with faculty mentor. Through observation of activities in clinical health setting, students see firsthand how brain and behavior science translates into real-world care.

M182. Personality and Brain Management. (4) Same as Neuroscience M161.) Seminar, four hours. Basic overview of brain function and consideration of some management methods that exist already, and what future may hold. New methods for predicting our own futures and modeling what if scenarios that might alter risks and benefits of different courses of action, based on individual genetic background and other elements of personal history and environmental exposures. Introduction to key principles from science of behavior change, illustrating how important health-related behavior change can be, and how change and why. Coverage of series of topics that center on personal enhancement of well-being through consideration of stress management, long-term goals and values, adaptations of long-term goals on immediate actions, reinforcement learning, meditation, neurofeedback, and time management. Critical appraisal of tools to help students distinguish scientifically validated procedures. Offered in summer only. Letter grading.

188S. Individual Studies for USIE Facilitators. (1) Tutorial, to be arranged. Enrolled corequisite: Honors Colloquium 101E. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to discuss selected USIE seminar topic, conduct preparatory research, and begin preparation of syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.

188S.B. Individual Studies for USIE Facilitators. (1) Tutorial, to be arranged. Enrolled corequisite: course 188SA. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to finalize course syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.

188SC. Individual Studies for USIE Facilitators. (2) Tutorial, to be arranged. Enrolled corequisite: course 188SB. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to finalize course syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.

197. Individual Studies in Psychiatry. (2 to 4) Tutorial, four hours. Limited to juniors/seniors. Individual interests and needs may vary, consultation and supervision to be arranged between faculty member and student. Assigned reading and tangible evidence of mastery of subject matter required. May be taken for letter grade once only. May be repeated for credit. Individual contract required. Additional information and contract forms are available in Office of Education, 38-213 Semele Institute. P/NP or letter grading.

199. Directed Research in Psychiatry and Biobehavioral Sciences. (2 to 8) Seminar, two hours. Limited to juniors/seniors. Supervised individual research or investigation under guidance of faculty mentor. Culminating paper required for credit. Individual contract required. P/NP or letter grading.

Graduate Courses

M210. Editorial Board Apprenticeship. (2) Same as Health Policy and Management M249Q.) Seminar, two hours. Designed for postdoctoral fellows and advanced PhD students. Participation in peer review process for academic journal, Health Psychology, with consideration of interface between behavioral science, health, and medicine. Reading and discussion of submissions and advising of editor on suitability for full review. S/U or letter grading.

226A-226B. Child Development Research. Seminar, 90 minutes. Current research on major topics of development and research, including biological, psychological, and social factors that influence development. Focus on major research questions and methodologies used in the field. S/U grading.

229A-229B. Advanced Topics in Child Development. Seminar, two hours. Focus on major research questions and methodologies used in the field. S/U grading.

M230. Communication of Science. (2) Same as Biostatistics M235.) Lecture, three hours; discussion, one hour. Requirements: Biostatistics 200C, 202B, or equivalent. Philosophical foundations, logical paradoxes, decision analysis, selection bias, confounding, ecological paradoxx, historical development, potential outcomes, Rubin causal model, propensity scores, competing perspectives on path analysis and graphical/structural-equation models, experiments with noncompliance, principal stratification, decision making when values are pluralistic, role of ethics in decision making. S/U or letter grading.

M234. Affective Disorders. (2 or 4) (Same as Psychology M280.) Seminar, two hours. General topics related to primary affective disorders (depression, mania, depressive illness), including diagnosis, pharmacology, epidemiology, psychology, phenomenology, biology, and treatment. Students enrolled for 4 units attend twice a week. Students enrolled for 2 units need to make a presentation or prepare a research paper. S/U grading.


237. Seminar: Behavioral Neuroimmunology. (1) Seminar, one hour per month; discussion, 30 minutes per month. Series of lectures presented each Wednesday of each month for each academic year by invited speakers. S/U grading.

M238. Survey Research Techniques in Psychocultural Studies. (4) (Same as Psychology M238.) Seminar, three hours. Designed for graduate students. Techniques for conceptualizing, conducting, and analyzing survey data; instruction in qualitative strategies for enhancing survey research on psychocultural problems. S/U grading.

M240. Assessment and Treatment of African American Families. (3) (Same as African American Studies M240.) Seminar, two hours. Designed for graduate students. Course aids mental health professionals and trainees in evaluation and treatment of African American families in terms of their cultural milieu, historical background, and economic status. Didactic presentations by instructors and invited guests form basis for review and evaluation. A project for African American families and letter grading. 243A-243B-243C. Mental Retardation and Chronic Illness Interdisciplinary Core Curriculum. (1–1–1) Lecture, 90 minutes. Survey series on major topics of mental retardation and chronic medical illness, covering epidemiology, nosology, assessment, healthcare delivery systems, basic genetics, nutrition, direct care, and special deficits. Presented in interdisciplinary setting and assumes that students are familiar with basic information independent of discipline. S/U grading.

253. Seminar: Child Development. (1) Theories of development, systems of child development, and chronological aspects of child development. Presentation of assigned readings by students plays major role in each session.


259. Legal and Ethical Issues with Vulnerable Populations. (3) Lecture, 90 minutes; laboratory, three and one half hours. Discussion of current laws dealing with vulnerable populations (e.g., children, developmentally disabled people, elderly people); philo-scientific evidence supporting pharmacological practice in the field. S/U grading.

M263. Clinical Pharmacology. (2) (Same as Bio- mathematics M263 and Medicine M263.) Seminar, two hours. Preparation: completion of foundational sciences degree (MD, DDS, DNSc, or PhD). Overview of principles of clinical pharmacology, especially as
they relate to clinical and translational medicine and to advances in contemporary medicine such as targeting, gene therapy, and genomics. Letter grading.

264. Health and Mental Health Disparities from Psychosocial and Cultural Perspectives. (4) Seminar, three hours. Designed for graduate and medical students, researchers, and junior/senior medical students (with consent of instructor) interested in learning about general, sexual, and mental health disparities. Survey course to introduce students to health disparities that exist for ethnic minorities and factors that may contribute to disproportionate prevalence rates. Review and discussion of research literature, with focus on specific research studies, interventions, and prevention programs related to substance abuse, depression, and breast and prostate cancer. Discussion of stereotypes and myths about healthcare of specific populations. Examination of psychosocial and cultural contexts as potential or contributing factors. S/U or letter grading.

M270. Neural Basis of Memory. (4) (Same as Neuroscience M273.) Lecture, two hours; discussion, one hour. Anatomical, physiological, and neurobiological data integrated into models for how behavioral phenomena of memory arise. Discussion of invertebrate memory, cortical conditioning, hippocampus and declarative memory, and frontal lobes and primary memory.

M272. Psychological Anthropology. (4) (Same as Anthropology M272.) Lecture, three hours. Various psychological issues in anthropology, both theoretical and methodological. Areas of interest include such things as culture and theory, culture and personality, and culture and cognition. Discussion of questions relating to symbolic and unconscious processes as they relate to culture. Topics vary from term to term. May be repeated for credit with topic change. S/U or letter grading.


275. Psychoneuroimmunology Research Seminar. (1) Seminar, one hour. Topics to be centered around current directions in psychoneuroimmunology (PNI), including social genomics, inflammation, and biological aging. Common molecular and immunological protocols used in PNI and current directions in PNI research, with emphasis on basic immunology and immunological mechanisms specifically designed for new investigators (5) human subject research. S/U or letter grading.


M281A-281B-281C. Behavioral Therapy in Educational Settings. (4–4–4) Lecture, one hour; laboratory, seven hours. Supervised experience in classroom working with behaviorally-disordered children in conducting tectonic observations, analyzing formal assessments, and developing and carrying out individualized educational and behavioral programs. Theoretical background, supplemented by two-hour weekly lecture, S/U or letter grading.

284A-M284B. Principles of Neuroimaging I, II, (4–4) (Same as Neuroscience M284A-M284B and Psychology M284A-M284B.) Lecture, four and one half hours. Neuroscience principles of delivery, models, and applications in integral calculus, electricity and magnetism, computer programming (any language), general statistics. Requisite: course 292. Course M284A is requisite to M284B. Instrumental imaging methods for study of nervous system, with emphasis on quantitative understanding and data interpretation and features common to modalities. X-ray computed tomography, magnetic resonance imaging, positron emission tomography, magnetoencephalography, transcranial magnetic stimulation, near infrared imaging, Letter grading.

M285. Functional Neuroimaging: Techniques and Applications. (3) (Same as Bioengineering M284, Biomedical Engineering M285, Biostatistics M285, and Psychology M272.) Lecture, three hours. In-depth examination of activation imaging, including MRI and electrophysiological methods, data acquisition and analysis, experimental design, and results obtained thus far in human systems. Strong focus on understanding technologies, how to design activation imaging paradigms, and how to interpret results. Lab. In-depth examination of functional MRI experimental design and implementation of functional MRI experiment. S/U or letter grading.

287. Small Group Cognitive/Behavioral Interventions. (4) Lecture, three hours. Presentation of brief therapeutic interventions for adults and children at risk for suicide, depression, conduct problems, and HIV, with didactic and experiential techniques.

M288. Social and Behavioral Factors of HIV/AIDS: Global Perspective. (4) (Same as Community Health Sciences M284.) Lecture, four hours. Requisites: Community Health Sciences 100 and Epidemiology 100, or prior social sciences courses. Overview of social and behavioral factors which influence both transmission and prevention of HIV/AIDS throughout the world. Letter grading.


290. Los Angeles HIV-Community Colloquia. (1) Lecture, two hours. Examination of emerging scientific HIV-related research, Discussion of policy issues, theories, and designs of HIV-related services and programs and shifting epidemiology of the virus and disease. S/U grading.

292. Functional Neuroanatomy for Neuropsychologists. (2) Lecture, four hours; laboratory, one hour. Undergraduate-level anatomy course. Designed for neuropsychology and radiology postdoctoral fellows and neurosciences graduate students. Human functional anatomy from systems perspective, integrating results from lesion research and functional neuroimaging. Students learn to identify gyri and major sulci on MR images and memorize associated Brodmann’s region. Letter grading.

293. Professional Development: Presentations and Preparation for Academic Interviews. (2) Seminar, discussion, one hour. Exposure to range of professional development skills essential to academic career development. Hands-on training and practice in delivering presentations for various audiences, and preparing research and/or teaching statements for job applications. S/U grading.

294. Essentials of Clinical Investigation. (2) Lecture, two hours; discussion, two hours. Designed for graduate students. Introduction to initial steps in clinical research through preparation of research proposal. Small working groups develop grant proposal on specific topic. S/U grading.


295A. (2) Seminar, two hours; discussion, one hour. Neurobiology and psychopharmacology of drug abuse, as well as epidemiology and prevention. Discussion of pros and cons of various treatment modalities for drug dependence. S/U grading.

295B. (2) Seminar, discussion, one hour. Drug use patterns and treatment issues in specific populations such as women, adolescents, homeless, multiply diagnosed, as well as different ethnic populations. Exploratory exchanges within drug abuse, anorexia, and HIV/AIDS. S/U grading.

295C. (2) Seminar, two hours; discussion, one hour. Theoretical perspectives on drug use and abuse as well as policy and ethical aspects of drug abuse research. Research design and analysis issues pertinent to drug abuse research. S/U grading.

296. Research Group Seminar: Practicum. (2) Research group meeting, three hours. Designed for graduate students who plan to conduct research studies. Coverage of (1) publishing process—submitting manuscripts to journals, selecting appropriate journals, frequent reasons for rejections of manuscripts, and key points in writing articles for publication, (2) overview of National Institutes of Health (NIH), including organization structure and mission, grant application process, funding mechanisms and review process, (3) preparing/writing grants for submission to NIH, including review of components of successful applications, criteria by which applications are judged, and how to emphasize reviewers’ questions, (4) grant mechanisms specifically designed for new investigators, (5) human subject sections for grant applications and IRB issues, and (6) preparation of budgets (modular and detailed) and budget justification for NIH submissions. S/U or letter grading.

375. Teaching Apprentice Practicum. (1 to 4) Seminar, to be arranged. Preparation: apprentice personnel experience as teaching assistant, associate, or fellow. Teaching apprenticeship under active guidance and supervision of regular faculty member responsible for curriculum and instruction at UCLA. May be repeated for credit.

402. Journal Club, (1) Seminar, two hours; outside study, two hours. Presentation of participants’ current research. Critical review of recent articles on drug abuse. Training sessions included in areas in which fellows believe they have a recognized need. S/U grading.

403. Individual Case Supervision. (1 to 4) Preparation: submission of written proposal to be structured by instructor and student prior to enrollment; additional information and proposal forms available in Office of Education, 38-216 Semel Institute. One-to-one supervision of individual therapy cases, including analyses of patient data, supervision of ongoing treatment, feedback, and assessment of patient progress. S/U or letter grading.

405. Trauma and Sexual Abuse Research Seminar. (4) Seminar, three hours; discussion, one hour. Designed for graduate and medical students and resident physicians interested in learning about biobehavioral trauma research. Introduction to DSM-IV TR diagnostically criteria for posttraumatic stress disorder (PTSD), as well as biopsychosocial sequelae. Examination and discussion of child and adult sexual abuse in context of being causative precipitators of acute and chronic causes of PTSD. Review of pharmacologic, among other biologic variables, within context of physiological markers for PTSD. Review of current modes of treatment, including therapeutic and pharmacological interventions. Description of research methods particularly important for trauma research. S/U or letter grading.

407A-407B-407C. Clinical Hypnosis Seminars. (2–2–2) Seminar, two hours. Integrated, experientially oriented sequence with lecture, discussion, demonstration, practice, and assigned readings. Guest speakers with expertise in specific hypnotherapeutic applications and populations, and video programs included. Trainees and faculty members in private practice as well as licensed healthcare providers from community (MCEP credit available) encouraged to enroll. For trainees in social work, psychology, and psychiatry, completion of minimum one-year supervised training in psychotherapy or behavior therapy required. S/U grading. 407A. Cultural and historical context for hypnosis; development of theoretical, technical, and trance induction, development of trance state into drug states, and re-alerting; and gaining familiarity with trance experiences. 407B. Fundamentals of trance utilization, including diagnosis, creating safety, and facilitating entrance into trance states; and utilization of hypnotic interventions in specific clinical situations and with specific populations. M424. Functional Magnetic Resonance Imaging Journal Club. (2) Same as Physics and Biology in Medicine M424.) Discussion, 90 minutes. Limited to 10 students. Current topics in functional neuroimaging, with emphasis on novel applications, analysis, and acquisition methods. Presentation and critique of
orders. Didactic and experiential training, including direct patient care, clinical supervision, and participation in weekly team meetings. Letter grading.

485. Human Genetics Seminar. (No credit) Seminar, one hour. Preparation: introductory genetics course. Weekly lecture series intended for those interested in human genetics or in specific topic to be presented. Speakers are invited for their expertise or research in some special area related to human genetics and may be from UCLA or elsewhere. No grading.

4490. Educational Psychology (Same as Law M4331.) Clinic, two hours (12 weeks). How to provide educational advocacy based on IDEA, ADA, and Section 504 of Rehabilitation Act on behalf of children with learning disabilities, behavior disorders, and mental retardation. S/U or letter grading.

596P. Individual Studies in Psychiatry. (2 to 12) Tutorial, to be arranged. Preparation: submission of written proposal outlining course of study (to be structured by instructor and student at time of initial enrollment). Additional information and course proposal forms available in Office of Education, 38-216 Semel Institute. Directed individual research and study in psychiatry at graduate level. S/U or letter grading.

PSYCHOLOGY

College of Letters and Science

1285 Franz Hall
Box 951563
Los Angeles, CA 90095-1563

Psychology

310-825-2961

Annette L. Stanton, PhD, Chair
Julienne E. Bower, PhD, Vice Chair, Academic Facilities
Thanas N. Bradbury, PhD, Vice Chair, Academic Personnel
Barbara Knowlton, PhD, Vice Chair, Undergraduate Programs
Anna S. Lau, PhD, Vice Chair, Graduate Programs

Professors

Howard S. Adelman, PhD
Robert F. Assarow, PhD, in Residence (Della Martin Professor of Psychiatry)
Carrie E. Bearden, PhD, in Residence
Peter M. Bentler, PhD
Robert M. Bilder, PhD, in Residence (Michael E. Tenenbaum Family Endowed Professor of Creativity Research)
James W. Bisley, PhD
Janet B. Blacher, PhD
Barbara Knowlton, PhD
Robert M. Bilder, PhD, in Residence (Michael E. Tenenbaum Family Endowed Professor of Creativity Research)

Dean V. Buonomo, PhD
Li Cai, PhD
Alan D. Castel, PhD
Denise A. Chavira, PhD
Patricia Cheng, PhD
Bruce F. Chorpita, PhD
Michelle G. Craske, PhD (Joanne G. Fosolom Professor of Psychobiology)
Thomas N. Bradbury, PhD

Susan Y. Bookheimer, PhD, in Residence (Joaquim M. Fuster Professor of Cognitive Neuroscience)
Julienne E. Bower, PhD (George F. Solomon Professor of Psychobiology)

Thomas N. Bradbury, PhD

Li Cai, PhD
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Michelle G. Craske, PhD (Joanne G. Fosolom and Family Endowed Term Professor)
Christine A. Dunkel Schetter, PhD
Naomi I. Eisenberger, PhD
Craig K. Enders, PhD
Christopher J. Evans, PhD, in Residence (Stefan Hatzos Endowed Professor of Psychiatry and Biobehavioral Sciences)

Michael S. Fanselow, PhD (Staglin Family Professor of Psychology)
Craig R. Fox, PhD
Andrew J. Fulgini, PhD, in Residence
Adriana Galvan, PhD
Noah J. Goldstein, MA, PhD
Patricia M. Greenfield, PhD
Martie G. Haselton, PhD
Hal E. Hershfield, PhD
Keith Holyoak, PhD
Yuen J. Hsu, PhD
Michael R. Irwin, MD, in Residence (Norman Cousins Endowed Professor of Psychoneuroimmunology)
Alicia Izquierdo, PhD
Keri L. Johnson, PhD
Scott P. Johnson, PhD
Jaana H. Juvonen, PhD
Benjamin R. Karp, PhD
Philip Kellman, PhD
Barbara Knowlton, PhD
Chris Hakwan Lau, PhD
Steve S. Lee, PhD
Matthew D. Lieberman, PhD
Zili Liu, PhD
Hongjing Lu, PhD
Vickie M. Maya, PhD
David J. Miklowitz, PhD, in Residence
Gregory A. Miller, PhD
Martin M. Monti, PhD
Keith H. Nuechterlein, PhD, in Residence
Ehrin O. Perez, PhD
Lara A. Ray, PhD
Steven P. Reise, PhD
Rena L. Repetti, PhD
Dario L. Ringach, PhD
Theodore F. Robles, PhD
Catherine M. Sandhofer, PhD
Stanley J. Schein, MD, PhD
Ladan Shams, PhD
Margaret J. Shih, PhD (UCLA Anderson Board of Advisors Term Professor of Management)
Alcino Silva, PhD (Eleanor I. Leslie Professor of Pioneering Brain Research)
Annette L. Stanton, PhD
James W. Stigler, PhD
Miguel M. Unzueta, PhD
Cindy M. Yee-Bradbury, PhD

Professors Emeriti

Paul R. Abramson, PhD
Bruce L. Baker, PhD
Jackson Beatty, PhD
Elizabeth L. Bjork, PhD
Robert A. Bjork, PhD
William E. Broen, Jr., PhD
Andrew Christensen, PhD
Seymour Feshbach, PhD
Charles R. Gallistel, PhD
R. Edward Geiselman, PhD
Rochel Gelman, PhD
Gerald M. Goodman, PhD
Carlos V. Grijalva, PhD
Constance L. Hammen, PhD
Eric W. Holman, PhD
John P. Houston, PhD
Franklin B. Krasne, PhD
Steven R. Lopez, PhD
Donald G. MacKay, PhD
Albert Mehrabian, PhD
Hector F. Myers, PhD
Allen Parducci, PhD
L. Anne Peplau, PhD
Tara K. Scanlan, PhD
David O. Sears, PhD
David Shapiro, PhD
James H. Sidanius, PhD
Shelley E. Taylor, PhD
James P. Thomas, PhD
Jill M. Waterman, PhD
Bernard Weiner, PhD
Excellent opportunities for research experience—e.g., perception, cognition, measurement, personality, animal behavior, learning and memory, motivation, pursue in greater depth those areas in which they approaches employed—while allowing students to both the range of behavioral phenomena studied to reflect the extensive breadth of psychology—

The undergraduate curriculum has been designed is ranked as one of the top departments in the and interpersonal influences and contexts. Accord-

Psychology is a subject of considerable interest to most people—we all tend to practice some form of intuitive psychology in an attempt to understand ourselves and the people and groups with whom we interact. The curriculum offered by the Department of Psychology presents psychology as a scientific discipline that employs systematic methods of inquiry to study and explain human and animal behavior—both normal and abnormal—in terms of a variety of underlying variables, including neural, physiological, and cognitive processes; developmental factors and individual differences; and social and interpersonal influences and contexts. Accord-

Department is ranked as one of the top departments in the country. The undergraduate curriculum has been designed to reflect the extensive breadth of psychology—but the range of behavioral phenomena studied and the variety of methods and theoretical approaches employed—while allowing students to pursue in greater depth those areas in which they become most interested. Beyond basic core courses, students can take many specialized courses in areas such as behavioral neuroscience, animal behavior, learning and memory, motivation, perception, cognition, measurement, personality, and clinical, social, developmental, community, and health psychology. The curriculum also provides excellent opportunities for research experience—ei-

Three undergraduate majors are offered: a BA in Psychology, a BS in Cognitive Science, and a BS in Psychobiology. While the majors overlap in certain fundamental and basic knowledge bases, they differ considerably in their focus (i.e., the extent to which certain areas of psychology and related disciplines are studied) and in terms of the different student in-

Areas of behavioral neuroscience, clinical, cognitive, cognitive neuroscience, computational cognition, developmental, health, learning and behavior, social, and quantitative psychology. The graduate pro-

The Cognitive Science major is a designated cap-

Professors offer a BA in Psychology and can do so once they complete all seven

Undergraduate Study

The Cognitive Science major is a designated cap-

Students are required to produce a paper based on each term of their experience in a research laboratory or approved fieldwork site. Through completion of the capstone experience students are expected to identify a research topic and hypothesis to be tested or a fieldwork project and goals, show that they can organize and inte-

The requirements described below represent the minimum requirements in satisfaction of the prepa-

Three majors and offers both broad and in-depth coverage of the fundamental and traditional areas of psychology. It provides students with a strong foundation for postgraduate education in psychology and can serve as excellent background to pre-

students are expected to identify a research topic and hypothesis to be tested or a fieldwork project in a clear manner in their own words, demonstrate abil-

The Psychology major has the following learning outcomes:

• Demonstrated ability to design an experiment in a field of psychology
• Ability to formulate a hypothesis based on knowledge of current literature
• Demonstrated application of principles of con-

The Psychology major has the following learning outcomes:

• Demonstrated ability to write up results of an experiment
• Ability to relate finding to current literature and interpret them in this context
• Ability to discuss results in front of a group of other students
• Ability to verbally communicate ideas motivat-

Premajor

Students need to file a petition in the Undergradu-

Preparation for the Major

Each of the following required courses must be taken for a letter grade (C or better in Psychology

Freshman Students

Students may declare the Psychology premaj-

Students must petition to declare the Psychology major and can do so once they complete all seven

Learning Outcomes

The Psychology major has the following learning outcomes:

• Demonstrated ability to design an experiment in a field of psychology
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Students must petition to declare the Psychology major and can do so once they complete all seven

Learning Outcomes

The Psychology major has the following learning outcomes:

• Demonstrated ability to design an experiment in a field of psychology
• Ability to formulate a hypothesis based on knowledge of current literature
• Demonstrated application of principles of con-
preparation for the major courses and submit an application to enter the major by the end of the fall quarter of their third year at UCLA. Admission into the major is based on student academic performance in the preparation courses. Students who have a grade-point average of 2.9 or higher in the preparation coursework and have met all other Psychology premajor requirements are guaranteed entry into the major after they submit the application by the above deadline. Students with a grade-point average between 2.5 and 2.89 in the preparation coursework enter a competitive application pool and are admitted only if there is space available in the major. Students with a grade-point average below 2.5 in the preparation coursework are not eligible to apply for admission to the major.

**Transfer Students**

Transfer applicants to the Psychology major with 90 or more units must complete the following introductory courses prior to admission to UCLA: one biology course equivalent to Life Sciences 1 or 7A or 15 or Psychological Science 3, one general chemistry or general physics course, one philosophy course, one introduction to psychology course, and one course from statistics (recommended), finite mathematics, calculus, computer science theory, or computer programming in C++.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

After satisfying the preparation for the major requirements, students need to petition to enter the major at the Undergraduate Advising Office.

**The Major**

**Required:** (1) Five core courses, with at least two from each category and a fifth course from either category: (a) Psychology 110, 115 (or M117A, M117B, and M117C), 120A, 120B, and (b) 127A or 127B or 127C, 130 (or one course from 133A through 133 or 161), 135, 136, 140; one laboratory/fieldwork course from 101, 111, 116, 121, 126, 131, 136A, 136B, 151, 186A through 186D; (2) three additional upper-division elective courses (16 units) in psychology.

Students who complete Psychology M117A, M117B, M117C receive equivalent credit for course 115 and two upper-division psychology electives. All three courses must be completed to receive psychology elective credit.

Each upper-division course must be taken for a letter grade. A C– or better is required in each core course and in at least one laboratory/fieldwork course. Students must have a 2.0 grade-point average in all upper-division courses selected to satisfy major requirements.

**Cognitive Science BS**

**Capstone Major**

The Cognitive Science major focuses on the study of intelligent systems, both real and artificial. While including a strong foundation in the traditional areas of psychology, the major is interdisciplinary in nature and emphasizes subject matter within cognitive psychology, computer science, mathematics, and related disciplines.

The requirements described below include sufficient preparation if students plan to pursue graduate work in cognitive science or related fields; however, they may want to include additional advanced courses in psychology and fields related to cognitive science (e.g., computer science, linguistics, mathematics, philosophy, and statistics) as well as other types of research and fieldwork experiences.

**Learning Outcomes**

The Cognitive Science major has the following learning outcomes:

- Ability to identify a research topic and hypothesis to test, or a fieldwork project and goals
- Demonstrated organization and integration, in a clear manner and in the student’s own words, of information related to a topic or project
- Demonstrated ability to find and utilize supporting literature relevant to a project or topic
- Successful relation of the paper to the student’s laboratory or fieldwork experience
- Ability to discuss results in front of a peer group: verbally communicate ideas motivating the experiment, make the experiment clear to those not familiar with the methods, and answer questions

**Premajor**

Students need to file a petition in the Undergraduate Advising Office to declare the Cognitive Science premajor. They are then identified as Cognitive Science premajors until they (1) satisfy the preparation for the major requirements and (2) file a petition to declare the Cognitive Science major.

Questions about the major should be directed to the Undergraduate Advising Office.

**Preparation for the Major**

Each of the following required courses must be taken for a letter grade (C or better in each course and a 2.5 overall grade-point average in the preparation courses) by the end of the summer quarter of the third year to be eligible to petition to declare the Cognitive Science major: Life Sciences 1 or 7A or 15 or Psychological Science 3; Chemistry and Biochemistry 14A or 17 or 20A or Linguistics 1 or 20 or Physics 1A or 5A or 10 or 11; Mathematics 3A, 3B, and 3C, or 31A or 31AL and 31B; Philosophy 7 or 8 or 9 or 23 or 25; Program in Computing 10A and two courses from 10B, 10C, 15, 16A, 20A, 30, 40A, 60, Psychology 20A, 20B, and Psychology 10, 85, 100A, 100B. Students cannot take Psychology 100B until they have passed course 100A with a grade of C or better. Psychology 100A and 100B should be taken early in the career; these courses are open only to students who have declared the Cognitive Science premajor before the term in which they plan to enroll. Students with no background in introductory statistics should take Statistics 10 before enrolling in course 100A.

Students who repeat more than two preparation courses or any preparation course more than once are denied admission to the major.

**Transfer Students**

Transfer applicants to the Cognitive Science major with 90 or more units must complete the following introductory courses prior to admission to UCLA: one biology course, one general chemistry or general physics course, two calculus/analytical geometry courses, one general physics course, one philosophy course, one introduction to psychology course, one introduction to cognitive science course, one psychological statistics course, one psychology research methods course, one computer programming course in C++, and one other computer programming course.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

**The Major**

After satisfying the preparation for the major requirements, students need to petition to enter the major at the Undergraduate Advising Office.

**Required:** (1) Psychology 115 (or M117A, M117B, and M117C), 120A or 120B, and one course from 124A through 124K; (2) one course from 111, 116, 121, 186A through 186D, Computer Science 161; (3) four upper-division elective courses (16 units) from Psychology 110, 111, 112A through 116, 118 through M199X, 120A, 120B, 121, 124A through 124K (if taken for the major, may not be applied as an elective), 130, 133B, 133E, 135, 137G, 142H, 141, 1566, 186A through 186D, 191CH (if content is approved by the Undergraduate Advising Office and course has not been applied toward the Psychology 195B or 196B requirement), Anthropology 124Q, 136A, M150, Communication 118, 119, 126, M127, 129, Computer Science 111 through CM186, Linguistics 103 through 185B, Mathematics 110A through 171, Music Industry M103, Neuroscience 102, M145, C177, 180, 181, 182, Philosophy 124 through 137, Statistics 100A, 100B, 100C, 101B, 101C, and (4) in the junior or senior year, two capstone terms of Psychology 195B or 196B (may be fulfilled by taking any two courses from 195B or 196B/194C, provided content is approved by the Undergraduate Advising Office).

Students who complete Psychology M117A, M117B, M117C receive equivalent credit for course 115 and two upper-division cognitive science electives. All three courses must be completed to receive cognitive science elective credit.

Students must have a 2.0 grade-point average in all upper-division courses selected to satisfy major requirements. With the exception of Psychology 195B and 196B, each course must be taken for a letter grade.

**Psychobiology BS**

The Psychobiology major is designed for students who plan to go on to postgraduate work in physiological psychology, neuroscience, behavioral aspects of biology, or the health sciences. Psychobiology is the study of behavior from a biological perspective. It includes neural, experimental psychological, natural history, genetic, comparative/evolutionary, and developmental approaches to understanding human and animal behavior.

The requirements described below include sufficient preparation if students plan to pursue graduate work in any of the above fields; however, they may want to include additional advanced courses in...
Learning Outcomes
The Psychobiology major has the following learning outcomes:

- Demonstrated ability to use working knowledge of the nervous system to deduce the consequence of nervous system dysfunctions
- Demonstrated understanding of molecular events at a cellular level by describing the physiological consequences of such events in qualitative and quantitative terms
- Demonstrated ability to utilize knowledge of sensory systems by describing their processes in both qualitative and phenomenological terms
- Demonstrated ability to choose and apply the appropriate quantitative analysis tools to a data set and meaningfully interpret the results of the analysis
- Demonstrated ability to read primary literature in the field and evaluate the validity of conclusions in light of the methodology and statistical analyses used as well as the logic of assertions presented
- Demonstrated ability to communicate the results of laboratory work orally or in writing with appropriate graphic depictions of the data
- Ability to relate work in literature in meaningful ways, explaining the motivation for the study and the interpretation of the results
- Demonstrated thorough knowledge of neuroanatomy, including layers of the brain, major anatomical landmarks, cranial nerves, and major subcortical structures
- Demonstrated thorough knowledge of the sequence of events that results in an action
- Demonstrated thorough knowledge of sensory systems, including signal transmission, neuroanatomical connections, and response properties of neurons in primary cortical areas
- Ability to analyze the behavior of neurons in circuits and predict how other neurons in the circuit will react when other neurons are depolarized or hyperpolarized

Premajor
Students need to file a petition in the Undergraduate Advising Office to declare the Psychobiology premajor. They are then identified as Psychobiology premajors until they (1) satisfy the preparation for the major requirements and (2) file a petition to declare the Psychobiology major.

Preparation for the Major

Life Sciences Core Curriculum

Required: Chemistry and Biochemistry 14A, 14B, 14C, and 14D, or 20A, 20B, 20L, 30A, 30AL, and 30B; Life Sciences 30A, 30B, and 40 or Statistics 13, or Mathematics 3A, 3B, and 3C, or 31A or 31AL, 31B, and 32A; Physics 1A, 1B, 1C, 4AL, and 4BL, or 5A, 5B, and 5C.

Students must also complete one of two life sciences sequences—either Life Sciences 1, 2, 3, 4, and 23L, or 7A, 7B, 7C, and 23L. They may not substitute courses in either sequence.

Also required are Psychology 10, 100A, 100B. Students cannot take Psychology 100B until they have passed course 100A with a grade of C or better. Psychology 100A and 100B should be taken early in the career; these courses are open only to students who have declared the Psychobiology premajor before the term in which they plan to enroll. Students with no background in introductory statistics should take Statistics 10 before enrolling in course 100A.

Each of the preparation for the major courses must be taken for a letter grade (C or better in Psychology 10, 100A, and 100B, C– or better in the remaining courses) with a 2.0 overall grade-point average.

Students must complete all preparation for the major courses by the end of the summer quarter of their third year to be eligible to petition to declare the Psychobiology major.

Students who repeat more than two preparation courses or any preparation course more than once are denied admission to the major.

Transfer Students
Transfer applicants to the Psychobiology major with 90 or more units must complete the following introductory courses prior to admission to UCLA: one year of general biology with laboratory for majors, preferably equivalent to Life Sciences 1 and 2, or 7A, 7B, and 7C; one year of calculus, one year of general chemistry with laboratory for majors, one semester of organic chemistry with laboratory, one introduction to psychology course, one psychological statistics course, and one psychology research methods course.

A second semester of organic chemistry or one year of calculus-based physics is strongly recommended but not required for admission.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

The Major
After satisfying the preparation for the major requirements, students need to petition to enter the major at the Undergraduate Advising Office.

Required: (1) Ecology and Evolutionary Biology 100 or 129 or Psychology 118, and Psychology 110, 115 (or M117A, M117B, and M117C), 116 or Neuroscience 101L, 120A or 120B; (2) one course from Psychology 127A, 127B, 127C, 130, 133A through 133I, 135, 150, 161; (3) 16 units of graded elective courses from the following list: Ecology and Evolutionary Biology 112, 113A, 114A (no more than one from this group), Psychology 111, 112A through 112D, M117A, M117B, M117C, 119A through 119Y, 124A, 137C, 152, 161, 162, 164, M166, 186D, 191CH (only if content is approved by the undergraduate vice chair), Chemistry and Biochemistry 153A, 153L, Computational and Systems Biology M187, Ecology and Evolutionary Biology 100, 102, 105, 106, 110, 111, 115, 117, 119A, 120, 121, 122, 124A (only 4 units may be applied toward the major), 125, 121, 170, Life Sciences 107, Microbiology, Immunology, and Molecular Genetics C185A, Molecular Cell, and Developmental Biology 100, 104AL, 138, M140, CM156, Neuroscience 102, Physiological Science C144, 145, 147, 166, 173.

Students who complete Psychology M117A, M117B, M117C receive equivalent credit for course 115 and 10 units of upper-division psychobiology electives. All three courses must be completed to receive psychobiology elective credit.

Students must have a 2.0 grade-point average in all upper-division courses selected to satisfy major requirements, and each must be taken for a letter grade.

Honors

Honors Courses
Each year the department offers a selection of honors courses, designated with an H suffix. The courses provide close contact with faculty members, emphasize readings in the original literature, student reports, and small group discussions, and may include field or research experience. Contact the College of Letters and Science for information on requirements for College Honors.

Honors Program
Psychology, Cognitive Science, and Psychobiology majors intending to continue study at the graduate level are encouraged to apply for the departmental honors program. Students work for one year (fall through spring quarters) with a Psychology Department faculty sponsor on a research project that is the basis of a formal honors thesis. During that year they also participate in a weekly seminar (Psychology 191AH, 191BH, 191CH) in which thesis projects are presented and discussed and other topics of interest are explored with invited faculty members and other guests. Other requirements may apply. Contact the Undergraduate Advising Office during spring quarter for more information and application forms. Satisfactory completion of the program and the other requirements for the major leads to awarding of the degree with honors or highest honors.

Computing Specialization
Majors in Psychology, Psychobiology, and Cognitive Science may select a specialization in Computing by (1) satisfying all the requirements for a bachelor’s degree in the specified major, (2) completing four courses from Program in Computing 10A, 10B, 10C, 15, 16A, 20A, 30, 40A, 60, Psychology 20A, 20B, and (3) completing at least two courses from Psychology 85, 121, 142H, 186A through 186D (one 199 course may be substituted for one of these courses provided project has been approved by vice chair). A grade of C or better is required in each course. Students graduate with a bachelor’s degree in their major and a specialization in Computing. Students planning to enter this specialization should contact the Undergraduate Advising Office.

Applied Developmental Psychology Minor
The Applied Developmental Psychology (ADP) minor is designed to (1) provide a coherent, challenging academic program focused on investigating, understanding, and supporting the development of young children and their families, (2) teach under-
graduate students how to apply theories, research methods, and research findings to practical concerns, and (3) prepare students to join or receive further training in various child-related professions.

The minor is open to all enrolled UCLA students (including Cognitive Science, Psychobiology, and Psychology majors) who have an overall grade-point average of 2.0 or better and have applied and been accepted into the program. Qualified students are admitted into one of two annual cohorts (one beginning in fall, the other in spring) to complete three consecutive terms of specialized coursework alongside a hands-on teaching internship (86 hours per term) at one of several UCLA child care centers. For more information about applying to the minor, contact the ADP academic coordinator by e-mail or see the department website. For questions about additional course requirements for the minor, contact a counselor in the Undergraduate Advising Office, 310-825-2730.

Required Lower-Division Course (4 units): Psychology 10.

Required Upper-Division Courses (24 units): Psychology 134A (must be taken concurrently with course 134D), 134B, 134C, 134D (must be taken concurrently with course 134E), and four additional courses from Education 120, 132, Psychology 127C, 129F, 130, 132A, 132B, 133B through 133I, 134F, 134G, 134H, 134I, 161, 199A or 199B (content must be approved by the Undergraduate Advising Office), Sociology M174. One of the four additional courses must include either Psychology 130 or one course from 133A through 133I.

Internship Requirement/Fieldwork Component (8 units): Psychology 134C, 134D (must be taken concurrently with course 134A), 134E (must be taken concurrently with course 134B). Students work as interns for three consecutive academic terms at one of several UCLA child care centers serving infants, toddlers, and/or preschool-age children. The internship provides hands-on experience working with young children and opportunities to closely observe children and teachers.

No more than two courses may be applied toward both this minor and a student’s major.

A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor.

Each minor course, except for the fieldwork component of the internship courses, must be taken for a letter grade, and students must have an overall grade-point average of 2.0 or better in the minor. Successful completion of the minor is indicated on the transcript and diploma.

Cognitive Science Minor

The Cognitive Science minor is designed to introduce students to cognitive science topics as addressed in a number of different disciplines, such as biology, computer science, engineering, linguistics, mathematics, philosophy, and psychology, while allowing them to pursue a more in-depth study of cognitive science topics within specific areas of their own choice.

The minor consists of two parts. In the first part students complete background courses and satisfy a computer programming experience requirement. In the second part they select courses from three clusters of upper-division courses that have been organized to reflect different aspects of cognitive science. Students take five courses from three clusters, with no more than three courses from any one cluster.

The minor is open to all enrolled UCLA students, other than Cognitive Science majors, who have an overall grade-point average of 2.0 or better. After completing two background courses, students must make an appointment with an advisor in the Psychology Undergraduate Advising Office by e-mail, or by phone at 310-825-2730, to declare the minor. The three background courses must be completed by the end of the summer quarter of the third year.

Required Courses (32 units): Psychology 85; one course from 15, 100B, Linguistics 1, or 20; and either Program in Computing 10A or Psychology 20A.

Students must complete five total courses from the following three clusters, with no more than three courses from any particular cluster: (1) biological basis of cognition cluster—Linguistics C135, Music Industry M103, Neuroscience 102, M145, C177, 180, 181, 182, Psychology 110, 115, 116, M117C (or Molecular, Cell, and Developmental Biology M175C or Neuroscience M101C or Physiological Science M180C), M19C, 119F, M190L, M190N, 137G, 161, M166; (2) human cognition cluster—Anthropology 124Q, 136A, Communication 129, Psychology 120A, 120B, 121, 124A through 124K, 133B, 133E, 186A through 186D; (3) mind and language cluster—Anthropology M150, Communication 118, 119, 126, M127, Linguistics 120A, 120B, 120C, 130, 132, C135, 185A, Philosophy 124, 125, 126, C127A, C127B, 129, 170, 172, Psychology 124A.

No more than two courses may be applied toward both this minor and a student’s major.

A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor.

Each minor course must be taken for a letter grade, and students must have an overall grade-point average of 2.0 or better in the minor. Successful completion of the minor is indicated on the transcript and diploma.

Fieldwork and Research Opportunities

Many research and fieldwork opportunities are open to students who wish to expand their knowledge and broaden their background in the field of psychology. These opportunities can be enriching and help bring undergraduate students closer to understanding the importance of research and internships, including their applications in the everyday world. At least one of the following courses is recommended for students planning postgraduate study: Psychology 185, 192, 194A through 194D, 195A, 195B, 196A, 196B, 199A, or 199B. Only 12 units from any combination of courses 185, 192, 194, 195, and 196 may be applied toward the undergraduate degree. Information about these courses and programs is available from the Undergraduate Advising Office.

Only one 4-unit 199 course may be taken per term, and only 16 units of course 199 may be applied toward the degree. Only one 199 course may be taken for a letter grade (additional 199 courses may be taken on a P/NP basis). If approved in advance by the Undergraduate Advising Office, 8 units of course 199 may be applied toward the Psychology 195B/196B requirement for the Cognitive Science major and 4 units of course 199B may be applied toward the elective course requirements for the Psychology major.

Psychology Research Opportunity Programs

The Psychology Research Opportunity Programs (PROPS) represent a vital effort to identify and mentor underrepresented minority and/or low-income students. The purpose of PROPS is to encourage such students to participate in research and pursue graduate studies leading to careers in academia. The recruitment and application process for PROPS takes place each fall quarter. Students selected to participate are awarded stipends for winter and spring quarters, during which time they do research under the mentorship of a psychology faculty member. In addition, students are required to attend weekly seminars covering such topics as graduate school, careers in academia, and research opportunities in various fields of psychology. Prior research experience is not required. This is an excellent opportunity for students to begin their research careers and acquire the needed experience to pursue advanced studies.

Infant Development Program

The Megan E. Daly Infant Development Program (IDP), established in May 1983, is located at the Ferndale Center at 320 N. Charles E. Young Drive and has two primary functions: (1) to offer quality group care for infants and toddlers of the students, staff, and faculty of the Psychology Department and other UCLA departments, and (2) to serve as a teaching and research facility for the Psychology Department and the UCLA community. The program’s two classrooms each serve children from three months to three years old and accommodate both cross-sectional and longitudinal investigation of infants, toddlers, their families, and caregivers. In addition, the program serves as a primary internship site for students in the Applied Developmental Psychology (ADP) minor, enabling ADP students to acquire firsthand experience observing and caring for infants and toddlers in a professional group setting.

UCLA Psychology Clinic

The UCLA Psychology Clinic in the Department of Psychology is a major training center for students in the clinical psychology PhD program, one of the top-ranked programs in the country. It provides a broad range of psychological services to children and adults, including assessment and individual, couples, family, and group therapy. Clients cover the entire age range and represent diverse populations in the community. Student therapists receive very close supervision and utilize research-based cutting-edge psychological interventions. Students and faculty members
Graduate Study

Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Division website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Graduate Degrees

The Department of Psychology offers Master of Arts (MA), Candidate in Philosophy (CPhl), and Doctor of Philosophy (PhD) degrees in Psychology.

Psychology

Lower-Division Courses

10. Introductory Psychology. (4) Lecture, four hours. General introduction including topics in cognitive, experimental, personality, developmental, social, and clinical psychology; six hours of psychological research and a grade of C or better required of all departmental premajors. P/NP or letter grading.


19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

20A. MATLAB Programming for Behavioral Sciences. (4) Lecture, two hours; laboratory, one hour. Prior programming experience not required. Introduction to MATLAB and programming methods useful in experimental psychology. Reading and writing of code for conducting experiments, analyzing data, and modeling. P/NP or letter grading.

20B. Advanced Topics in MATLAB Programming for Behavioral Sciences. (4) Laboratory, one hour. Requisite: course 20A. Introduction of advanced topics in MATLAB programming for behavioral sciences, including Psychtoolbox, advanced MATLAB graphics and input/output, simulations and modeling, and efficient MATLAB coding. Active programming during class and for homework required. P/NP or letter grading.

30. Web Programming for Psychology. (4) Lecture, one hour; laboratory, three hours. Introduction to core technologies of Internet, with focus on applications that collect and analyze data. Server side programming includes Perl and MySQL databases. Client side programming includes HTML and Javascript. P/NP or letter grading.

85. Introduction to Cognitive Science. (4) Lecture, three hours. Exploration of computer metaphor of mind as an information-processing system, focusing especially on perception, knowledge representation, and thought based on research in cognitive psychology, neuropsychology, and artificial intelligence. Many examples from visual information processing.

88A. Lower-Division Seminar: Stress, Adaptation, and Coping. (4) Seminar, three hours. Enforced requisite: completion of lower-division course. Examination of nature of coping mechanisms and exploration of strategies for stress management. May be repeated for credit. P/NP or letter grading.

89. Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to lower-division lecture course. Exploration of topics in greater depth through guided readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

89HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to lower-division lecture course. Individual study under instructor approval; topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

97. Variable Topics in Psychology. (4) Seminar, three hours. Enforced requisite: course 10. Study of selected topics in psychology at introductory level; seminar format designed for freshmen/sophomores. P/NP or letter grading.

99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentors. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Courses

100A. Psychological Statistics. (4) Lecture, four hours. Requisites: course 10 with a grade of C or better, and one course from Mathematics Program in Computing, CS 10, or one term of calculus. Designed for premajors. Basic statistical procedures and their application to research and practice in various areas of psychology. P/NP or letter grading.

100B. Research Methods in Psychology. (4) Lecture, two hours; laboratory, four hours. Enforced requisites: courses 10 and 100A, with grades of C or better. Introduction to research methods and critical analysis in psychology. Lecture and laboratory topics include experimental and nonexperimental research methods, statistical design and analysis as applied to a broad range of basic and applied research issues. P/NP or letter grading.

101. General Psychology Laboratory. (4) Lecture, one hour; laboratory, three hours. Requisites: courses 10, 100A, 100B. General laboratory course for psychology students to acquire key concepts in psychology through active participation in enriched environment. Use of current technologies (e.g., Web-based teaching, interactive computer demonstrations) in challenging atmosphere to learn how mind works. P/NP or letter grading.


110. Fundamentals of Learning. (4) Lecture, three hours; discussion, one hour. Requisites: courses 10, 100A. Designed for juniors/seniors. Experimental findings on animal and human conditioning; retention and transfer of learning; relation of learning and motivation. Intended to provide empirical basis for theory and research in this area. P/NP or letter grading.

111. Learning Laboratory. (4) Lecture, two hours; laboratory, three hours. Requisites: courses 10, 100A, 100B, 110. Designed for departmental majors. Laboratory study of learning, especially with animals. Letter grading.

112A. Basic Processes of Motivated Behavior. (4) Lecture, 90 minutes; discussion, 90 minutes. Requisites: courses 10, 100A, 110. Designed for juniors/seniors. Examination of some basic processes underlying motivated behavior, stressing environmental determinants of behaviors such as feeding, drinking, and reproduction-related behavior. Discussion of physiological mechanisms that contribute to such behaviors. Consideration of topics such as reinforcement, acquisition, motivation, and extinction. Evaluation of evidence obtained in laboratory studies conducted with animals. P/NP or letter grading.

112B. Psychobiology of Fear and Anxiety. (4) Lecture, three hours. Requisites: courses 10, 100A, 110, Recommended: course 115. Designed for juniors/seniors. Presentation of biological and behavioral approaches to fear and anxiety, taken from laboratory and applied research. Introduction of major principles from each approach, emphasis on areas in which significant research advances have recently occurred. Examination of concordance and discordance between results from laboratory and applied research. P/NP or letter grading.

112C. Psychobiology of Anxiety and Depression. (4) Lecture, two and one-half hours; discussion, 30 minutes. Requisites: courses 110 and 115, or Neuroscience M101A, M101B, and M101C. Limited to juniors/seniors. Presentation of biological and behavioral approaches to anxiety and depression, taken from laboratory and applied research. In addition to overview of major principles of each approach, emphasis on areas in which significant research advances have recently occurred. Examination of concordance and discordance between results from laboratory and applied research. P/NP or letter grading.

112D. Animal Cognition. (4) Lecture, 90 minutes; discussion, 90 minutes. Requisites: courses 10, 100A, 110. Designed for juniors/seniors. Investigation of scientific study of cognition and behavior in animals. Topics include perception (attention, working and reference memory, spatial cognition, timing and counting, concept formation, and abstract reasoning. Most discussions focus on laboratory findings with animals, as viewed from evolutionary framework concerned with natural histories of animals. P/NP or letter grading.

112E. Decision Making and Brain. (4) Lecture, three hours. Requisites: courses 10, 100A, 110. Designed for juniors/seniors. Survey of neural mechanisms of value-based decision making from perspective of neuroscience. Discussion of theoretical models of decision making and valuation and decision making from economics and application to psychological and neuroscience studies of learning and decision making. P/NP or letter grading.

115. Principles of Behavioral Neurosciences. (4) Lecture, three hours; discussion, three hours. Requisites: course 100A, Life Sciences 2 or 7A or 15. Not open to students with credit for course M117A (or Molecular, Cell, and Developmental Biology M175A or Neuroscience M101A or Physiological Science M180A). Designed for juniors/seniors. Nervous system anatomy, physiology, pharmacology, and their relationship to behavior. P/NP or letter grading.

116. Behavioral Neurosciences Laboratory. (4) Lecture, one hour; laboratory, three hours. Requisites: courses 10, 100A, 100B, 115. Designed for Psychobiology and Psychology majors. Laboratory experience with various topics in behavioral neuroscience. P/NP or letter grading.


M117A. Cellular and Systems Neuroscience. (5) Lecture, four hours; discussion, 90 minutes. Requisites: Chemistry 14C or 14C (taken concurrently), Life Sciences 2 or 7C, Physics 1B or 1BH or 5C or 5B. Not open for credit to students with credit for Physiological Science 111A. For Neuroscience and Physiological Science majors, grade of C or better is required to proceed to Neuroscience M101B or Physi-
M117B. Molecular and Developmental Neuroscience. (3) Lecture, three hours; discussion, one hour. Prerequisites: course 115 or M117A (or Molecular, Cell, and Developmental Biology M157A or Neuroscience M101A or Physiological Science M180A; Neuroscience majors must have grade of C– or better) or Physiology 111A, Life Sciences 3 and 4 (may be taken concurrently), or 7C. Molecular biology of channels and receptors, mechanisms underlying neurodevelopmental disorders, and neurobiological mechanisms of disease. P/NP or letter grading.

117C. Behavioral and Cognitive Neuroscience. (3) Lecture, four hours; discussion, 90 minutes. Prerequisite: course 115 or M117A (or Molecular, Cell, and Developmental Biology M157A or Neuroscience M101A or Physiological Science M180A; Neuroscience majors must have grade of C– or better) or Physiology 111A, Life Sciences 3 and 4 (may be taken concurrently), or 7C. Molecular biology of channels and receptors, mechanisms underlying neurodevelopmental disorders, and neurobiological mechanisms of disease. P/NP or letter grading.

118. Comparative Psychology. (4) Prerequisite: course 115. Designed for junior/senior majors. Survey of determinants of species-specific behavior, including genetic impacts, social factors, and environmental cues. P/NP or letter grading.

119A. Neuropsychopharmacology of Emotion and Cognition. (4) Lecture, three hours. Prerequisite: course 115 or M117C. Limited to juniors/seniors. Analysis of basic pharmacologic principles, with emphasis on neurochemical modulation of emotional regulation and cognitive processes in normal and diseased state. P/NP or letter grading.

119C. Cognitive Neuroscience. (4) Lecture, three hours. Prerequisites: courses 10, 100A, B, M115C, or M117C. Understanding complex mental functions depends on interplay of cognitive psychology and behavioral neuroscience. Designed to provide advanced undergraduate students with current perspectives on how complex processes of mind may be understood using neuroscientific techniques. P/NP or letter grading.

119F. Neural Basis of Behavior. (4) Lecture, three hours. Prerequisite: course 115. Designed for juniors/seniors. Preadministration data and theory covering how neuron circuits produce behavior. Mechanisms of perception, response selection, motor pattern generation, learning, and motivation, with emphasis on common processes that underlie complex behaviors in well-defined neural circuits in animals and humans. P/NP or letter grading.

119J. Integration of Face and Brain. (4) Seminar, three hours. Prerequisite: course 115 or M117C. Faces play major role in social interactions in both humans and nonhuman primates and in other animals as well. Exploration of neuroanatomical, neurophysiological, and neurofunctional underpinnings of face processing (attractiveness, emotional expressions, facial skin, identity recognition, based on empirical studies that use behavioral responses in neuroimaging techniques, in effects of hormones, in physiological responses, and in psychopathological states. Discussion of evolutionary approaches to faces, as well as relationship between specific genetic mutations affecting both brain and facial appearance. P/NP or letter grading.

119K. Neurophilosophy. (4) Lecture, three hours. Prerequisite: course 115. Philosophy of mind has relied on introspection and thought experiments to explore consciousness, self, and free will. Field of neurophilosophy employs findings and methods of neuroscience to investigate these seemingly in penetrable constructs, providing students with foundation in neurophilosophy, which includes basic understanding of philosophy of mind, consideration of phenomena including consciousness, volition, and self, and examination of scientific methods available for studying these phenomena. Exploration of student experiences of world and themselves within and demonstrations of how alterations in brain functioning due to injury, psychopharmacology, and dreaming result in alterations in these phenomena. P/NP or letter grading.

119L. Human Neuropsychology. (4) Same as Neuroscience 111L. Lecture, three hours. Recommended requisites: courses 115 (or M117A and M117C), 120A or 120B. Designed for juniors/seniors. Survey of experimental and clinical human neuropsychology; neural basis of higher cognitive functions. P/NP or letter grading.

119M. Neural Circuits of Learning and Memory. (4) Lecture, three hours. Prerequisite: course 115. Designed for juniors/seniors. Introduction to classical and current literature on mechanisms of learning and memory from individual brain systems to circuits. P/NP or letter grading.

119N. Visual System. (4) Same as Neuroscience 111N. Lecture, three hours. Prerequisite: course 115 or Neuroscience M101A or Physiological Science 111A. Ability to image and analyze visual world is truly remarkable feat. Coverage of anatomy and physiology of visual processing from retina to visual cortex through lectures, extensive reading, and discussions. P/NP or letter grading.

119Q. Psychology of Aging. (4) Same as Gerontology M119Q. Course, three hours. Designed for juniors/seniors. Aging refers to developmental changes occurring at end stages of life. Some alterations that occur represent improve others, are detrimental. Examination of impact of aging process on mental phenomena and exploration of changes in which age-related changes occur. Impact of detrimental alterations minimized. P/NP or letter grading.

119R. Emerging Topics in Neuroscience. (4) Lecture, two hours; discussion, one hour. Prerequisite: course 115 or Neuroscience M101A or Physiological Science 111A. Ability to image and analyze visual world is truly remarkable feat. Coverage of anatomy and physiology of visual processing from retina to visual cortex through lectures, extensive reading, and discussions. P/NP or letter grading.

119S. Psychobiology of Sleep and Dreams. (4) Lecture, three hours. Prerequisite: course 115. Designed for juniors/seniors. Study of measurement of sleep, comparison of sleep in mammalian species and sleep in sub-mammalian species, circadian rhythms and circadian control of sleep, development and aging of sleep, brain anatomical and neurochemical control of sleep, effects of pharmacological and drug-induced psychosis, on focus of current research on sleep in psychiatric disorders, human sleep disorders, and properties of dreams. P/NP or letter grading.

119T. Neural Correlates of Psychotic Disorders. (4) Lecture, three hours. Prerequisite: course 115. Designed for juniors/seniors. Exploration of genetic, cellular, structural, and functional abnormalities associated with psychotic states, including those seen in schizophrenia spectrum disorders, bipolar disorder, and other psychoses. Focus on current drug treatments and unique neural findings associated with these abnormal states. Study includes review of clinical aspects of disorders covered. P/NP or letter grading.


119V. Biology and Behavioral Neuroscience of Aging. (4) Same as Gerontology M119V. Lecture, three hours. Designed for juniors/seniors. Biologic mechanisms of aging process and its terminal phase, death, have been increasingly studied in recent years. Establishment of what is important about biology and behavioral neuroscience of aging and evaluation of theories developed to account for this knowledge. P/NP or letter grading.

119W. Psychobiology of Sexual Behavior. (4) Lecture, three hours. Prerequisite: course 115. Broad overview of scientific study of sexual behavior, with emphasis on evolutionary, biological, psychological, and sociocultural factors. Topics include evolutionary bases of sex research, evolution of sex, influence of sex hormones on brain and behavior, sexual development, and roles of genes and hormones on sexual orientation. P/NP or letter grading.

120A. Cognitive Psychology. (4) Lecture, three hours; discussion, one hour. Prerequisites: courses 10, 100A. Designed for juniors/seniors. Survey of cognitive psychology: how people acquire, represent, transform, and use verbal and nonverbal information, perception, attention, imagery, memory, representation of knowledge, language, action, decision making, thinking. P/NP or letter grading.

120B. Sensation and Perception. (4) Lecture, three hours; discussion, one hour. Prerequisites: courses 10, 100A. Designed for juniors/seniors. Acquisition of information about physical world through basic sensory mechanisms and perceptual processes. Perception of contours, surfaces, space, sound, Consequences between information, computations, and biological mechanisms in vision, audition, and other systems. P/NP or letter grading.

121. Laboratory in Cognitive Psychology. (4) Laboratory, four hours. Prerequisites: courses 10, 100A, 100B, 120A or 120B. Designed for Psychology and Cognitive Science majors. Laboratory experience with methods and phenomena from research on human perception, memory, thinking, and cognition. P/NP or letter grading.


124C. Human Memory. (4) Lecture, two hours; discussion, one hour. Prerequisite: course 120A or 120B. Designed for juniors/seniors. Review of current issues in research on basic processes and structural components that comprise the human memory system. Discussion topics include practical implications of such research for instruction, marketing, and witness testimony. P/NP or letter grading.

124D. Consciousness: Current Debates. (4) Seminar, three hours. Prerequisites: courses 100B, 115. Designed for juniors/seniors. Review of current issues in research on cognitive neuroscience of consciousness, with focus on modern theories of consciousness perception, especially in visual modality so as to reflect its impact in consciousness in consciousness research. P/NP or letter grading.

124F. Thinking. (4) Lecture, three hours. Prerequisite: course 120A or 120B. Analysis of experimental studies of human categorization, reasonings, decision making, problem solving, creativity, and related topics. P/NP or letter grading.

124G. Cognition and Successful Aging. (4) Lecture, three hours. Prerequisites: course 120A or 120B. Discussion of cognitive, social, and emotional changes that happen with age, how people live and learn, focus on what is important, achieve balance, and get better with age. Topics include happiness, memory, brain training, use of emerging technology, wisdom, humor, intelligence, memory, and what constitutes successful aging. P/NP or letter grading.
124J. Perception, Learning, and Learning Technology. (4) Seminar, three hours. Requisite: course 120A or 120B. Aspects of perception and cognition as they relate to learning and potential for learning technology. Basic knowledge about visual information processing, percep- tual learning, knowledge representation, pattern recognition, attention, memory, and expertise, as well as research on learning, technology, and applications of perceptual and cognitive concepts in specific domains with special focus on teaching and learning in mathematics, P/NP or letter grading.

124K. Ethical, Legal, and Societal Implications of Cognitive Neuroscience. (4) Lecture, three hours. Requisite: course 120A or 120B. Designed for juniors, seniors, or graduate students. Critical use of neuroimaging data in legal system as means to assess memories, truthfulness, culpability, and probability of guilt. Consideration of social and societal consequences of use of cognitively enhancing drugs, memory enhancing techniques, brain stimulation, and neural prosthesis. Students debate range of current topics. P/NP or letter grading.

125. Clinical Psychology Laboratory. (4) Laboratory, four hours. Requisites: courses 10, 100A, 100B, and 127A or 127B or 127C. Designed for departmental majors. Methods, designs, and issues in conduct of research. Students will develop and conduct research. Content varies by instructor, with concentration on one of: schizophrenia, mood disorders, anxiety disorders, childhood disorders, psychological and biological mechanisms, observational methods with families and couples. P/NP or letter grading.

127A. Abnormal Psychology. (4) Lecture, three hours; discussion, one hour. Requisite: course 10. Not open for credit with credit for course 127B or 127C. Study of psychological disorders (e.g., depression, anxiety, substance use disorders, schizophrenia) across lifespan, including role of biological, behavioral, environmental, and cultural factors. Diagnosis and treatment approaches. Discussion of stigma and practices that support inclusiveness. P/NP or letter grading.


129C. Culture and Mental Health. (4) Lecture, two hours; discussion, one hour. Requisites: courses 10, 100A, 100B. Examination of culture and human behavior in general, and culture and mental health in particular. Emphasis on cultural groups that comprise major U.S. ethnic groups (i.e., African Americans, Latinos/Chicanos, Asian Americans, and American Indians). P/NP or letter grading.


129F. Clinical Psychology of Childhood and Adolescence. (4) Lecture, two hours; discussion, one hour. Requisite: course 127A or 127B or 127C. Survey of child and adolescent psychopathology and psychotherapy from a developmental perspective. Coverage includes such conditions as anxiety disorders, depression, conduct and attention problems, eating disorders, and autism, with information on prevalence, causes, common treatments and their effects. P/NP or letter grading.

130. Developmental Psychology. (4) Lecture, three hours; discussion, one hour. Requisites: courses 10, 100A. Designed for juniors/seniors. Elaboration of developmental aspects of physical, mental, social, and emotional growth from birth to adulthood. P/NP or letter grading.

131. Research in Developmental Psychology. (4) Discussion, one hour; laboratory, three hours. Requisites: courses 10, 100A, 100B, and 130 or one course from 131A or 131B. Child Psychology and Cognitive Science majors. Forms of scientific writing; ethics of research, especially with minors; special advantages and problems of asking developmental re- search questions; relevant methodologies for experimental and observational work; data analyses and data presentation options. P/NP or letter grading.


132B. Mental Health in Schools: Policy and Practice. (4) Seminar, three hours. Limited to juniors/sen- iors. Policies, models, and mechanisms for mental health in schools. Psychopathology placed into broad perspective of normal development and practical problems to explore range of theoretical, practical, and ethical issues. P/NP or letter grading.

133A. Adolescent Development. (4) Lecture, three hours. Requisites: courses 10, 100A. Examination of cognitive, social, and psychological development of the adolescent. P/NP or letter grading.

133B. Cognitive Development. (4) Lecture, three hours. Requisites: courses 10, 100A. Major theories, approaches, and issues in study of cognitive development. Readings include original research on important topics such as development of perception, language, thinking, and problem solving, and acquisition of con- cepts and domain-specific language. P/NP or letter grading.

133C. Language Development. (4) Lecture, three hours. Requisites: courses 10, 100A. Application of principles of cognitive development, learning, and per- ception to study of language development. Topics in- clude formalists and acquisitionists (sounds, meanings, grammatical structures), learning mecha- nisms, communication skills, and relation between language and thought in children. P/NP or letter grading.

133D. Social and Personality Development. (4) Lecture, three hours. Requisites: courses 10, 100A. Theory and research on social and personality develop- ment during childhood. Topics include parent/child attachment, temperament, self-control, aggression, sex-typing, self-concept, moral reasoning and be- havior, social status and social skills, and peer group relations. P/NP or letter grading.

133E. Perceptual Development. (4) Lecture, three hours. Requisites: courses 10, 100A. Topics include origins and development of human perceptual abili- ties, origins of knowledge about functionally important aspects of the environment, ecological and computa- tional issues in perception, research and theory about initial perceptual capacities, and some sensory foun- dations. P/NP or letter grading.

133F. Psychology and Education. (4) Lecture, three hours. Requisites: courses 10, 100A. Application of principles of cognitive development, learning, and per- ception to educational problems. Topics include gen- eral instructional issues, psychology of reading and mathematics, educational psychology, education, and education of the disadvantaged. P/NP or letter grading.

133G. Culture and Human Development. (4) Lecture, three hours; discussion, one hour. Requisites: courses 10, 100A. Role of culture in human develop- ment through psychology, anthropology, and autobi- ography. Students relate material from lectures and readings through projects, to di- verse cultural backgrounds in class, at UCLA, and in the broader community. P/NP or letter grading.

133L. Applied Developmental Psychology. (4) Lecture, three hours. Requisites: courses 10, 100A. Appli- cation of development through psychology to issues pertaining to improving well-being of children and their families. Topics include quality of child care, patterns and ranges of normal child behaviors, developmental disabilities, safety, legal, and child protective issues, child-rearing practices. P/NP or letter grading.

134A. Applied Developmental Psychology: Infant/ Toddler Care and Education. (4) Lecture, three hours. Designed for Applied Developmental Psychol- ogy minors. Coverage of children zero to three years old. Topics include physical, cognitive, social, and emotional development of children, developmentally appropriate practices, child care quality, role of educator/caregiver, and other related issues. Letter grading.

134B. Applied Developmental Psychology: Pre- school/School-Age Care and Education. (4) Lecture, three hours. Designed for Applied Developmental Psychology minors. Coverage of children three to eight years old. Topics include physical, cognitive, so- cial, and emotional development of children, develop- mentally appropriate practices, role of educator/caregiver, and other related issues. Letter grading.


134F. Infant Care and Development. (4) Lecture, three hours. Requisites: course 10, one course from 130 or 133B through 133J, one statistics course. Ex- tensive study of research methods, current research findings, and theories used to understand infant de- velopment from conception to the second year of life, including cross-cultural application of this knowl- edge to various populations. P/NP or letter grading.

134G. Early Childhood Curriculum. (4) Lecture, three hours. Requisites: course 10, one course from 130 or 133B through 133J, one statistics course. Exam- ination of methods, materials, and philosophies that enhance development of children in context of childcare settings. Topics include issues of multicultural- ism, antibias curriculum, and special needs adapta- tions. P/NP or letter grading.

134I. Child, Family, and Community. (4) Lecture, three hours. Requisites: course 10, one course from 130 or 133B through 133J, one statistics course. Key topics of parenting and of changes in parent-child relationship from birth through young adulthood. Overview of theories, dis- cussion of transition to parenthood, and examination psychology / 687
of parenting across developmental stages. Examination of how parenting and parent-child relationship are affected by family dynamics and contextual factors. Study of effective child socialization techniques and their theoretical and empirical foundations to meet children's developmental needs: build positive and mutually respectful parent-child relationships; and provide positive guidance to promote self-regulation, competence, and socially responsible behavior. P/NP or letter grading.


136A. Social Psychology Laboratory. (4) Lecture, one hour; laboratory, four hours. Requisites: courses 10, 100A, 100B, 135. Designed for Psychology majors. Introduction to research designs and methods used to test social psychological hypotheses, including experiments, observation, content analysis, and/or questionnaires. P/NP or letter grading.

136B. Nonexperimental Methods in Social Psychology. (4) Lecture, two hours; laboratory, two hours. Requisites: courses 10, 100A, 100B, 135. Designed for Psychology majors. Research experience with nonexperimental methods for study of social attitudes or behavior, including fieldwork with survey research, naturalistic observation, or questionnaires. P/NP or letter grading.

M137B. Nonverbal Communication and Body Language. (4) (Same as Communication M111.) Lecture, three hours. Examination of how various forms of nonverbal communication convey meaningful information to perceivers, with focus on both production and perception of multiple communication formats (e.g., affect expression of face and body, gesture, and kinesics), with strong emphasis on body language. Readings from variety of related fields. P/NP or letter grading.

137C. Intimate Relationships. (4) Lecture, three hours. Requisites: courses 10, 100A. Limited to juniors/seniors. Introduction to how social scientists think about, study, and treat intimate relationships, with emphasis on understanding how relationships change over the course of life and interaction, relationship formation, conflict resolution, social support, sex, role of individual differences, and external circumstances. P/NP or letter grading.

137D. Psychology of Diversity. (4) Lecture, three hours. Requisites: course 10 or Gender Studies 10. Designed for juniors/seniors. Examination of how culture, socioeconomic class, ethnicity, gender, and other group differences are created, perceived, and maintained. Emphasis on how scientific evidence informs approaches to contemporary problems including management of diverse workforce, immigrant integration, racial tensions, and health/educational disparities. P/NP or letter grading.

M137E. Women in the Profession of Women and Men. (4) (Same as Gender Studies M137E.) Lecture, two and one-half hours. Requisite: course 10 or Gender Studies 10. Designed for seniors. Examination of work behavior and topics include inventions, advancements, barriers, and gender roles. P/NP or letter grading.

137G. Social Cognitive Neuroscience. (4) Lecture, three hours. Principles of social cognitive neuroscience (SCN) and survey of broad array of topics in field. SCN is fundamental merging of social science questions and tools and sciences, with particular emphasis on functional magnetic resonance imaging (fMRI). P/NP or letter grading.

137I. Social Influence. (4) Lecture, three hours. Requisite: course 10. Study of theory and research that addresses influence and persuasion from social psychological perspective. Particular attention given to reviewing theory and empirical research on conformity, compliance, and obedience. Covers attitudes and their measurement, factors that make persuasive messages effective in changing attitudes, social influence online, cross-cultural influence, and resisting persuasion and influence attempts. Application of findings from social influence literature to understanding influence processes in various social contexts. P/NP or letter grading.


137K. Psychology of Emotion. (4) Lecture, three hours. Designed for senior/junior psychology majors. Broad overview of science of human emotion. Covers topics such as history of emotion research, dominant models of emotion, and means to be happy. Exploration of range of perspectives in psychology, ranging from social, cultural, developmental, health, and clinical psychology. Consideration also of cognitivist and behavioral neuroscience. P/NP or letter grading.

M138. Electoral Politics: Political Psychology. (4) (Same as Political Science M141A.) Lecture, three hours; discussion, one hour (when scheduled). Requisites: courses 10, 100A, 100B, 135. Designed for Psychology majors. Examination of political behavior, political socialization, personality and politics, and psychological analysis of public opinion on these issues. P/NP or letter grading.

M139. Perspectives on Autism and Neurodiversity. (4) (Same as Disability Studies M139) Seminar, three and one half hours. Genealogy of autism as diagnostic category and cultural phenomenon from its historical roots as new, rare, and obscure condition in early 1970s to prevalent disability in current day society and global epidemic. Examination of material sourced from various fields and disciplines invested in autism, including psychology, neuroscience, arts and humanities, popular media, anthropology, activism, and critical autism studies. Students encounter and analyze multiple perspectives on autism and put them in conversation with one another. Attention paid to way people with autism describe and represent their own experiences and dis/ability and how autism experiences can be magnified or minimized. P/NP or letter grading.

M140. Introduction to Study of Aging. (4) (Same as Social Welfare M140) Lecture, three hours. Designed for juniors/seniors. Perspectives on major features of human aging—biological, social, psychological, and humanistic. Introduction to information on range of influences on aging to prepare students for subsequent specialization. P/NP or letter grading.

142H. Advanced Statistical Methods in Psychology (Honors). (4) Lecture, three hours; laboratory, two hours. Requisites: courses 100A, 100B. Survey of statistical techniques commonly used in psychology, education, and behavioral and social sciences: correlation and regression, analysis of variance, and multiple regression. P/NP or letter grading.


M147A. Psychology of Lesbian Experience. (4) (Same as Women's Studies M147A and Lesbian, Gay, Bisexual, Transgender, and Queer Studies M147A) Lecture, two hours; discussion, one hour. Requisite: course 10 or Gender Studies 10 or Lesbian, Gay, Bisexual, Transgender, and Queer Studies M114. Designed for juniors/seniors. Review of research and theory in gender studies and psychology to examine various aspects of lesbian experience, impact of heterosexism/stigma, gender role socialization, minority status of women and lesbians, identity development within a multicultural society, changes in psychological theories about lesbians in sociocultural context. P/NP or letter grading.

M149. Language Development and Socialization. (4) (Same as Anthropology M152P) Lecture, three hours; discussion, one hour (when scheduled). Exploration of processes through which children acquire language and culture. Focus on a variety of issues and problems related to the development and use of language and culture. Readings and practices of language and become competent in social and cultural worlds around the globe. Perspectives on language and socialization over childhood, across communities of practice, and across different ethnic and socioeconomic groups. Bridges work from anthropology, psychology, linguistics, and cognitive science. Topics include cross-cultural perspectives on child development and wide range of methodological approaches. Examination of ways in which language development and socialization are shaped by culture, morality, inequality, education, and cognition. P/NP or letter grading.

150. Introduction to Health Psychology. (4) Lecture, three hours. Requisite: course 10. Areas of health, illness, treatment, and delivery of treatment that can be elucidated by psychological research and applied to health problems. P/NP or letter grading.

151. Research Methods in Health Psychology. (4) Laboratory, four hours. Enforced requisites: courses 10, 100A, 100B, 150. Research methods used in health psychology, including experimental, quasi-experimental, and nonexperimental methods. Examples and projects from health psychology. P/NP or letter grading.

152. Mind-Body Interactions and Health. (4) Lecture, three hours. Designed for junior/senior Psychology majors. Exploration of bi-directional interactions between mind and body and how these interactions influence physical health. Topics include impact of stress, emotions, personality, and social world on biological systems and health. Discussion of mind-body interventions designed to reduce stress and improve health, including scientific research on yoga and meditation. P/NP or letter grading.

151. Behavior and Brain Development. (4) Lecture, three hours. Requisites: courses 10, 100A, Limited to juniors/seniors. Exploration of relationship between brain development and behavior. Examination of how cognitive neuroscience can be used to understand how developmental and how developmental approach can advance progress in cognitive and developmental sciences. P/NP or letter grading.

152. Psychology of Addiction. (4) Lecture, three hours; discussion, one hour (when scheduled). Survey of topics covering psychological and neurobiological theories of addiction, pharmacological effects of drugs and abuse, etiology, assessment, diagnosis, and treatment. P/NP or letter grading.

M163. Death, Suicide, and Trauma. (4) (Same as Sociology M163) Lecture, three hours; discussion, one hour. Sociological analysis of incidence of violent death and how it is understood in U.S. and third leading cause for young people aged 15 to 24. Both kinds of violent deaths are often dismissed as extreme psychopathology, reflecting individual mental health issues. Sociologists argue that suicide and homicide are social facts. Suicide and homicide do not occur randomly in society but are stratified according to social factors such as age, gender, race, social location, and class. Emphasis on configuration of social structure and system to determine suicide and solve homicides. Review of historic and contemporary studies to examine how research and conceptualizations of suicide and homicide have changed, as well as social responses to these phenomena. P/NP or letter grading.

177. Counseling Relationships. (4) Lecture, two hours; discussion, two half hours. Requisites: courses 10, 100A, and 127A or 127B or 127C. Designed for junior/senior Psychology majors. Conceptual and empirical foundations of psychological counseling; comparison of alternative models of counseling processes. Emphasis on the laboratory component. Laboratory in community mental health areas such as drug abuse, suicide prevention, and crisis intervention. P/NP or letter grading.

184A-184B. Psychology Research Opportunity Program Seminars. (184A) Preparatory course, 90 minutes. Designed to bring together Psychology Research Opportunity Program (PROP) students undertaking supervised tutorial research in seminar setting with one or more faculty members to discuss their own work or related work in discipline. Led by one supervising faculty member. P/NP grading.

185. Research Practicum in Psychology. (3) Laboratory, seven hours. Corequisite: course C194D. Limited to 25 students. Supervision of psychology research through understanding of faculty mentor. Only 12 units from any combination of courses 185, 192, 194, 195, and 196 may be applied toward undergraduate degree. Only 12 units may be applied toward undergraduate degree. Only 12 units may be applied toward undergraduate degree. Only 12 units may be applied toward undergraduate degree. Only 12 units may be applied toward undergraduate degree.

186A. Cognitive Science Laboratory: Introduction to Theory and Simulation. (4) Laboratory, four hours. Requisites: courses 10, 85, 100A, 100B, Program in Computing 10A, 10B. Designed for junior/senior departmental majors. Models of cognition within framework of explanation at multiple levels of abstraction. Examples of elementary models in multiple psychological domains (e.g., visual perception, categorization, learning, reasoning, and memory). Types of models include neural networks and symbolic models. Lectures and discussions interwoven with computer simulations written in MATLAB, P/NP or letter grading.


186C. Cognitive Science Laboratory: Psychophysical Theories and Methods. (4) Lecture, two hours; laboratory, two hours. Requisites: courses 10, 85, 100A, 100B. Designed for junior/senior departmental majors. Lectures and laboratory work that examine perceptual measurement procedures (psychophysical methods) and cognitive processing and decision models on which procedures are based, with particular emphasis on theory detection and its applications. Letter grading.

186D. Laboratory in Functional Neuroimaging. (4) Laboratory, four hours. Enforced requisites: courses 10, 100A, 100B, Program in Computing 10A, 10B. Introduction to study of brain with functional resonance imaging (fMRI). Major all aspects to be discussed, from physical basis of MR signal to data analysis. Letter grading.

188A. Special Seminars: Psychology. (4) Seminar, three hours. Limited to juniors/seniors. Departmentally sponsored experimental or temporary seminars on selected topics in psychology, such as those taught by visiting faculty members. Reading, discussion, and development of culminating project. May be repeated for credit. P/NP or letter grading.

188B. Special Courses in Psychology. (4) Lecture, three hours. Designed for junior/senior majors. Departmentally sponsored experimental or temporary courses on topics of psychological interest, such as those taught by visiting faculty members. Consult Schedule of Classes for topics and instructors. May be repeated for credit. P/NP or letter grading.

188SA. Individual Studies for USIE Facilitators. (1) Tutorial, to be arranged. Enforced corequisite: course 188SB. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to discuss selected USIE seminar topic, conduct preparatory research, and begin preparation of syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.

188SB. Individual Studies for USIE Facilitators. (1) Tutorial, to be arranged. Enforced requisite: course 188SA. Designed for junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to finalize course syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.

188SC. Individual Studies for USIE Facilitators. (2) Tutorial, to be arranged. Enforced requisite: course 188SSB. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor while facilitating USIE 88S course. Individual contract with faculty mentor required. May not be repeated. Letter grading.

189. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities conducted by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

189HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to upper-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities conducted by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. Letter grading.

190. Research Colloquia in Psychology. (1) Seminar, one hour. Designed to bring together students undertaking supervised tutorial research in seminar setting with one or more faculty members to discuss their own work or related work in discipline. Led by one supervising faculty member. May be repeated for credit. P/NP grading.

191. Variable Topics Research Seminars: Psycholog- y. (1) Seminar, one hour. Limited to juniors/seniors. Research seminar on selected topics in psychology. Requires discussion, and development of culminating project. May be repeated for credit. P/NP grading.


192. Education Practices in Psychology. (4) Seminar, three hours. Limited to juniors/seniors. Undergraduate Education Program for advanced undergraduate students to assist in courses related to psychology. Students assist in preparation of materials and development of innovative programs under guidance of faculty members and teaching assistants. Only 12 units from any combination of courses 185, 192, 194, 195, and 196 may be applied toward undergraduate degree. May be applied toward undergraduate degree. May be applied toward undergraduate degree. May be applied toward undergraduate degree. May be applied toward undergraduate degree.

193. Research Participation. (1) Tutorial, two hours. Limited to students in College Honors Program. Participation in research projects with faculty supervisor and discussion of student and faculty research presentations. Information and applications may be obtained from Undergraduate Advising Office, 1301 Franz Hall. If approved in advance by Undergraduate Office, courses 191CH and 198 may be applied toward elective course requirement for any Psychology Department major. Letter grading.

194. Independent Study in Psychology. (1) Seminar, three hours. Designed to bring together students undertaking supervised tutorial research in seminar setting with one or more faculty members to discuss their own work or related work in discipline. Led by one supervising faculty member. May be repeated for credit. P/NP grading.
193. Journal Club Seminars: Psychology. (1) Seminar, one hour. Limited to undergraduate students. Discussion of readings selected from current literature of particular field or attendance at and write-ups of speakers series. May be repeated for credit. P/NP grading.

194A. Internship Seminars: Psychology. (2) Seminar, two hours. Corequisite: course 195A. Study of research methods and applications, and current literature through group discussion, presentation, and papers. Research methods and topics vary by instructor. Only 12 units from any combination of courses 185, 192, 194, 195, and 196 may be applied toward undergraduate degree. May not be applied toward course requirements for any Psychology Department major. Individual contract required. Information and contracts may be obtained from Undergraduate Advising Office, 1531 Franz Hall. P/NP grading.

194B. Research Group Seminars: Psychology. (1) Seminar, one hour. Corequisite: course 196A (3-unit option). Limited to juniors/seniors who are part of research group. Discussion of research methods and current field or of research of faculty members or students. Only 12 units from any combination of courses 185, 192, 194, 195, and 196 may be applied toward undergraduate degree. May not be applied toward course requirements for any Psychology Department major. Individual contract required. Information and contracts may be obtained from Undergraduate Advising Office, 1531 Franz Hall. P/NP grading.

194C. Research Group Seminars: Cognitive Science. (1) Seminar, one hour. Corequisite: course 196B (3-unit option). Limited to junior/senior Cognitive Science majors who are part of research group. Discussion of research methods and current literature in field or of research of faculty members or students. Only 12 units from any combination of courses 185, 192, 194, 195, and 196 may be applied toward undergraduate degree. May not be applied toward course requirements for any Psychology Department major. Individual contract required. Information and contracts may be obtained from Undergraduate Advising Office, 1531 Franz Hall. P/NP grading.

194D. Research Group Seminars: Practicum. (1) Seminar, one hour. Corequisite: course 185. Designed for undergraduate students who are part of research group. Discussion of research methods and current literature in field or of research of faculty members or students. Only 12 units from any combination of courses 185, 192, 194, 195, and 196 may be applied toward undergraduate degree. May not be applied toward course requirements for any Psychology Department major. Individual contract required. Information and contracts may be obtained from Undergraduate Advising Office, 1531 Franz Hall. P/NP grading.

195A. Community Internships in Psychology. (2) Tutorial (approved community setting), six hours. Corequisite: course 194A. Limited to juniors/seniors. Internship in applications of psychology in supervised setting in community agency or business. Students meet on regular basis with sponsor and provide periodic reports of their experience. Only 12 units from any combination of courses 185, 192, 194, 195, and 196 may be applied toward undergraduate degree. May not be applied toward course requirements for any Psychology Department major. Individual contract with supervising placement sponsor required. Information and contracts may be obtained from Undergraduate Advising Office, 1531 Franz Hall. P/NP grading.

195B. Corporate Internships in Cognitive Science. (4) Tutorial, eight hours. Limited to junior/senior Cognitive Science majors. Practical applications of cognitive science through internship experience in supervised setting. Students meet on regular basis with supervisor and provide periodic reports of their experience. Only 12 units from any combination of courses 185, 192, 194, 195, and 196 may be applied toward undergraduate degree. May not be applied toward course requirements for Cognitive Science major. Individual contract with supervisor required. Information and contracts may be obtained from Undergraduate Advising Office, 1531 Franz Hall. P/NP grading.

199A. Senior Project in Psychology. (4) Tutorial, to be arranged. Limited to juniors/seniors. Supervised individual research under guidance of psychology faculty mentor. Culminating paper required. Only one 4-unit 199 course may be taken per term. May be repeated for credit. Individual contract required. Information and contracts may be obtained from Undergraduate Advising Office, 1531 Franz Hall. P/NP grading.

199B. Senior Project in Psychology. (4) Tutorial, to be arranged. Limited to juniors/seniors. Supervised individual research under guidance of psychology faculty mentor. Culminating paper required. Only one 4-unit 199 course may be taken per term. May be taken only once for letter grade. Individual contract required. Information and contracts may be obtained from Undergraduate Advising Office, 1531 Franz Hall. Letter grading.

Graduate Courses

200A. Pavlovian Processes. (4) Lecture, three hours. Basic principles and characteristics of learning and behavior, including Pavlovian conditioning, instrumental learning, and species-specific behavior. S/U or letter grading.

200B. Instrumental Conditioning. (4) Lecture, three hours. Topics include animal learning and conditioning and application of learning principles to goal-directed action, motivational processes and goal selection in nonhuman animals. S/U or letter grading.


201. Current Issues in Learning and Behavior. (1) Discussion, 90 minutes. Designed for graduate students. Required of learning and behavior students a minimum of four times (entire first year and winter of second year). Presentation of papers of current interest in learning, behavior, or applied behavioral analyses by experts in the field. Evaluation of their significance and methodology in detail. May be repeated for credit. S/U grading.

202. Research in Learning and Behavior. (2) Forum in which graduate students discuss the literature and methodological, analytical, and interpretational issues related to specific topics of research in learning and behavior. S/U grading.

204A. Basic Motivational Processes. (4) Lecture, three hours. Designed for graduate students. Analysis, using behavioral systems approach, of basic motivated behavior such as feeding, drinking, foraging, and reproduction. Same approach also applied to phenomena such as acquired motivation, reinforcement, and drug addiction. Historical survey of behavioral analyses of motivation and goal-directed behavior.

204B. Theories of Learning. (4) Discussion, three hours. Requisite: course 200A. Critical discussion and in-depth analysis of current major theoretical approaches to associative learning, with emphasis on recent experimental analyses of conditioning phenomena.

204C. Evaluative Processes. (4) Lecture, three hours. Designed for graduate psychology students. Lectures and discussion on current research in application learning principles to clinical and social problems such as alcohol and drug abuse, aggression, fear management, mental retardation, behavioral medicine, autism/schizophrenia, etc. S/U or letter grading.

204D. Fear and Anxiety. (4) Lecture, three hours. Designed for graduate students. Graduate training in theoretical and empirical advances, from biological and behavioral perspectives, in the area of fear and anxiety. Integration of animal and human research.

205A. Cortical Plasticity and Perceptual Learning. (2) Lecture, three hours. Designed for graduate students. Examination of neural basis of perceptual learning. Overview of literature on cortical plasticity and how it relates to different forms of perceptual learning in visual, auditory, and somatosensory modalities. Review of mechanisms of cortical plasticity, including basic features of long-term synaptic plasticity and computational models of cortical processing. Letter grading.

205B. Human Neurophysiology. (2) Lecture, three hours. Designed for graduate students. Examination of higher cognitive processes in terms of neural mechanisms that underlie them. Topics include cortical modularity and organization, coordinated sensory representation, language, regional functional specialization, attention, and regulation of cortical function by descending systems. Letter grading.


205D. Clinical Psychopharmacology. (2) Lecture, three hours. Designed for graduate students. General principles of brain neurotransmitters, including synthesis, cell bodies and pathways, and receptor subtypes. General principles of drug administration and pharmacokinetics. Major classes of psychoactive drugs, animal models, and “atypical” compounds. Letter grading.

205E. Neural Basis of Reward and Value. (2) Five week course. Lecture, three hours. Designed for graduate students. Overview of neural systems underlying reward and value. Emphasis on mechanisms of reinfor cement learning and cost-benefit or value-based decision making. Readings drawn from primary literature in animal research. Letter grading.

205F. Physiology of Learning. (2) Lecture, three hours. Designed for graduate students. Search for anatomic loci of engrams. Cell biology of plasticity, including electrophysiological approaches to associative learning, with emphasis on recent experimental analyses of conditioning phenomena.
205G. Behavior Genetics. (2) Lecture, three hours. Designed for graduate students. In-depth analysis of field of behavior genetics, including methods for determining genetic and environmental influences and for locating and characterizing genes impacting these traits. Examination of current knowledge of genetic contributions to cognition and behavior and disorders thereof. Letter grading.

205I. Attention. (2) Lecture, three hours. Designed for graduate students. Review of cognitive neuroscience of attention from classical psychological models to modern computational models. Focus on perception, with brief coverage of attention in action and decision. Letter grading.


205K. Vision Neurobiology. (2) Lecture, three hours. Designed for graduate students. Exploration of anatomy, physiology, and computation in visual system, focusing on retina, visual cortex, and overall performance. Letter grading.

205L. Cognitive Neuroscience. (2) Lecture, three hours. Designed for graduate students. Overview of neural basis of higher cognitive functions, integrating anatomical, physiological, and behavioral approaches and incorporating clinical and experimental data. Systems covered include attention, perception, memory, language, and hemispheric specialization. Letter grading.

205M. Neuropsychology of Perception. (2) Lecture, three hours. Designed for graduate students. Overview of neural substrates of high-level visual processing. Topics include agnosias and characteristics of electrophysiological responses recorded in primates in temporal lobe. Discussion of issues regarding neural representation of knowledge. Letter grading.

205N. Dopamine Prediction Error: Case Study of Reinforcement Learning Theory. (2) Seminar, three hours. Overview of dopaminergic prediction error—signal exhibited when there is difference between expected outcome and reality—and theories that have been used to describe it. Discussion of papers describing studies of dopamine prediction error, its application to temporal difference reinforcement learning (TDRL), and challenges to this theory by recent work using optogenetic tools. Letter grading.

205O. Neurobiology of Defensive Behaviors. (2) Lecture, three hours. Designed for graduate students. Exploration of anatomy, physiology, and computation in visual system, focusing on retina, visual cortex, and overall performance. Letter grading.


215B. Human Physiology in Social and Behavioral Science. (4) Lecture, three hours. Limited to graduate students. Introduction to field of human physiology to help students develop conceptual and methodological skills necessary for interpreting research in this area. Letter grading.

216A. Psychology of Chronic Disease. (4) Seminar, three hours. Limited to graduate students. Major themes include conceptualization and operationalization of adjustment to chronic illness: theoretical framework for understanding determinants of adjustment to chronic illness and current research on these determinants, prevalence of psychological disorder in populations with chronic illnesses, evidence-based psychosocial interventions for individuals with chronic illness, and terminal illness and end-of-life care. Readings and discussion focus on several major chronic diseases (e.g., cardiovascular diseases, cancer, AIDS, rheumatic conditions). Letter grading.

216B. Psychoneuroimmunology. (4) Seminar, three hours. Limited to graduate students. Introduction to field of psychoneuroimmunology to help students develop conceptual and methodological skills necessary for interpreting research in this area. Letter grading.

216C. Psychology of Women's Health. (4) Seminar, three hours. Limited to graduate students. Examination of theoretical and empirical advances in psychology that effectively measure major health behaviors, clinical and methodological issues within domain of interpretive research (TDRL), and challenges to this theory by recent work using optogenetic tools. Letter grading.

216D. Psychology of Aging and Health. (4) Seminar, three hours. Limited to graduate students. Discussion of theory and research on biological, emotional, social, and behavioral aspects of aging. Topics include physical and cognitive changes with age, mental and physical well-being in older adulthood, and socioemotional functioning changes with age. Letter grading.

216E. Families, Emotions, and Health. (4) Seminar, three hours. Limited to graduate students. Discussion of theory and research on biological, emotional, social, and behavioral aspects of aging. Topics include physical and cognitive changes with age, mental and physical well-being in older adulthood, and socioemotional functioning changes with age. Letter grading.

216F. Community Psychology. (4) Seminar, three hours. Limited to graduate students. Social problems focus, with discussion of both conceptual and methodological issues that arise when designing and evaluating community interventions. Issues related to conceptualization of social problems as opposed to problems that impact on individuals, and presentation of multidimensional exploratory models and interventions for several social problems. Special attention to ethnic and socioeconomic health disparities and to methodological issues in conducting research on these issues. Letter grading.

216G. Biology of Chronic Disease. (4) Seminar, three hours. Limited to graduate students. Examination of basic epidemiology and biology of major chronic diseases (e.g., cardiovascular disease, cancer, diabetes) and consideration of practical and logistical issues involved in studying chronic disease populations in behavioral and population research. S/U or letter grading.

216H. Social Behavior Theory and Behavior Change. (4) Seminar, four hours. Overview of research and theory in health behavior and health behavior change. Identification of contribution of health behaviors to overall health, construction of study measures that effectively measure major health behaviors, critical evaluation of health behavior research and design, and generation of hypotheses and design research using main health behavior theories. S/U or letter grading.

217. Variable Topics in Health Psychology. (4) Seminar, three hours. Topics vary by instructor within health psychology area of study and may include epigenetics, child health psychology, health behavior, and behavior change. May be repeated for credit. S/U or letter grading.

218. Research Methods in Health Psychology. (4) Seminar, three hours. Designed for graduate psychology students. Basic foundation for health psychology graduate students to study various research designs and methods, measurement issues, responsible conduct of research, and related issues that are found in research in health psychology. S/U or letter grading.

219. Health Psychology Lecture Series. (2) Formerly numbered 425S. Lecture, one hour. Clinicians and researchers in health psychology from Los Angeles present their research, programs, and/or clinical work as part of training program in health psychology. May be repeated for credit. S/U grading.

220A. Social Psychology. (4) Lecture, three hours. Designed for graduate psychology students. Intensive consideration of concepts, theories, and major problems in social psychology.


220C. Advanced Social Psychology. (4) Lecture, three hours. Designed for graduate psychology students. Discussion of research, forms of research, and current research areas in social psychology area of study and may include epidemiology, child health psychology, health behavior, and methodological issues in research using main health behavior theories. S/U or letter grading.

220D. Introduction to Social Psychology. (4) Lecture, three hours. Designed for graduate students. Introduction to social psychology theory and research on interpersonal relations, with emphasis on friendship, group relations research. Approaches not simply restricted to work within psychology but across social sciences in general, including anthropology, political science, and sociology. S/U or letter grading.
222D. Social Stigma. (4) Seminar, three hours. Introduction to classical and contemporary theory and research on social psychology of stigma, primarily from perspectives of stigmatized. Letter grading.

M222E. Foundations of Organizational Behavior. (4) (Same as Management-PhD M243.) Lecture, three hours. Design, development, and impact of organizational systems. Development of comprehensive survey of classic and emerging theories and research in field of organizational behavior, with focus on micro-level topics related to individual and interpersonal processes within organizations. Exploration of how individual behaviors, cognitions, and perceptions are affected by organized content, structure, and culture. S/U or letter grading.

222F. Professional Issues in Psychology. (4) Seminar, three hours. Acquisition of skills essential for success in graduate school and academia more broadly, including transition to graduate school, writing, manuscript reviewing, grant writing, teaching and mentoring, academic job market, job negotiating, and giving job talks. Involves combination of guest speakers, lectures, discussions, readings, written exercises, and practical exercises. S/U or letter grading.

M222G. Social Vision. (4) (Formerly numbered 222G.) Same as Communication M234.) Seminar, three hours. Exploration of nascent field of social vision, with emphasis on how observers utilize visible cues in face and body evidence for emotions of other people and how these perceptions are moderated by existing knowledge structures and motivations. S/U or letter grading.

222I. Intervention Science. (4) Seminar, three hours. Exploration of use of science as basis for intervention. Exploration of psychology of social problems, and possible consequences for human behavior and social interaction. S/U or letter grading.


226A-226B-226C. Current Literature in Social Psychology. (2–2–2) Discussion, 90 minutes. Course 226A is limited to first-year social psychology students. Courses 226B and 226C are open to nonsocial psychology students with consent of instructor. Recent and current developments in social psychology are offered by members of faculty and their significant methodology discussed and critiqued in depth. S/U grading.

M226A. Proseminar: Political Psychology. (4) (Same as History M236A and Political Science M261A.) Seminar, three hours. Introduction to political psychology: psychobiography, personality and politics, mass attitudes, group conflict, political communication, and elite decision making. S/U or letter grading.

M228B. Seminar: Political Psychology. (4) (Same as Political Science M261D.) Discussion, three hours. Requisite: course 220A or Political Science M261A. Examination of interpersonal, political socialization, racial conflict, mass political movements, and public opinion. S/U or letter grading.

M228C. Critical Problems in Political Psychology. (4) (Same as Political Science M261E.) Discussion, three hours. Requisite: course 220A or Political Science M261A. Examination of interpersonal, political socialization, racial conflict, mass political movements, and public opinion. S/U or letter grading.

229. Social Cognition. (4) Lecture, one hour; discussion, two hours. Social cognition is concerned with how people organize and interpret social information in their environment. It provides the psychological background in the field and also gives depth and focus on particular research topics in the field. Weekly papers, as well as a lengthy final paper, required.

231. Psychology of Gender. (4) Seminar, three hours. Preparation: one prior course on gender/women's studies. Critical evaluation of current research and theory concerning psychology of gender, drawing on work from various areas of psychology to understand sources of gender differentiation and its consequences for human behavior and social interaction.

233. Human Sexuality. (4) Lecture, three hours. Designed for graduate students. Intended to teach students how to carry out research on human sexual behavior. Contents include theory construction, scale development, physiological and endocrinological implications, the role of hormones (e.g., brain, steroid, pituitary, gonad) in human copulation, ethical issues, methodological and statistical considerations, measurement of sexual arousal, fantasy, and sexual dysfunction therapy. Discussion-oriented, with emphasis on operationalizing predictions concerning human sexual functioning.

233. Seminar: Environmental Psychology. (4) Requisites: courses 235, 250A, 250B. Critical review of work in environmental psychology designed to identify basic dimensions for analysis of human-environment relationships. Use of human emotional responses to environments as intervening variables linking specific stimuli qualities to a variety of approach-avoidance behaviors. Individual differences and drug-induced states as these relate to emotional response dimensions used to explain within-individual differences in response to same environment over time or between-individual differences to same situation. Review of literature relating information rate from environments to arousal and preferences for those environments.

234. Social Psychological Aspects of Competitive Sport. (4) Examines social psychological aspects of competitive sport for children. Sport is presented as a major achievement domain for young participants. Topics include sources and consequences of stress, self-confidence, affect, adult influences and interactions, predictors of performance, determinants of participation and dropping out, and socialization through sport.


M236. Interdisciplinary Relationship Science. (4) (Same as Anthropology M209A, Education M217, and Sociology M270.) Lecture, three hours. Limited to graduate students. Surveys of approaches to relationship science in fields of anthropology, education, psychology, and sociology. Focus on theme of understanding biological, behavioral, and cultural aspects of relationships through diverse theoretical and methodological approaches. Use of broad definition of interpersonal relationships, including relationships such as parent-child, teacher-student, sibling, peer, kin, romantic relationships, marriages, and friendships. S/U or letter grading.

M238. Research Survey Techniques in Psychocultural Science. (4) (Same as Psychology M238.) Seminar, three hours. Designed for graduate students. Techniques for conceptualizing, conducting, and analyzing survey data; instruction in qualitative strategies for enhancing survey research on psychocultural problems.

M239. Personality, Motivation, and Attribution. (4) (Same as Education M215.) Discussion, three hours. Current research and theory relating personality variables (e.g., attributional styles, self-esteem) to motivational concerns such as persistence and intensity of behavior. Perceived causes of outcomes in achievement and affiliative domains. S/U or letter grading.

240A. Language and Cognitive Development. (4) Lecture, three hours. Preparation: one undergraduate developmental psychology course in cognitive or language development. Designed for graduate students. Consideration of topics and concepts, key theories, latest methods, and research findings in development of language and cognitive. S/U or letter grading.

240B. Social and Emotional Development. (4) Lecture, three hours. Preparation: one undergraduate developmental psychology course in cognitive or language development. Designed for graduate students. Consideration of major topics and concepts, key theories, latest methods, and research findings in social and emotional development. S/U or letter grading.

240C. Developmental Psychobiology. (4) Lecture, three hours. Limited to graduate students. Introduction to emerging field of developmental psychobiology, including cognitive and affective neuroscience. Consideration of major topics and concepts, key theories, latest methods, and research findings. S/U or letter grading.

241. Current Developments in Developmental Psychology. (1) Discussion, 90 minutes. Designed for graduate developmental psychology students. Preparation: current developmental psychology and closely related areas by experts in the field. Emphasis on approaches to a problem, making it suitable to interweave presentations by graduate students. S/U or letter grading.

242A-M242G. Seminars: Developmental Psychology. (4 each) Each course may be taken independently and may be repeated for credit.

242A. Perceptual Development. (4) Seminar, three hours. Requisites: courses 240A, 240B. May be taken independently and may be repeated for credit. S/U or letter grading.

242B. Cognitive Development. (4) Seminar, three hours. Requisites: courses 240A, 240B. May be taken independently and may be repeated for credit. S/U or letter grading.

242C. Socialization. (4) Seminar, three hours. Requisites: courses 240A, 240B. May be taken independently and may be repeated for credit. S/U or letter grading.

242D. Development of Language and Communication. (4) Seminar, three hours. Requisites: courses 240A, 240B. May be taken independently and may be repeated for credit. S/U or letter grading.

M242G. Adolescent Development. (4) (Same as Education M217F,) Seminar, four hours. Designed for graduate students. Review of recent research on physical, cognitive, social, and psychological development during second decade of life. Topics include physical development, changes in parent/adolescent relationships, role of peers, identity development, high-risk behaviors, stress and coping, and school adjustment.

243A-243B. Seminars: Practical and Social Issues in Developmental Psychology. (4–4) Four seminars, three hours each. Requisites: courses 240A, 240B. Socialization processes in human development and implications for social/political, educational, research issues, values, and societal change. In Progress (243A) and S/U or letter grading (243B) grading.

244. Critical Problems in Developmental Psychology. (4) (Same as Education M217C.) Lecture, four hours. Review of research and theory of critical content areas in personality development that bear on school performance: achievement motivation, self-concept, aggression, sex differences, empathy, and other social behaviors; review of status of emotional behavior in personality theory and development. S/U or letter grading.


M247. Culture, Brain, and Development. (4) (Same as Sociology M249.) Seminar, three hours. General introduction to interrelations of culture, brain, and development, including both social and cognitive development. Special attention to effects of social change on culture and human development. S/U or letter grading.

248. Brain and Behavioral Development During Adulthood. (4) (Same as Psychology M269.) Seminar, three hours. Requisites: courses 240A, 240B. Current problems; content varies depending on interest of class and instructor. May be repeated for credit with consent of instructor.

M254. Personality Development and Education. (4) (Same as Education M217D.) Lecture, four hours. Review of research and theory of critical content areas in personality development that bear on school performance: achievement motivation, self-concept, aggression, sex differences, empathy, and other social behaviors; review of status of emotional behavior in personality theory and development. S/U or letter grading.

to item response theory (IRT) measurement models. Requisites: courses 250A, 250B. Introduction to experimental design and planning of investigations.

250C. Advanced Psychological Statistics. (4) Lecture, three hours; discussion, two hours. Requisite: course 250A. Limited to graduate students. Review of traditional multivariate analysis and regression analyses, including model comparison strategies, evaluation of model assumptions, testing mediation and moderation hypotheses, working with categorical variables, general linear model, and logistic regression. Letter grading.

251A-251B-251C. Research Methods. (4-4-4) Tutorial, to be arranged. Designed for graduate psychology students. Students design and conduct original research under the supervision of instructor in charge. It is anticipated that many students will complete their project in two terms (normally three terms allowed). S/U (251A, 251B) and S/U or letter (251C grading).

252A. Multivariate Analysis. (4) Lecture, three hours. Requisites: courses 250A, 250B. Introduction to analysis of data having multiple dependent variables. Topics include principal component analysis, multiple regression, multivariate analysis of variance, discriminant analysis, canonical correlation, principal component analysis. Applications from clinical, cognitive, physiological, and social psychology. Computer methods.

252B. Discrete Multivariate Analysis. (4) Lecture, three hours. Requisites: courses 250A, 250B. Introduction to analysis of frequency table data. Topics include log-linear models, multivariate distributions, independent and conditional independence, log-linear models, multivariate categorical designs, and ordered categorical variables. Applications from various areas of psychology.


254A. Computing Methods for Psychology. (4) Lecture, three hours. Requisites: courses 250A, 250B. Use of MATLAB, but only basic programming knowledge and MATALB are required. Designed to teach basic computer methods relevant to work in experimental psychology and cognitive science. Topics include simulation/modeling, statistical data analysis, and stimulus presentation. S/U or letter grading.

254B. Mediation, Moderation, and Conditional Process Analysis. (4) Lecture, three hours. Requisite: course 250C. Designed for students with previous experience with regression analysis. Application of linear and logistic regression to assess how (moderation) and when (moderation) effects occur; and combination of these to examine when certain processes occur (conditional process analysis). S/U or letter grading.

255A. Quantitative Aspects of Assessment. (4) Lecture, four hours. Requisites: courses 250A, 250B. Introduction to issues concerning empirical measurement of abstract concepts using both classical and modern measurement techniques. Hands-on approach allows students to develop practical experience. In addition to discussion of issues concerning reliability and validity, topics include exposure to analytic approaches such as factor analysis, item response theory, multiple regression, principal components analysis, exploratory factor analysis, confirmatory factor analysis, path analysis, and structural equation modeling. S/U or letter grading.


256A. Introduction to Multilevel Modeling. (4) Lecture, four hours. Requisite: course 250C. Basics of random coefficient modeling for primary data from (1) individuals nested within groups and (2) repeated observations of individuals (longitudinal growth models). Selected advanced topics, including three-level models, cross-classified modeling dynamics, categorical data, contextual outcomes, power, and assumption violation. S/U or letter grading.

256B. Advanced Multilevel Modeling. (4) Lecture, four hours. Requisite: course 256A. Advanced topics in analysis of clustered and longitudinal data, including nonlinear models, multilevel mediation, nonhierarchical data structures, meta-analysis, modeling variance, and other topics of student interest. Readings in both quantitative and substantive multilevel modeling literature. S/U or letter grading.

257M. Multivariate Analysis with Latent Variables. (4) Same as Political Science M208D and Statistics M202C.) Lecture, three hours. Requisite: knowledge of IRT methods and analysis of data hypothesized to be generated by unmeasured latent variables, including latent variable analogues of traditional multivariate analysis. Causal modeling; theory testing via analysis of moment structures. Measurement models such as confirmatory, higher-order, and structured-matrix analytic models. Structural equation models, including simultaneous equation models. Parameter estimation, hypothesis testing, and other statistical issues. Computer implementation. Applications. S/U or letter grading.


259. Quantitative Methods in Clinical Psychology. (4) Requisites: courses 250A and 250B. An introduction to nonlinear statistical methods and techniques commonly used in cognitive psychology. Topics include Markov chains, other stochastic processes, queueing theory, information theory, frequency analysis, etc.

260A-260B-260C. Proseminars: Cognitive Psychology. (1–1–1) Presentation of research topics by students, faculty, and visiting scholars. May be repeated for credit. S/U or letter grading.

261. Perception. (4) Lecture, three hours. Concepts, theories, and research in study of perception. Considers the questions: Why do things look, sound, smell, taste, or feel as they do? What is the nature of perception systems? How do these systems process information?


268A-268E. Seminars: Human Information Processing. (4 each) Seminar, three hours. Topics vary with interests of instructor. Each course may be taken independently and may be repeated for credit.

268F. Human-Computer Interaction. (4) Lecture, three hours. Limited to graduate students. Concepts, theories, and pragmatics of human-computer interaction. Topics include optimizing Web and product interfaces to enhance quality of user experience, with focus on applying principles of cognition, perception, learning, and memory to create human-computer interactions that are consonant with user needs and capabilities. Course projects include creating and user testing a functional Web-based application. S/U or letter grading.

269. Seminar: Cognitive Psychology. (4) Seminar, three hours. Discussion of problems in cognitive psychology that encompass more than a single subfield of the area. May be repeated for credit.


271D. Clinical Research Laboratory. (2) Discussion, one hour; laboratory, one hour. Corequisites: courses 270A or 270B or 270C, and 271A or 271B or 271C. Designed for graduate clinical psychology students. Acquaints students with faculty research interests and involves them in their course 251 research at an early stage to insure completion. S/U grading.

271E-271F. Clinical Research Laboratories. (2–2) Requisite: course 271D. Designed for graduate clinical psychology students. Required of first-year clinical psychology students. S/U grading. 271E. Brief overview of research design issued in clinical psychology and practical issues in implementing research activities. 271F. Discussions of students’ particular research activities and issues, plus laboratories in computer analysis of statistical data.

271G. Evidence-Based Intervention for Childhood Problems. (2) Fieldwork, five-day, 35-hour training period in Fall Quarter. Requisites: courses 271A, 271B, 271C. Designed for second-year clinical psychology students. Training of students in application of (1) child treatment outcome literature, (2) clinical monitoring and feedback tools, and (3) common clinical strategies from evidence-based practices to prepare for assessment, monitoring, planning, and service delivery in child and adolescent settings.

272A-272G. Advanced Psychological Methods. (4 each) Each course may be taken independently for credit. Letter grading.

272C. Clinical Interventions for Psychological Problems of Children. (4) Seminar, three hours. Requisite or corequisite: course 401 or 451. May be taken independently for credit. Letter grading.

272D. Family Therapy and Research. (4) Seminar, three hours. Requisites: courses 270A, 270B, 270C. Survey of family therapy and research. Emphasis and application to specific clinical cases, with emphasis on depression, bipolar disorder, and schizophrenia. Discussion of areas of research that relate to family theories, modes of assessment, and specific interventions. May be taken independently for credit. Letter grading.

272E. Special Problems. (4) Seminar, three hours. Requisite or corequisite: course 401 or 451. May be taken independently for credit. Letter grading.

272F. Behavior Modification with Adults. (4) Seminar, three hours. Requisite or corequisite: course 401 or 451. Designed for second-year graduate clinical psychology students. Current cognitive behavior modification principles and techniques. Major conceptual issues; specific techniques demonstrated and practiced by students to cover a range of adult problems such as depression, stress and anxiety, anger management, assertion problems. May be taken independently for credit. Letter grading.

272G. Marital Therapies. (4) Lecture, two hours; discussion, one hour; laboratory, one hour. Requisites: courses 270A, 270B, 270C, 271A, 271B, 271C. Examination of assessment and treatment approaches for relationship problems in couples. Presentation, discussion, and illustration of procedures derived from social-learning, family, and systemic theories, with relevant research findings. May be taken independently for credit. Letter grading.

273A-273B-273C. Professional Ethics and Ethical Issues in Clinical Psychology, 2-2-2. Lecture, one hour; discussion, one hour. Designed for graduate clinical psychology students. Year-long course sequence covering variety of topics necessary for clinical psychologists in their clinical work, including legal and ethical issues, code of ethics, the assessment, issues in specifically validated treatments, psychiactric consultation and psychoactive medications, working with diverse client populations, etc. Letter grading.

273. Health Behaviors of Racial and Ethnic Minority Populations. (4) Same as Health Policy and Management M274.) Lecture, two hours; discussion, one hour. Limited to graduate students. Overview of physical and mental health behaviors and status of major racial/ethnic groups in U.S. Where appropriate, discussion of international issues as well. S/U or letter grading.

275. Conceptual and Methodological Issues in Community Intervention. (4) Lecture, three hours. Limited to graduate students. Conceptualization of social problems from macrosocial perspective; discussion of multidimensional explanatory models for selecting illustrative problems; discussion and critical evaluation of both individual-focused and community-focused interventions with high-risk and impacted populations. S/U or letter grading.


277A-277B. Advanced Clinical Assessment. (4-4) Lecture, four hours; laboratory, three hours. Designed for graduate students in clinical psychology. Projective techniques, clinical interpretation, case studies, psycho-
1. Fieldwork in Clinical Psychology. (1 to 12) Fieldwork, to be arranged. Requirements: courses 271A, 271B, 271C. Students on practicum assignments are required to register for this course each term (except by consent of clinical program committee). Letter grading.

2. Clinical Research Practicum. (2) Fieldwork, two hours. Faculty and graduate students who share interests discuss current literature, new ideas, methodological issues, and preliminary findings. Meetings include research presentations and opportunities for feedback on current and proposed research activity to encourage, support, and facilitate student research expertise. Assigned reading included. S/U grading.

3. Special Topics Study Course. (1 to 4) Discussion, one to four hours. Under faculty supervision, group of students meets each week for quarter in self-taught study group to pursue specific topic of their choice that is not covered in other department courses. S/U grading.

4. 410A-410B-410C. Clinical Teaching and Supervision. (4-4-4) Clinic, four hours. Preparation: completion of PhD comprehensive examinations, advancement to candidacy or preparation for dissertation research actively under way. Study and practice of knowledge, concepts, and theories on teaching and supervision of applied clinical psychology. Letter grading.

5. 410D-410E-410F. Clinical Assessment Supervision. (4-4-4) Clinic, two hours; other, one hour. Designed for third-year graduate clinical psychology students. Study and practice of knowledge, concepts, and theories on teaching and supervision of psychological assessment. Letter grading.

6. 420B. Health Psychology Practicum. (2-2) Fieldwork, to be arranged. Designed for graduate students. Determination of what areas of health, illness, treatment, and delivery of treatment can be elucidated by understanding of psychological concepts and research; psychological perspective on these problems; how psychological perspective might be enlarged and extended in medical area. Through practical field placement, students apply knowledge acquired in class to research observation and/or clinical work in field. S/U or letter grading.

7. Research in Social Psychology. (2) Discussion, two hours; reading and group work, four to six hours. Forum for faculty and graduate students pursuing research on a common topic to share research ideas, make research presentations, and obtain feedback on study designs, procedures, and results to foster collaborative investigations in common research areas. S/U grading.

8. Social Survey Research Practicum. (4) Practicum, two hours; additional hours to be arranged. Methods of survey sampling, conduct and management of computer-assisted telephone interview surveys. S/U or letter grading.


10. Undergraduate Study

Public Affairs Minor

To enter the Public Affairs minor, students must have an overall grade-point average of 2.0 or better and complete Public Affairs 10 with a grade of B or better. For more information, contact the Undergraduate Advising Office by e-mail.

Required Lower-Division Courses (10 units): Public Affairs 10, and 40 or 60.

Required Upper-Division Courses (20 to 25 units):

(1) Two or three theory and/or methods courses selected from Public Affairs 110, 111, 112, 113, 114, 115, 116, (2) two or three elective courses selected from upper-division, undergraduate courses (100-199) within the four academic units of the Luskin School of Public Affairs: public affairs, public policy, social welfare, and urban planning. Students must complete five upper-division courses. If three theory/methods courses are selected, two electives are required; if two theory/methods courses are selected, three electives are required.

Lower-division courses may not be substituted. If a student has taken a non-public affairs course in statistics or microeconomics, it is recommended that the other public affairs course be taken to satisfy the second lower-division requirement.

By petition only, students may request to use one outside course (not from a Luskin School of Public Affairs unit) as an elective for the minor.

Fieldwork and internship courses, such as Social Welfare 130A, 130B, and Urban Planning M165, may not be applied toward the minor.

A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor.

Each minor course must be taken for a letter grade, and students must have an overall grade-point average of 2.0 or better in the minor. Successful completion of the minor is indicated on the transcript and diploma.
The Public Affairs major offers students a rigorous conceptual and empirical foundation that prioritizes capacity for action by students exhibiting high motivations for public service and social change. It combines interdisciplinary training in the social sciences with practical experience addressing public problems. Students will learn theoretical, empirical, and critical foundations of applied social science, qualitative and quantitative research methods, and the history and practice of community engagement.

Public Affairs students traverse the boundary between the classroom and the world through instruction in public engagement and experiential learning that develop students’ capacity to work collaboratively with communities, government agencies, nonprofit organizations, and businesses. The major serves as a pathway for students pursuing careers serving the public interest in civil society, business, government, or through advanced graduate training in academic or professional programs.

### Undergraduate Study

#### Public Affairs BA

#### Capstone Major

**Learning Outcomes**

The Public Affairs major has the following learning outcomes:

- Understanding of how different contexts, institutions, and/or environments influence individual and public life and can create, exacerbate, or reduce inequality and injustice.
- Demonstrated familiarity with economic, political, and/or civil society responses to social problems and public issues.
- Location of, use of, and critical thinking about quantitative and qualitative evidence for understanding societal problems and/or their solutions.
- Formulation of clear and convincing written and oral arguments for varied audiences.
- Effective communication with collaborators, policymakers, and/or the public.
- Application of theoretical knowledge, analytical methods, and communication skills to an experiential learning capstone.

#### Admission

Students must apply to declare the Public Affairs major. Admission into the major is based on student academic performance and an application process. Consult with Luskin School of Public Affairs undergraduate advisors for any additional admission requirements.

#### Premajor

Students entering UCLA directly from high school can select the Public Affairs premajor on the UCLA admission application, or complete a petition to enter the premajor once in attendance at UCLA. Transfer students are automatically admitted to the major if they select Public Affairs on the UCLA admission application. See the Transfer Students section for more details.

The Public Affairs major includes eight lower-division courses and ten upper-division courses. Students identified as Public Affairs premajors have the opportunity to formally apply to declare the Public Affairs major after completing five of the required lower-division courses and the school quantitative reasoning and Writing I requirements. Two of the five required lower-division courses must be Public Affairs 40 and 60, both of which serve as requisites for upper-division coursework.

Students may only apply to the Public Affairs major during winter quarter of their first or second year, once they have satisfied the following criteria:

1. Must be in good standing at the time of application. This means students cannot be on probation or subject to dismissal status when they apply. (2) Have completed, with a C or better, at least five of the eight required lower-division public affairs courses (including courses taken winter quarter). Completed courses must include Public Affairs 40 and 60. The remaining two courses, if not yet taken, must be taken as soon as possible, and during the third year at the latest. All courses for both the premajor and the major must be taken for a letter grade. (3) Have completed at least 45 letter-graded units (including AP and transfer units, if needed) by the end of winter quarter of the year they apply. (4) Have not exceeded 135 units of coursework (not including AP or other transfer units), by the end of winter quarter of the year they apply.

#### Preparation for the Major

**Required:** Public Affairs 10, 20, 30, 40, 50, 60, 70, 80. Each course must be taken for a letter grade. Preparation for the major courses must be completed with a C grade or better.

**Transfer Students**

Transfer applicants to the Public Affairs major with 90 or more units are considered for admission based on successful completion of the preparation for the major coursework. Students must take all preparation for the major courses for a letter grade, and receive a B grade or better in these courses to be competitive. Transfer credit is subject to department approval. Consult an undergraduate counselor before enrolling in any courses for the major.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

#### The Major

**Required:** (1) Two theory courses selected from Public Affairs 110, 111, 112, 113, 114, 116; (2) three-term capstone sequence Public Affairs 187A, 187B, 187C; (3) three additional upper-division public affairs courses. Each course must be taken for a letter grade, and students must have an overall grade-point average of 2.0 or better in the major.

### Public Affairs

#### Lower-Division Courses

**10. Social Problems and Social Change.** (5) Lecture, three hours; discussion, one hour. Introduction to social scientific approaches to study of social problems and their solutions. Using selected contemporary social problems as cases, and drawing on variety of sources (such as scholarly readings, video clips, and guest speakers), exploration of how social problems and their solutions come to be defined, roles that economic, political, educational, and cultural institutions play in perpetuating or solving social problems, and how individuals, social advocates, and communities can lead or impede social change. Letter grading.

**19. Fiat Lux Freshman Seminars.** (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

**20. Power, Politics, and Social Change.** (5) Lecture, three hours; discussion, one hour. Introduction to key institutions of government, politics, and policy in U.S., covering their history, contemporary forms, and internal dynamics. Includes various scales and branches of government as well as institutions that exercise power and influence in public decision making and public action, such as corporations, unions, media, social movements, and civil society. Letter grading.

**30. Comparative Analysis of Wealth, Policy, and Power.** (5) Lecture, three hours; discussion, one hour. Exploration of strategic interactions that give rise to social problems around world, what can be done to address them, and how different polities have tried (and sometimes failed) to mount effective response. Applications include climate change, antivaccination movement, protest and repression, war and formation of states, corruption, and human and drug trafficking. Letter grading.

**40. Microeconomics for Public Affairs.** (5) Lecture, three hours; discussion, one hour. Introduction to principles of microeconomics with focus on social and policy problems. Study of decisions by firms and individuals, and implications for allocation of resources. Application of economic models to public issues such as social safety net, minimum wage, education, inequality, and poverty. Letter grading.

**50. Foundations and Debates in Public Thought.** (5) Lecture, three hours; discussion, one hour. Introduction of core concepts of democracy and equality and challenges to implementation posed by race, class, and gender inequality. Review of standards by which political systems can be judged to be democratic and identification of obstacles to their mutual implementation. Focus on inequality, its historical causes and modern consequences. Letter grading.

**60. Using Data to Learn about Society: Introduction to Empirical Research and Statistics.** (5) Lecture, three hours; discussion, two hours. Introduction to statistics through examination of topics of public interest. Familiarization with research design principles and hands-on data analysis using statistical software. Students learn how to find and organize quantitative data; summarize, display, and interpret data; draw inferences from samples (including understanding margins of error, standard errors, and confidence intervals); test hypotheses about associations between two variables (including tests of proportion, t-tests, chi-squared, correlation); and communicate findings to lay audience. Letter grading.

**70. Information, Evidence and Persuasion.** (4) Lecture, three hours; discussion, one hour. Examination of public life of evidence and arguments by different actors in social political—moral—persuasion, and propaganda process. Letter grading.

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**Scope and Objectives**

**Undergraduate Study**

**Public Affairs Schoolwide Programs**

Lené F. Levy-Storrs, MPH, PhD (Social Welfare)
Meredith Phillips, PhD (Public Policy, Sociology)
80. How Social Environments Shape Human Development. (4) Lecture, four hours; discussion, one hour. Overview of major theoretical, conceptual, and empirical traditions in study of human development. Exploration of how diverse cultural, social, socioeconomic, and historical contexts interact with biological, cognitive, and psychological processes to affect individuals during key developmental periods (such as early childhood, childhood, adolescence, early adulthood, and late adulthood). Topics may include historical changes in families, schools, neighborhoods, and workplace; economic conditions of families, schools, and neighborhoods; enduring effects of childhood on adult well-being; gender- and race-specific characteristics such as gender, race, and nationality on individuals' environments, pathways, and outcomes. Letter grading.

95. Introduction to Community or Corporate Internships in Public Affairs. (2 or 4) Tutorial, two hours; fieldwork, eight hours. Limited to freshmen/sophomores. Entry-level internship in supervised setting in corporate, governmental, or nonprofit/community organization area related to public affairs. Students meet on regular basis with instructor and provide periodic reports of their experience. Individual contract with supervising faculty member required. May be repeated. May not be used to fulfill Public Affairs major capstone requirement; consult with undergraduate advisor. P/NP grading.

99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week. Undergraduate research for upper-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Courses

M109. Introduction to Cities and Planning. (4) (Same as Urban Planning M120.) Lecture, three hours. Survey of urban history and evolution in U.S., urban social theory, current trends and system of cities, urban economy and economic restructuring, traditional and alternative location theories, urban transport, and residential location and segregation. P/ NP or letter grading.

110. Urban Revolution: Space and Society in Global Context. (4) Lecture, three hours; discussion, one hour. Examination of potentials and challenges of 21st-century urban revolution in global context. Introduction to several frameworks and conceptual methods used by urban studies and planning to study cities and urban transformations, and historical and contemporary analyses of urbanization to learn about key urban issues: aging, gentrification, segregation, and suburbanization. Students learn about institutions and policies governing transport and housing, and forms of community organizing and civil society that seek to redress urban inequalities. Introduction to key theories of space and utopian visions of urbanism. Letter grading.

111. Microeconomics: Market Failures and Inequality. (4) Lecture, three hours; discussion, one hour. Requisites: courses 40 (or Economics 1 or 11 or equivalent introductory economics course), 60 (or Political Science 6 or Statistics 10 or equivalent introduc- tory course), 101 (or equivalent introduction to economic theory for policy analysis). Broad focus on evaluating rationales for government intervention in economy, in particular to address market failures and issues of economic inequality. Major emphasis on market failures in context of environmental sustainability, and economic inequality arising from markets for human capital, health, housing, and labor. Students are expected to acquire a working knowledge of basic statistical and economic concepts. Letter grading.

112. Social Movements. (4) Lecture, three hours; discussion, one hour. Introduction to theories, real-life examples, and applied skills for understanding and contributing to social movements. Examination of how and why social movements emerge; how and why people join, lead, stay, or drop out of movements; and strategies and tactics by which social movements enact change. Draws upon wide range of social movements inside and outside of U.S. Letter grading.

113. Policy Analysis: Approaches to Addressing Social Problems. (4) Lecture, three hours; discussion, one hour. Introduction to applied policy analysis designed to train students in logic of policy analysis, to introduce them to general skills required to do policy analysis, and to prepare them in persuasive presentation of their work. Development of skills fundamental to effective policy analysis and argumentation. Letter grading.


115. Using Quantitative Methods to Understand Social Problems and Their Potential Solutions. (5) Lecture, three hours; discussion, two hours; laboratory course 60 or equivalent introductory statistics course. Course in R preferred. Introduction to multivariate quantitative research models used to answer questions in social and political sciences oriented toward social justice and social change. Use of R to perform regression analysis, and apply knowledge by analyzing real world data. Focus on practical analytic tools using statistical software. Letter grading.

116. Using Qualitative Methods to Understand Social Problems and Their Potential Solutions. (5) Lecture, three hours; discussion, two hours. Introduction to qualitative research methods with focus on ethno- graphic observations, interviewing, and focus groups. Students practice conducting variety of qualitative methods. Letter grading.

120. Urban Poverty and Public Policy. (4) Lecture, three hours. Exploration of how neighborhoods characterized by concentrated poverty affect urban residents. Evaluation of relative efficacy of various public policies that aim to improve lives of urban poor. Use of explicit political lens, evaluating roles that elites, institutions, mass behavior, class and race- based power disparities, and public opinion play in development and implementation of urban policy. Letter grading.

130. Biomedical, Social, and Policy Frontiers in Human Aging. (5) (Same as Gerontology M108 and Social Welfare M108.) Lecture, four hours. Limited to juniors and seniors, aging required in ways that are based on variety of recent research frontiers. Use of conceptual frameworks to increase relevance and aging to students' lives and enhance their critical thinking—biopsychosocial approach that is based on recognition that aging is inherently interdis- ciplinary phenomenon, and life course perspective that is distinguished by analytical framework it provides for understanding interplay between human lives and changing social structures, and allows students to understand how events, successes, and losses at one stage of life can have important effects later in life. Focus on individual and collective aging, and one particular sociohistorical context. Letter grading.


168. Race, Rights, and Citizenship: Encounters with Bureaucracies. (4) Lecture, three hours. Examination of role of bureaucracies in emergence of, persistence of, and experience of social inequality. Exploration of dilemmas that bureaucrats face as they do their jobs, and experiences of residents who interact with bureaucrats. Consideration of how peoples' experience of bureaucracies are associated with socioeconomic standing, and reflection on how experiences with bureaucracies convey messages about race, citizenship, and belonging. Letter grading.

M142. Latino Social Policy. (4) (Same as Chicana and Chicano Studies CM177.) Lecture, three hours; discussion, one hour. Examination of social welfare of Latinos (Chicanos, Puerto Ricans, and Cubans) in U.S. through assessment and critical analysis of social policy issues affecting them. Survey of social, economic, cultural, and political circumstances affecting ability of Latinos to access public benefits and human services. Letter grading.

145. California Policy Issues. (4) Lecture, three hours. Application of policy analysis to California is- sues. Guest lecturers from practitioners and academicians along with readings and videos. Written reports or oral presentations required. Letter grading.

148. U.S. Housing Policy and Geography of Opportunity. (4) Lecture, three hours. Exploration of con- temporary levels of residential and social segregation in U.S. housing policy. Study includes historical overview of federal policies; evaluation of ways by which living in racially segregated, high-poverty neighborhoods contributes to social isolation and exploitation of most prevalent affordable housing policies; and evaluation of their respective program designs and outcomes. Letter grading.

149. Research Capstone for Urban Planners. (4) (Same as Public Policy M152.) Seminar, three hours. Study of complex arena of public policy and ethical concerns in planning and community development; necessity to balance demands from interest groups in city and metropolitan areas, political and non-profit sectors, general public; and interrelationship between local government implementation and federal urban laws and regulations. Letter grading.

153. Transportation and Land Use: Parking. (4) (Same as Urban Planning CM151.) Lecture, three hours. Requisites: course 40 or Economics 1 or 11. Parking is misunderstood link between transportation and land use development. Transport and land use traditional assumption that free parking is simply there at end of most trips, while urban planners treat parking as transportation issue that engineers must study. No profession is more important in determining how cities develop; everyone seems to assume that someone else is doing hard thinking. Mistakes in parking for parking help to explain why parking and transportation and land use has in many cases gone wrong. Letter grading. Study of theory and practice of parking for parking and examination of how parking for planning in U.S has become planning for free parking. Exploration of new ways to improve planning for parking, transportation, and land use. Letter grading.

M159. Politics of Water. (4) (Same as Public Policy M168.) Lecture, three hours. Access to safe and sustainable water provision is major challenge for govern- ment. Examination of political dimensions of water provision in Asia, Africa, Latin America, and US. Key issues include water and state building, market reforms and globalization, social mo-bilization and citizen demand making strategies, role of crisis in citizen claims making. Letter grading.

M160. Urban Sustainability. (4) (Same as Urban Planning M161.) Lecture, three hours. In 21st century, much of Earth’s population centers on cities and virtually no part of globe remains untouched by human influence. Cities constitute crucibles of most pressing social and environmental challenges but are also central centers for addressing those challenges. Examination of theory and practice from geography and related fields to understand many articulations of urban sustainability and how it might be achieved. Letter grading.
M161. Environmental Justice through Multiple Lenses. (4) (Same as Environment M167 and Urban Planning M167.) Lecture, three hours. Examination of intersection between race, economic class, and environment in U.S., with focus on issues related to social justice. Basic racial inequality is a highly complex phenomenon, multidisciplinary and multi-population approach taken, using alternative ways of understanding, interpreting, and taking action. P/NP or letter grading.

M164. Science, Technology, and Public Policy. (4) (Same as Electrical and Computer Engineering CM182 and Public Policy CM182.) Lecture, three hours. Recent and continuing advances in science and technology and their implications for public policy issues. Consideration of selection of critical policy issues, each of which has substantial ethical, social, economic, political, scientific, and technological aspects. Letter grading.

165. Advanced Technologies, Law, and Public Policy. (4) Lecture, three hours. Focus on cutting-edge issues in technology and public policy. Consideration of the importance of law on technology and its role in the rise of technology, and (re-)discovery of civil society. Letter grading.


174. Cultural Policy and Cultural Diplomacy: Soft Power, Creative Economy, Innovation, and Arts. (4) Lecture, three hours. Culture is one of most complex concepts in social sciences. Review of cultural policies at international, national, and local levels. Exploration of culture as system of meaning and identity, as well as culture as art and creative expression. Examination of role of culture in international relations and cultural diplomacy. Letter grading.

175. Communications and Conflict in Public Affairs. (4) Lecture, four hours. Interactive course that prepares students for successful work with collaborators, policymakers, and public. Students gain interpersonal skills, cultural competency; learn effective communication, conflict resolution, and negotiate their interests successfully; learn to engage constituencies and build community around shared goals. P/NP or letter grading.

M176SL. Making Films about Food. (5) (Same as Community Engagement and Social Change M176SL and Food Studies M176SL.) Lecture and video production, three hours. Introduction to documentary video production and distribution. Students work on assignments in pairs and small groups to create 8- to 10-minute video about one of several Los Angeles partner organizations advocating for healthy, local, sustainable food. Consideration, through video production, of challenges posed by existing farming, ranching, and distribution methods, and strategies these groups are pursuing to create more sustainable food pathways. Students learn to use social media communications strategies to help think through intervention in face of historically entrenched industrial food production and regulations that remain favorable to mass-produced, processed food items. P/NP or letter grading.

187A-187B-187C. Experiential Learning Capstone. (4–4–4) Lecture, two hours; discussion, one hour. Course 187A is requisite to 187B, which is requisite to 187C. Limited to and required for senior Public Affairs majors. Students apply public affairs course concepts and methods to internship experience; refine understanding of concepts and methods based on internship experience; gain new knowledge about specific topics related to their internship, and develop new skills needed to complete capstone project. Letter grading.

191A. Variable Topics Seminar: Public Affairs. (4) Seminar, three hours; outside study, nine hours. Emergence of public issues in public affairs may be repeated for credit. Letter grading.

M191DC. CAPP Program Washington DC, Research Seminars. (8) (Same as Communication M191DC, History M191DC, Political Science M191DC, and Sociology M191DC.) Seminar, three hours. Limited to CAPP Program students. Seminars for undergraduate students in Center for American Politics and Public Policy’s program in Washington, DC. Focus on development and execution of original research proposal based on experiences from Washington, DC-based field placements. Study of variety of qualitative methods (observation, interviewing, etc.), with compartmental and quantitative analysis. Examination of features of solid and significant research; intensive writing. Letter grading.

M191P. Variable Topics Seminar: Public Policy. (4) (Same as Policy CM191B.) Seminar, three hours. Limited to senior study; nine hours. Emerging issues in public policy may be repeated for credit. P/NP or letter grading.

195. Community or Corporate Internships in Public Affairs. (2 or 4) Tutorial, to be arranged; fieldwork, six to 12 hours. Limited to juniors/seniors. Internship in supervised setting in corporate, governmental, or non-profit/community organization setting related to Public Affairs. Students meet with instructor and provide periodic reports of their experience. Individual contract with supervising faculty member required. May be repeated for credit. May be used toward Public Affairs major capstone requirement; consent with under-graduate adviser. P/NP or letter grading.

M195DC. CAPP Program Washington, DC, Internships. (4) (Same as History M195DC, Political Science M195DC, and Sociology M195DC.) Tutorial, four hours. Limited to senior/senior CAPPP Program students. Internships in Washington, DC, through Center for American Politics and Public Policy. Students meet on regular basis with instructor and provide periodic reports of their experience. Individual contract with supervising faculty member required. May be repeated for credit. May be used toward Public Affairs major capstone requirement; consent with under-graduate adviser. P/NP or letter grading.

196. Research Apprenticeship in Public Affairs. (2 or more) Tutorial, three hours per week per unit. Limited to juniors/seniors. Research apprenticeship for upper-division students under guidance of faculty mentor. May be repeated for credit. Individual contract required. P/NP grading.


M199A. Directed Research or Senior Project in Public Affairs. (2 to 6) Tutorial, to be arranged. Limited to juniors/seniors. Supervised individual research or investigation under guidance of faculty mentor. Culminating paper or project required. May be repeated for maximum of 16 units. Individual contract required. P/NP or letter grading.

Scope and Objectives
The Public Health minor is designed for students who wish to learn more about core public health functions, including the assessment and monitoring of the health of communities and populations at risk to identify health problems and priorities, the formulation of public policies designed to solve identified local and national health problems and priorities, the assurance that all populations have access to appropriate and cost-effective care, and the evaluation of the effectiveness of that care.

Undergraduate Study
Public Health Minor
To enter the Public Health minor, students must be in good academic standing with an overall grade-point average of 2.0 or better, have completed 90 or more units, and apply to the Fielding School of Public Health Student Affairs Office, AT-269 Center for Health Sciences. Enrollment is competitive and based on grade-point average and an application essay.

Required Upper-Division Courses (28 units): Seven courses, including Biostatistics 100A, Community Health Sciences 100, Environmental Health Sciences 100, Epidemiology 100, Health Policy and Management 100, Public Health 150 (must be taken during the first term of enrollment in the minor), and one elective course to be selected from Biostatistics 100B, Community Health Sciences 91, 130, 132, M140, 180, 181, Health Policy and Management M110, C121, Public Health S3, M106, or M151. Transfer credit for any of the above is subject to school approval.

A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor.

Each minor course must be taken for a letter grade, and students must have a minimum grade of C (2.0) in each and an overall grade-point average of 2.0 or better in the minor. Successful completion of the minor is indicated on the transcript and diploma.
SCHOOLWIDE PROGRAMS

Jonathan and Karin Fielding School of Public Health
A1-269 Center for Health Sciences
Box 951772
Los Angeles, CA 90095-1772
Public Health
310-825-5524

Scope and Objectives

The profession of public health is responsible for the protection, preservation, and promotion of the health of communities and populations. Although the health problems of today differ from those of the past and of the future, the professionals who make up the field need to be trained to respond to broad community problems utilizing the basic ideas of prevention of disease and promotion of well-being. This goal can be achieved only with an understanding of the health status of the population through data gathering and analysis, as well as knowledge of the complex relationships between disease process in the social and biological environment of the community.

The field of public health today needs practitioners from many disciplines. Candidates for graduate study may come from a wide variety of academic backgrounds, training, or experience, including both the natural and social sciences.

Graduate Study

Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Division website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Graduate Degrees

The Fielding School of Public Health offers two schoolwide degrees, Master of Public Health (MPH) and Doctor of Public Health (DrPH); and MS and PhD degrees in Biostatistics, Community Health Sciences, Environmental Health Sciences, Epidemiology, and Health Policy and Management.

One interdepartmental degree program—the PhD in Molecular Toxicology—is also available.

Eight concurrent degree programs (Community Health Sciences MPH/Urban Planning MURP, Environmental Health Sciences MPH/Urban Planning MURP, Public Health MPH/African Studies MA, Public Health MPH/Asian American Studies MA, Public Health MPH/Law JD, Public Health MPH/Management MBA, Public Health MPH/Public Policy MPP, Public Health MPH/Social Welfare MSW) and two articulated degree programs (Public Health MPH/Latin American Studies MA, Public Health MPH/Medicine MD) are also offered.

Public Health Lower-Division Courses

10. Introduction to Public Health. (4) Seminar, three hours. Designed for lower-division students. Introduces students to the major topics, issues, and methodologies of public health science and the public health system.


250. Community Health Outcomes. (4) Laboratory, four hours. Laboratory investigations of health outcomes in community settings.

Upper-Division Courses

M106. Health in Chicano/Latino Population. (4) (Same as Chicana and Chicano Studies CM106.) Lecture, four hours; discussion, one hour. Major health issues in Chicano/Latino populations.

M151. Healthcare in Transitional Communities. (4) (Same as Sociology M152.) Lecture, three hours; discussion, two hours. Healthcare in transitional communities.

M160A. Health Outreach and Education for At-Risk Populations. (4) (Same as Medicine M160A.) Lecture, four hours; field observations. Field-based public health outreach and education.

M160B. Health Outreach and Education for At-Risk Populations. (4) (Same as Medicine M160B.) Lecture, two hours; discussion, two hours. Field-based public health outreach and education.

Upper-Division Courses

M100A. Health Outreach and Education for At-Risk Populations. (4) (Same as Medicine M100A.) Lecture, four hours; field observations. First in series of courses to explore prevention of disease in at-risk populations.

M100B. Health Outreach and Education for At-Risk Populations. (4) (Same as Medicine M100B.) Lecture, two hours; discussion, two hours. Field-based public health outreach and education.

M188A. Individual Studies for USIE Facilitators. (1) Tutorial, to be arranged. For students who need to develop course materials for USIE students.

M188B. Individual Studies for USIE Facilitators. (1) Tutorial, to be arranged. For students who need to develop course materials for USIE students.

M273. Responsible Conduct of Research in Global Health. (2) (Same as Epidemiology M273.) Lecture, two hours. Responsible conduct of research in global health.

Upper-Division Courses


M201. Healthcare in Transitional Communities. (4) (Same as Sociology M202.) Lecture, three hours; discussion, two hours. Healthcare in transitional communities.

M250. Community Health Outcomes. (4) Laboratory, four hours. Laboratory investigations of health outcomes in community settings.

Upper-Division Courses


475. Pedagogy: Essential Skills and Innovative Strategies. (4) Seminar with focus on teaching methodologies for public health. Prepares individuals who will serve as teaching assistants for courses in Fielding School of Public Health.

480. Public Speaking Mastery for Public Health Professional. (2) Lecture, two hours. Seminar for public health professionals.

Graduate Courses


100SSB. Individual Studies for USIE Facilitators. (1) Tutorial, to be arranged. Enforced corequisite: Honors Collegium 101E. Limited to junior/senior USIE facilitators.

188BS. Individual Studies for USIE Facilitators. (1) Tutorial, to be arranged. Enforced corequisite: Honors Collegium 101E. Limited to junior/senior USIE facilitators.

Graduate Courses


475. Pedagogy: Essential Skills and Innovative Strategies. (4) Seminar with focus on teaching methodologies for public health. Prepares individuals who will serve as teaching assistants for courses in Fielding School of Public Health.

480. Public Speaking Mastery for Public Health Professional. (2) Lecture, two hours. Seminar for public health professionals.

Graduate Courses


475. Pedagogy: Essential Skills and Innovative Strategies. (4) Seminar with focus on teaching methodologies for public health. Prepares individuals who will serve as teaching assistants for courses in Fielding School of Public Health.

480. Public Speaking Mastery for Public Health Professional. (2) Lecture, two hours. Seminar for public health professionals.
Scope and Objectives

The Department of Public Policy is an interdiscipli- 

ary unit composed of faculty members from various 

disciplines, some of whom hold joint appointments in 

other UCLA departments. Its goal is to foster an 

understanding of the theory and practice of public 

policy in the many fields in which it applies. Examples 

include education, health care, unemployment and 

training, drug policy and crime, economic de-

velopment, national security, and the environment. 

The department offers the Master of Public Policy 

(MPP) degree and participates in the undergraduate 

minor in Public Affairs.

The MPP degree program is designed to train pro-

fessionals in both public- and private-sector policy 

analysis and implementation, and offers coursework in 

such areas as microeconomics, statistics, political 

processes, and public and nonprofit management. 

 Concurrent degree programs allow students to combine study for an MPP with work toward a JD in the School of Law, an MBA in the Anderson Gradu-

ate School of Management, an MD in the Geffen School of Medicine, an MPH in the Fielding School of Public Health, or an MSW in the Department of Social Welfare.

The undergraduate minor in Public Affairs familiarizes students with key issues in public policy. Both programs have a heavy applied orientation. For ad-

ditional information on the minor, see Public Af-

fairs in this chapter.

Graduate Study

Official, specific degree requirements are detailed in 

program requirements for UCLA graduate degrees, available at the Graduate Division website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Graduate Degree

The Department of Public Policy offers the Master of Public Policy (MPP) degree. Five concurrent degree programs (Public Policy MPP/Law JD, Public Policy MPP/Management MBA, Public Policy MPP/Medicine MD, Public Policy MPP/Public Health MPH, and Public Policy MPP/Social Welfare MSW) are also offered.

Public Policy

Lower-Division Courses

10A. Introduction to Public Policy. (5) Lecture, three hours; workshops and outside study, three hours. Overview of principal topics of contemporary policy analysis, developing their applications with examples from instructor's own research, visitors, small student projects, or field trips. P/NP or letter grading.

10B. California Policy Issues. (4) Lecture, three hours; outside study, nine hours. Application of policy analysis to California issues. Guest lectures from prac-
titioners and academics along with readings and videos. Student written reports and oral presentations required. Letter grading.

10C. Public Policy for Crime, Cannabis, and Other Drugs. (5) Lecture, three hours; outside study, twelve hours. Application of policy analysis, including critical analysis, problem solving, and substantive policy re-

search, to develop knowledge and understanding about drug and crime policy, with focus on cannabinoids. Guest lectures by instructors and guest academics and practitioners, with readings from academic litera-
ture and policy reports. P/NP or letter grading.

10D. Public Policy and Urban Homelessness. (5) Lecture, three hours; outside study, nine hours. Application of policy analysis to issues and solutions concerning homelessness. Guest lectures from local policymakers. P/NP or letter grading.

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

89. Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to lower-divi-

sion lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible stu-

dents. Honors content noted on transcript. P/NP or letter grading.

89HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors and depart-

mental honors programs. Designed as adjunct to lower-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

99. Student Research Program. (1 to 2) Tutorial (su-

pervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-divi-

sion students under guidance of faculty mentor. Stu-

dents must be in good academic standing and en-

rolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Courses

105. Leadership in Public Interest. (4) Lecture, three hours. Examination of prevailing models, theories, and practices of leadership in public settings and applica-
tions of them through case studies, films, and situa-
tional articles. Participation in group projects and dis-
cussions designed to improve understanding of role of leadership in mobilizing people groups to do difficult work. Introduction to literature and theory on leader-
ship, examination of leadership and group dynamics, and challenge of leadership in times of stress and change. Letter grading.

113. Politics of U.S. Health Policy. (4) Lecture, three hours. Every modern nation faces similar health system challenges, such as promoting health and lon-
gevity, providing effective treatments, balancing bene-

fits and burdens of medical technology, and con-

trolling healthcare costs that grow faster than national income. U.S. seems uniquely disadvantaged with lower life expectancy, problematic quality of medical services, lack of insurance for millions, and highest costs in world, hampering families, businesses, and government. What political dynamics produced this result and influence possibility and direction of on-

going policy change? Examination of meaning of health and healthcare; international experience; cur-

rent status, organization, and financing of U.S. health-
care system; and factors that affect national health policymaking, including comprehensive healthcare re-

form: framing of problems, role of public opinion, influ-

cence of interest groups, composition and organization of Congress, and opportunities for and applications of presidential leadership. P/NP or letter grading.

C115. Environmental and Resource Economics and Policy. (4) Lecture, three hours. Requisites: Eco-

nomics 11, 143. Survey of ways economics is used to de-

fine, analyze, and resolve problems of environ-

mental management. Overview of analytical questions
addressed by environmental economists that bear on public policies. Concurrently scheduled with course CM250. Letter grading.

M120. Race, Inequality, and Public Policy. (4) (Same as African American Studies M120.) Lecture, three hours; discussion, one hour. Backgrounds in microeconomics, sociology, or urban studies preferred but not required. Survey course to examine major debates and current controversies concerning public policy responses to social problems in urban America. Letter grading.

M127. Understanding Public Issue Life Cycle. (4) (Same as Political Science M142D.) Lecture, three or four hours; discussion, one hour (when scheduled). Recommended preparation: Political Science 10, 11, and one course from Economics 1, 2, 5, 11, or 101. Examination of how public issue life cycle is shaped by (1) economic and political incentives of various actors—business, news media, mass public, organized interests, Congress, the president, regulatory agencies, and courts and (2) ideology, cognitive biases, and ethical reasoning. P/NP or letter grading.

M152. Local Policymaking for Urban Planners. (4) (Same as Political Science M152.) Seminar, three hours. Study of complex arena of public policy and ethical concerns in planning and community development; necessity to balance demands from interest groups including public policy, business and nonprofit sectors, general public; and interrelationship between local government implementation and federal and state laws and regulations. Letter grading.

CM182. Science, Technology, and Public Policy. (4) (Same as Electrical and Computer Engineering CM182 and Public Affairs M184.) Lecture, three hours. Recent and continuing advances in science and technology are raising profoundly important public policy issues. Consideration of selection of critical policy issues, each of which has substantial ethical, social, economic, political, scientific, and technological aspects. Concurrently scheduled with course CM262. Letter grading.

187. Research Seminar: Public Policy. (4) Seminar, three hours; outside study, nine hours. Requisite: course 10A or Public Affairs 10. Limited to and required of seniors in Public Affairs minor. Production of research project that examines in depth one particular policy issue in its social context, including political pressures involved and problems of implementation. Emphasis on development of data analysis and analytical conceptualization, and written analysis and presentation. Letter grading.

188SA. Individual Studies for USIE Facilitators. (1) Tutorial, to be arranged. Enforced corequisite: Honors Colloquium 101E. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to discuss selected USIE seminar topic, conduct preparatory research, and begin preparation of syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.

188SB. Individual Studies for USIE Facilitators. (1) Tutorial, to be arranged. Enforced requisite: course 188SA. Enforced corequisite: Honors Colloquium 101E. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to discuss selected USIE seminar topic, conduct preparatory research, and begin preparation of syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.

188SC. Individual Studies for USIE Facilitators. (2) Tutorial, to be arranged. Enforced requisite: course 188SB. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to discuss selected USIE seminar topic, conduct preparatory research, and begin preparation of syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.

189HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors and departmental honors programs. Designed as adjunct to upper-division lecture course. Individual study with lecture course instructor to explore topics in greater depth than supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. P/NP or letter grading.

189AL. Advanced Honors Seminars. (1) Seminar, three hours. Discussion, one hour. Limited to students in Honors College and departmental honors programs. Designed as adjunct to upper-division lecture course. Individual study with lecture course instructor to explore topics in greater depth than supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. P/NP or letter grading.

204. Principles of Microeconomic Theory I. (4) Lecture, three hours; discussion, one hour; outside study, eight hours. Requisite: course 201, Second course in two-term sequence (see course 201) covering both theory and policy applications. Topics include monopoly, factor markets, general equilibrium, welfare economics, externalities, public goods, uncertainty, and intertemporal optimization. Letter grading.

204A. Applied Microeconomics. (4) (Same as Health Policy M204A.) Lecture, four hours. Requisites: courses 201A, 201B, and one course from any of Mathematics 3A, 3B, or 31A. Basic concepts of microeconomics, with emphasis on their application to actual situations and their use in problem solving and focus on theories of firms and markets. Extensive use of differential calculus. Letter grading.

205. Institutional Leadership and Public Manager. (4) Lecture, three hours; outside study, nine hours. Examination of leadership role of public managers as they lead and manage in tough day-to-day world of politics and intensive public scrutiny. Heavy emphasis on case studies that focus on what public managers do, political and organizational environment in which they find themselves, and skills they need both inside and outside their organization to get things done with high degree of competence and integrity. Letter grading.

206. Political Economy of Policy Adoption and Implementation. (4) Lecture, three hours; outside study, nine hours. Analysis of how policy is formed, adopted, and implemented. How policies are formulated, by whom, with whose support, and what role the size, shape, and scope of government, and the role of policy agencies are. How to use economic analysis to design public policies and analyze issues and problems. P/NP or letter grading.


209. Management in the 21st Century. (4) Lecture, three hours; outside study, nine hours. Focus on practical management skills to prepare students for workplace. Examination of design, management, and leadership of teams in organizational settings, decision-making strategies in face of challenges, and negotiation as invaluable skill. Examples from public and private sector, as well as exercises, cases, and simulations. Letter grading.

210. Methods of Policy Analysis. (4) Lecture, three hours; outside study, nine hours. Preparatory course that precedes three-term 298A, 298B, 298C sequence in policy analysis and its application. Topics include research projects and papers that are case studies of policy evaluation and implementation and are equivalent to professional master’s theses. Papers build on prior core courses, internship experience, and policy cluster courses. Letter grading.

M212. Child Welfare Policy. (4) (Same as Social Welfare M212.) Lecture, three hours. Development of social policy as it affects families, children, and families from different cultural backgrounds and as it is given form in public child welfare system. Examination of development of infrastructure to support needs of children and families, S/I or letter grading.

M213. Mental Health Policy. (4) (Same as Social Welfare M213.) Lecture, three hours. Examination of evolution of social policy and services for mentally ill, with emphasis on political, economic, ideological, and sociological factors that affect views of mental illness and the services they are provided. S/I or letter grading.


M215. Health Policy. (4) (Same as Social Welfare M215.) Lecture, three hours. Introduction to contemporary issues in health financing and delivery, providing historical perspective on emergence of these is-
sues: Examination of major public programs and their relationship to issues of access and cost. S/U or letter grading.

M216. Public Policy for Children and Youth. (4) (Same as Social Welfare M230N.) Lecture, three hours. Policy issues that affect children and adolescents in relation to their interaction with schools and community, with emphasis on impact of policy across federal, state, and local levels. S/U or letter grading.

M217. Graduate Seminar in Environmental Economic Analysis. (4) (Same as Environmental Health Sciences M217.) Seminar, four hours. Preparation: undergraduate-level statistics, basic undergraduate microeconomics. Introduction to applied scholarship in economics and policy. Enables students to become more proficient consumers and producers of social science research that explores questions of environmental policy and sustainability broadly construed. Topics include health and economic impacts of climate change, adaptation to climate change, efficient and equitable design of environmental policies (e.g., cap and trade, carbon taxes). Development of detailed empirical research proposal and short presentation. Letter grading.

M218. Research Design and Methods for Social Policy. (4) (Same as Urban Planning M204.) Lecture, three hours; outside study, nine hours. Limited to graduates. Introduction to basic research design methods to develop sophisticated and producers of qualitative and quantitative policy research. In first half of course, formal principles of research design; in second half, various designs, including ethnography, qualitative interviewing, and survey design. Letter grading.

M220. Transportation, Land Use, and Urban Form. (4) (Same as Urban Planning M250.) Lecture, three hours. Historical evolution of urban form and transportation systems, intrametropolitan location theory, recent trends in urban form, spatial mismatch hypothesis, jobs/housing balance, transportation in strong central city and polycentric city, neotraditional town planning, debate, rail transit and urban form. Letter grading.

M221. Travel Behavior Analysis. (4) (Same as Urban Planning M253.) Lecture, three hours. Requisites: courses 201 and 203, or Urban Planning 207 and 220B. Descriptions of travel patterns in metropolitan areas, recent trends and projections into future, overview of travel forecasting methods, trip generation, trip distribution, and mode split, traffic assignment, air quality, pollution, overview of transportation-related approaches to air quality enhancement; new car tailpipe standards; vehicle inspection and maintenance issues; transportation demand management; transportation finance and economics; concepts of efficiency and equity in transportation finance; historical evolution of highway and transit finance; current issues in highway finance; private parking, toll roads, road costs and cost allocation, truck charges, congestion pricing; current issues in transit finance; transit fare and subsidy policies, contracting and privatization of transit services. Letter grading.

M223. Transportation and Environmental Issues. (4) (Same as Urban Planning M258.) Lecture, three hours. Regulatory structure linking transportation, air quality, and energy. Mobility, traffic assignment, air quality, pollution, overview of transportation-related approaches to air quality enhancement; new car tailpipe standards; vehicle inspection and maintenance issues; transportation demand management; transportation finance and economics; concepts of efficiency and equity in transportation finance; historical evolution of highway and transit finance; current issues in highway finance; private parking, toll roads, road costs and cost allocation, truck charges, congestion pricing; current issues in transit finance; transit fare and subsidy policies, contracting and privatization of transit services. Letter grading.


M225. Education Policy and Education Inequality. (4) Seminar, three hours; outside study, nine hours. Limited to graduate students. Examination of policies that may reduce socioeconomic and ethnic disparities in educational success. Topics include international and national comparisons of educational outcomes, private and public school choice, school accountability policies, international comparative studies of school output, quality, parenting and preschool interventions, and supplemental educational services. Letter grading.

M227. Politics, Power, and Philanthropy. (4) (Same as Social Welfare M230S and Urban Planning M287.) Lecture, three hours; outside study, nine hours. Use of political economy perspective to analyze forces that have shaped rise and characteristics of nonprofit sector and its constituent elements. Examination of social history of nonprofit sector in U.S. Exploration of legal and policy environments and distinct organizational forms. Comparative perspective between U.S. and other countries. S/U or letter grading.

M228. Leadership, Development, and Governance of Nonprofit Organizations. (4) (Same as Social Welfare M241E and Urban Planning M288.) Lecture, three hours; outside study, nine hours. Designed for graduate students. Various patterns of community action for nonprofits, concepts of research and field experience directed toward study of social problems within context of community planning; emerging patterns of physical, economic, and social planning within a framework of social change theory. Letter grading.

M228B. Global Public Affairs: Governing in interconnected World. (4) (Same as Social Welfare M215 and Urban Planning M231.) Lecture, three hours; outside study, nine hours. Focus on interplay between three major institutional complexes of modern, globalizing societies and organizations that operate within them: state, market, and civil society. Study moves between abstract theory and concrete examples, offers sense of where these institutions and organizations have come from, and helps chart their present trajectories. From perspective of government, assessment of role and impact of institutions, and organizations to address today's challenges. S/U or letter grading.

M229. Law and Management of Nonprofit Organizations. (4) (Same as Urban Planning M225B.) Lecture, three hours. Introduction to important legal, financial, and management issues confronting nonprofit organizations. Topics include how to start nonprofit tax-exempt organizations, maintaining tax-exempt status under IRC Code Section 501(c)(3), corporate governance, political and legislative activity restrictions, and strategic planning, fundraising, nonprofit accounting, and employment law. S/U or letter grading.

M230. Employment Issues in California. (4) Lecture, three hours; outside study, nine hours. Designed for graduate students. Drawing on resources of UCLA Business School and Public Policy, this course complements the discussion of the California labor market, analysis of employment fluctuations and forecasting techniques including linkages between employment fluctuations in California and elsewhere in the country, and social issues related to labor market. Letter grading.

M240. Theories of Regional Economic Development. I. (4) (Same as Geography M230A and Urban Planning M230A.) Lecture, two hours; discussion, one hour. Introduction to theories of location of economic activity, trade, and other forms of contact between regions, process of regional growth and decline, reasons for variation in levels of economic development, relations between core and periphery, development regions. Letter grading.

M241. Introduction to Regional Planning. (4) (Same as Urban Planning M230L.) Lecture, three hours. Critically and historical survey of evolution of regional planning theory and practice, with particular emphasis on relations between regional planning and development within Western social and political philosophy. Major concepts include regions and regionalism, territorial community, and social production of space. Letter grading.

M242. Community Development and Housing Policies: Roles of State, Civil Society, and Nonprofits. (4) (Same as Social Welfare M290U and Urban Planning M275.) Lecture, three hours; outside study, nine hours. Designed for graduate students. Examination of regulation of housing and urban policy and their relation to housing and community organizations. Is problem housing or economic development? Should interventions be focused toward inner city housing markets or through neighborhood strategies? What lessons can be learned from experiences of other countries? Letter grading.

M244. Shared Mobility Policy and Planning. (4) (Same as Social Welfare M241F and Urban Planning M290.) Lecture, three hours; outside study, nine hours. Designed for graduate students. Technical processes of problem solving regarding transportation and urban planning, including performance evaluation and route planning, land use, ridesharing, car-, bike-, and scooter-share; implications of vehicle automation for shared mobility in the years ahead. Letter grading.

M247. Strategic Planning for Public and Nonprofit Organizations. (4) (Same as Social Welfare M241F and Urban Planning M290.) Lecture, two and one half hours. Governance is about solving and managing societal problems, such as climate change, poverty, migration, security, mobility, pollution, trade regulations. Contemporary governance is complex set of laws, rules, and regulations involving rights and responsibilities of three institutional complexes of modern societies (state, market, and civil society), institutions that guide them, activities that they command. Actors often reach across systemic, jurisdictional, and national boundaries; their relationships can be cooperative, neutral, or fraught with conflict, and governance can differ significantly. These dynamics involve fundamental challenges and, consequently, require significant governance readiness. Lectures, debates, in-class exercises, and student presentations. Exploration of several issues in more detail, e.g., types of state capacities, democracy, crisis management, governance innovation, and specific policy fields such as infrastructure or global finance. S/U or letter grading.

CM250. Environmental and Resource Economics and Policy. (4) (Same as Urban Planning M267.) Lecture, three hours. Requisites: courses 204 and 208, or Urban Planning 207 and 220B. Survey of ways economics is used to define, analyze, and resolve problems of environmental management. Overview of analytical questions addressed by environmental economists that bear on public policies. Concurrently scheduled with course C115. Can U.S. and how each level of government finances its operations and capital investment programs, with particular attention to California. Students are organized into small groups to facilitate review of assigned readings and to report key information to class. Based on assigned readings, de-
M253. Lesbian, Gay, Bisexual, and Transgender Law and Public Policy Research. (4) (Same as Law M675.) Lecture, three hours. Exploration of relevance of public policy research to lesbian, bisexual, and transgender (LGBT) legal issues. Topics include LGBT identity and demographics, legal recognition of same-sex couples, parenting, workplace discrimination, transgender rights, and implications in various areas of LGBT law. Themes include doctrinal and other reasons why research has become more central to LGBT legal advancements in past decade, different types of policy research, limitations of current data and research on LGBT issues, difficulties in translating social science research into evidence in courtroom, impact that dominant LGBT rights frame of equality has on social science research, challenges in conducting objective research, and effective presentation of social science research before legislators, judges, juries, media, and other audiences. S/U or letter grading.

M258. Macroeconomic Theory of Health Sector. (4) (Same as Health Policy M258.) Lecture, two hours; outside study, nine hours. Focuses on role of economic theory and economic research in understanding economic risks and neglected issues affecting health care. Theories of economic growth and change. Role of advances in technology and actions of maximizing income-maintenance programs in U.S., with emphasis on interaction of moral attitudes toward poor and structure and implementation of law, policy, and administration. Current reform consensus and major forms. Letter grading.

M259. Microeconomic Theory of Health Sector. (4) (Same as Health Policy M259.) Lecture, four hours; discussion, two hours; outside study, nine hours. Focuses on role of economic theory and economic research in understanding economic risks and neglected issues affecting health care. Focus on role of economic growth and change. Role of advances in technology and actions of maximizing income-maintenance programs in U.S., with emphasis on interaction of moral attitudes toward poor and structure and implementation of law, policy, and administration. Current reform consensus and major forms. Letter grading.

M260. Principles and Economic Development in Indigenous Communities. (4) (Same as American Indian Studies M207.) Seminar, two hours; discussion, one hour. Limited to graduate students. Familiarizes students with theoretical and practical aspects of economic development in indigenous communities. Focus on indigenous communities broadly and contrasted with other regions, countries, and communities. Introduces students to important concepts such as opportunity, economic trade-offs, adverse selection, moral hazard, and discount rates through use of existing research and case studies. These basic concepts are important for graduate students who will be analyzing and evaluating research conducted on and for indigenous peoples and governments. S/U or letter grading.

M260A. Research and Development Policy. (4) (Same as Management-PhD M260A.) Lecture, three hours. Focuses on the process and development of public research and development as a process and as an element of goal-oriented organization. Factors affecting invention and innovation; transfer of technology; organizational and behavioral considerations; raising of science, technology, and organizational goals; assessing of and forecasting technological futures. S/U or letter grading.

M260B. Growth, Science, and Technology. (4) (Same as Management-PhD M260B.) Lecture, three hours. Economic growth and change. Role of advances in science and technology, and actions of maximizing innovators and factors impinging on their behavior. How technology (or discontinuities) generate new industries or transform nature of and population of firms in existing industries. S/U or letter grading.


M262. Science, Technology, and Public Policy. (4) (Same as Electrical Engineering CM262.) Lecture, three hours. Recent and continuing advances in science and technology are raising profoundly important public policy issues. Consideration of selection of critical policy issues, each of which has substantial ethical implications. Case studies on economic, political, scientific, and technological aspects. Concurrently scheduled with course CM182. Letter grading.

M266. Policy Analysis of Emerging Environmental Technologies. (4) (Same as Urban Planning M266.) Lecture, three hours. Acquisition and utilization of economic, finance, planning, and policy analytic tools needed to evaluate factors that drive market adoption from early to middle market phases. Rooftop solar, electric vehicle, and energy efficiency as focal examples, with emphasis on role of policy and planning intentions to spur adoption. Letter grading.

M291A. Special Topics in Public Policy. (4) (Formerly numbered 290C) Seminar, three hours. Emerging issues in public policy. May be repeated for credit. Letter grading.

M291B. Variable Topics Seminar: Public Policy. (4) Seminar, three hours; outside study, nine hours. Emerging issues in public policy. May be repeated for credit. Concurrently scheduled with course OM118. S/U or letter grading.

M291C. Special Topics in Public Affairs. (4) (Same as Social Welfare M203X and Urban Planning M210A.) Seminar, three hours; outside study, nine hours. Advanced seminar on emerging issues across public policy, social policy, and urban planning. May be repeated for credit. S/U or letter grading.


M296. Voting Rights Policy and Law I (Lecture) (Formerly numbered 296I) Seminar, two hours; discussion, one hour. Weekly social science research lectures covering range of policy-relevant topics and discussion of research findings with professor. Examination of quality and relevance of research findings and connections between research, public policy, and real-world policy problems. S/U grading.

M297C. Public Policy Seminar Series. (2) (Formerly numbered 297C) Seminar, two hours; discussion, one hour. Weekly public policy seminars at which faculty and guest speakers provide their perspective on how to understand broad range of policy-related topics. S/U grading.

M297D. Public Policy Student-Initiated Special Topics. (2) Seminar, three hours. Student-initiated and facilitated special topics on emerging issues in public policy. May be repeated for credit. S/U grading.

M298A. Applied Policy Project I. (2) Seminar, 90 minutes; outside study, four and one half hours. Requisite: course 210. Limited to MPP students. First course of your capstone sequence designed to meet professional master’s theses. Papers build on prior core courses, and internship (unless waived). Requisite: course 298A. Second course in three-term sequence in which students prepare major public policy projects and papers that are case studies of policy evaluation and application and professional master’s theses. Papers build on prior core courses, internship experience, and policy cluster courses. Letter grading.

M298B. Applied Policy Project II. (2) Seminar, three hours; outside study, 15 hours. Preparation: completion of MPP core curriculum, two policy cluster courses, and internship (unless waived). Requisite: course 298A. Second course in three-term sequence in which students prepare major public policy projects and papers that are case studies of policy evaluation and application and professional master’s theses. Papers build on prior core courses, internship experience, and policy cluster courses. Letter grading.

M298C. Applied Policy Project III. (2) Seminar, two hours. Preparation: completion of MPP core curriculum, two policy cluster courses, and internship (unless waived). Requisite: course 298B. Third course in three-term sequence in which students complete research projects, conduct oral presentations of their applied policy projects, and give written feedback on other student presentations. Letter grading.

375. Teaching Apprentice Practicum. (1 to 4) Seminar, to be arranged. Students will work as an apprentice person under active guidance in order to gain teaching experience. Appointments to be arranged in consultation with the student's advisor or other appropriate faculty member.
Radiation Oncology

Lower-Division Courses

19. Fiat Lux Freshman Seminars. (1) Seminar: one hour. Discussion and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

99. Student Research Program. (1 to 8) Tutorial, to be arranged. Limited to graduate students. Individual programming for selected students to permit pursuit of a subject in greater depth. S/U or letter grading.

Upper-Division Course

199. Directed Research in Radiation Oncology. (2 to 8) Tutorial, two hours. Limited to juniors/seniors. Supervised individual research or investigation under guidance of faculty mentor. Culminating paper required. May be repeated for credit. Individual contract required. P/NP or letter grading.

Scope and Objectives

The Department of Radiation Oncology includes clinical divisions at the UCLA Medical Plaza and Reagan UCLA Medical Center, Santa Monica-UCLA Medical Center, and West Los Angeles VA Medical Center and includes the Division of Brachytherapy, Division of Molecular and Celluar Oncology, and Medical Radiation Physics. Laboratory, clinical, and translational research are facilitated at all locations.

The primary clinical mission of the department is the management of patients who have cancer. The purpose of using radiation therapy, rather than or in addition to surgery, is to preserve function and/ or cosmesis while eliminating the cancer. Other activities include total body irradiation before bone marrow transplantation, stereotactic body radiotherapy, brachytherapy, and stereotactic radiosurgery for A-V malformations, meningiomas, and malignant intracranial lesions. Research interests include clinical trials, radiation biology, radiation modifiers, molecular biology, immunology, and applied physics. Knowledge of the disease in question, the comparative efficacy of radiation therapy and other methods, radiation biology and pathophysiology, and the physical characteristics of various radiations is essential.

The educational programs serve medical, dental, basic science (biology and physics), nursing, and radiation therapy students, and community and postgraduate physicians; there also is a four-year program for residents who are qualifying for certification in radiation oncology by the American Board of Radiology.

For more details on the Department of Radiation Oncology and courses offered, see the department website.

For more details on the Department of Radiological Sciences, see the department website.

Scope and Objectives

The undergraduate major in Study of Religion equips students to understand and compare creatively the worldwide varieties of core convictions, stories, texts, rituals, and practices known collectively as religion. Students complete courses in a wide range of departments in which religious phenomena are analyzed, including anthropology, art history, Asian languages and cultures, classics, comparative literature, English, history, Near Eastern languages and cultures, philosophy, political science, and world arts and cultures/dance. Students can anticipate gaining versatile intellectual tools for approaching, analyzing, and appreciating the deep roots, human motivations, and history of the formation of religious traditions in their respective cultural contexts. Within this interdepartmental program, students may focus in depth on one or more specific religions. Students may wish to select this major in combination with a second major field, a minor, or related language study.

Undergraduate Study

The Study of Religion major is a designated capstone major. Students must complete an advanced seminar that provides unique opportunity to work closely with a faculty member on a focused topic of research. Through their capstone work students are expected to demonstrate their ability to plan and carry out a major project, apply subject matter and research methods knowledge to produce a paper or other research project, and organize information into a coherent and persuasive form for oral presentation to their peers.
Study of Religion BA
Capstone Major

Learning Outcomes
The Study of Religion major has the following learning outcomes:

- Demonstrated ability to plan a major project that concludes with writing a cogent and convincing document
- Application of knowledge of a wide-ranging bibliography and of methods of research to thoroughly prepare for seriously engaging an interviewee or for writing the prospectus describing the major project
- Development of skills essential to taking oral histories or doing field research in Los Angeles’ multicultural population
- Ability to organize research data into a coherent and persuasive form for oral presentation to peers
- Demonstrated empathy as a critic of a wide array of religious traditions, institutions, and practices

Preparation for the Major

Required: Study of Religion M4 or 11, and two courses from Ancient Near East 10W, Anthropology 3, Asian M60, History 1A, 1B, 1C, 9A, 9C, 9D, 9E, M10A, 10B, 11A, 11B, Philosophy 2, 21, Study of Religion M10, M50, M60A through M60E, M60W, M61W.

Transfer Students

Transfer applicants to the Study of Religion major with 90 or more units must complete the following introductory courses prior to admission to UCLA: one history of religions course, one philosophy of religion course, and two courses from sociocultural anthropology, Buddhism, history of Western civilization, Asian civilizations, civilizations of Africa, and history of China.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

The Major


Student are encouraged to select courses that focus on a specific religious tradition or traditions, or on a set of thematic issues important to the study of religion. During their senior year students must complete the capstone seminar, Study of Religion 191. A course may be taken twice, on different topics, for credit toward the major where repetition is allowed by the department offering the course. A maximum of 4 units of special studies courses (197, 198, 199) approved by the adviser may be applied toward the major.

A minimum of 12 units of special studies courses (197, 198, 199) approved by the adviser may be applied toward the major. Each course for preparation for the major and the major must be taken for a letter grade.

Honors Program

The honors program provides exceptional students with an opportunity to do independent research under the tutorial guidance of a faculty member. Students admitted to honors should take three Study of Religion 198 courses under the guidance of the sponsoring professor. The first 198 course should be taken in spring quarter of the junior year, the second during the following fall quarter, and the third during winter quarter of the senior year. The three courses count as part of the regular requirement of 12 upper-division courses. The program culminates in an honors thesis.

To qualify for admission students should have a minimum grade-point average of 3.4. The 198 courses designed for the program and the thesis topic should be approved by the committee in charge of the major.

For more information, contact the student affairs officer or the faculty adviser at the program office or the faculty adviser at the program.

Study of Religion Minor

To enter the Study of Religion minor, students must have an overall grade-point average of 2.0 or better.

Required Lower-Division Courses (4 to 10 units):
- Study of Religion M4 or 11, or M50 and M60A or M60W.

Required Upper-Division Courses (24 to 29 units):

Student are encouraged to select courses that focus on a specific religious tradition or traditions, or on a set of thematic issues important to the study of religion.

A course may be taken twice, on different topics, for credit toward the minor where repetition is allowed by the department offering the course. A maximum of 4 units of special studies courses (197, 198, 199) approved by the adviser may be applied toward the minor.

A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor.

Each minor course must be taken for a letter grade, and students must have an overall grade-point average of 2.0 or better in the minor. Successful completion of the minor is indicated on the transcript and diploma.

Study of Religion
Lower-Division Courses

M4. Introduction to History of Religions. (5) (Same as History M4.) Lecture; three hours; discussion, one hour. Survey of three major religious traditions, with emphasis on their beginnings and subsequent decisive changes in their respective historical developments and interactions. Equips students with intellectual tools necessary for thinking analytically, empathetically, and comparatively about fascinating human phenomena identified as religious, such as sacred acts, places, words, and persons in their various historical contexts. Development of student skills in critical thinking, analyzing documents, and making persuasive arguments based on historical evidence. P/NP or letter grading.

M10. Introduction to Judaism. (5) (Same as Jewish Studies M10.) Lecture; three hours; discussion, one hour. Judaism’s basic beliefs, institutions, and practices. Topics include development of biblical and rabbinic Judaism; concepts of god, sin, repentance, prayer, and the messiah; history of Talmud and synagogue; evolution of folk beliefs and year-cycle and lifecycle practices. P/NP or letter grading.

11. Religion in Los Angeles. (4) Lecture, four hours. Introduction to varieties of religious experience in Los Angeles and its environs. Presentations, required readings, and (where possible) site visits to examine selected faiths and spiritual practices throughout Southern California and provide deeper understanding of myriad ways that sacred is made manifest and encountered. Foundational academic orientations within study of religion (anthropological, historical, psychological, sociological, etc.) used as framework to examine and interpret almost unparalleled religious diversity of City of Angels. Recognizing that spiritual traditions are crucial reflection of region’s ever-changing demographics, emphasis on role of ethnicity, gender, nationality, and race in shaping of religious landscape. P/NP or letter grading.

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

M20. Introduction to Islam. (5) (Formerly numbered M109.) (Same as Islamic Studies M20.) Lecture, three hours; discussion, one hour. Genesis of Islam, its doctrines, and practices, with readings from Qur’an and Hadith; schools of law and theology; Sufism; reform and modernism. P/NP or letter grading.

M40. Christianities East and West. (6) (Same as Slavic-Mongol M42.) Lecture, two hours; discussion, one hour. Survey of three major historical branches of Christianity—Eastern and Orthodox Orthodoxy, Roman Catholicism, and Protestantism, contrasting how history, dogma, culture, and community structures develop in those three traditions. P/NP or letter grading.

M50. Origins of Judaism, Christianity, and Islam. (5) (Same as Ancient Near East M50B and Middle Eastern Studies M50B) Lecture; three hours; discussion, one hour. Examination of three major monothe-
Asian M61.) Lecture, three hours; discussion, one hour. Examination of relationship between medicine, religion, and society; how religion is help or hindrance to health; and how people might look into beyond biomedical clinic. Examination of historical entrenchment of religion, medicine, and society in Western antiquity to early modern period; disentanglement of empirical medical history care delivery, with particular attention to questions of justice and holistic care in U.S. and of policy and practice globally. P/NP or letter grading.

55. Spirit of Medicine. (5) Lecture, three hours; discussion, one hour. Introduction to historical development and contemporary issues and including medieval period; disentanglement of empirical medical history care delivery, with particular attention to questions of justice and holistic care in U.S. and of policy and practice globally. P/NP or letter grading.

560A. Introduction to Buddhism. (5) (Same as Asian M60W.) Lecture, three hours; discussion, one hour. Not open for credit to students with credit for course M60W. Knowledge of Asian languages not required. General survey of development of Buddhism in India, with focus on those religious doctrines and meditative practices most essential to various Asian traditions of Buddhism. Letter grading.

560B. Introduction to Chinese Religions. (5) (Same as Chinese M60W.) Lecture, three hours; discussion, one hour. Not open for credit to students with credit for course M61W. Knowledge of Chinese not required. General survey of religious life in China, with emphasis on everyday religious practice over doctrine, and themes common to Buddhism, Daoism, and Confucianism. P/NP or letter grading.

560C. Introduction to Korean Religions. (5) (Same as Korean M60C.) Lecture, three hours; discussion, one hour. Knowledge of Asian languages not required. General survey of history of religions in Korea—Shamanism, Buddhism, Confucianism, Daoism, Christianity, Tonghak, and some new religions—with focus on religious doctrines, practices, Korean Confucianist, and social impacts. P/NP or letter grading.

560D. Religion in Classical India: Introduction. (5) (Same as South Asian M60D.) Lecture, three hours; discussion, one hour. Introduction to religions of classical India—Vedism, Brahmism, Jain, and Buddhist—paying equal attention to change and continuity, with emphasis on chronological development. P/NP or letter grading.

560E. Religious Traditions in Southeast Asia. (4) (Same as Southeast Asian M60E.) Lecture, three hours. Introduction to historical development and contemporary practice of religions in Southeast Asia. Examination of indigenous religious beliefs and major textually based religions in the region, including Hinduism, Buddhism, Islam, and Christianity. P/NP or letter grading.

560F. Introduction to Buddhism. (5) (Same as Asian M60W.) Lecture, three hours; discussion, one hour. Not open for credit to students with credit for course M60W. Knowledge of Asian languages not required. General survey of Buddhist worldview and lifestyle, with focus on those religious doctrines and meditative practices most essential to various Asian traditions of Buddhism. Particular attention to problems involved in study of religions and to beliefs. Required. Letter grading.

561. Introduction to Zen Buddhism. (5) (Same as Asian M61.) Lecture, three hours; discussion, one hour. Knowledge of Asian languages not required. Introduction to Zen traditions and to interplay between Zen and other fundamental cultural and religious concerns in East Asia. Topics include role of Zen within Buddhist thought and practice, artistic and literary arts, society, and daily life. Letter grading.

M61W. Introduction to Chinese Religions. (5) (Same as Chinese M60W.) Lecture, three hours; discussion, one hour. Enforced requisite: Composition 3 or PS 3 or English as a Second Language 36. General survey of religious life in China, with everyday religious practice over doctrine, and themes common to Buddhism, Daoism, and Confucianism. Satisfies Writing II requirement. Letter grading.

89. Honors Seminar. (1 to 5) Lecture, one hour. Limited to 20 students. Designed as adjunct to lower-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

89HC. Honors Contracts. (1) Individual contract required; consult Undergraduate Center. Limited to students in College Honors Program. Designed as adjunct to lower-division lecture course. Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP or letter grading.

Upper-Division Courses

101. History of Study of Religion. (4) Lecture, four hours. Recommended requisite: History 4. Survey of major modern theories, methods, and approaches to study of religion to situate them within their own historical, philosophical, and social contexts. Critical consideration of changing and contested meanings of term religion and its relationship to such categories as science and magic, as well as to other domains of social experience. Examination of how study of religion has engaged especially to four biblical studies, anthropology, sociology, psychology, and evolutionary biology. P/NP or letter grading.

M105A. Bahá’í Faith in Iran: Historical and Sociological Survey. (4) (Same as Iranian M105A.) Lecture, three hours. Readings in English. Rise and development of Bábí and Bahá’í religions in context of 19th century Iran. Focus on personalities of Báb, Bahá’u’lláh, and ‘Abdu’l-Bahá. May be taken independently for credit. P/NP or letter grading.


M105C. Bahá’í Faith in Iran: 20th-Century Iran and the Bahá’ís. (4) (Same as Iranian M105C.) Lecture, three hours. Readings in English. Focus on history of 20th-century Iran beginning with constitutional revolution, development and persecution of Bahá’í community, and latter’s relation to reform movements in Iran. May be taken independently for credit. P/NP or letter grading.

M106A. Premodern Islam. (4) (Same as History M106A.) Lecture, three hours; discussion, one hour (when scheduled). Recommended for juniors/seniors. Examination of early development of Islamic with special attention to doctrine of nature of human, capacity, guidance, revelation and religious authority, duties of believers, ritual, law, sectarian movements, mysticism, and popular religion. P/NP or letter grading.

M107. Islam in West. (5) (Same as Arabic M107 and Islamic Studies M107.) Lecture, three hours; discussion, one hour. Acquisition of understanding of basic doctrines and practices of Islam. Survey of history of Islam in West, with focus on U.S. and France. Analysis of Islam as coherent system of thought and sphere of action that once served as meaningful and relevant framework for understanding physical reality and human life for inhabitants of Nile Valley. General princi- ple: growth as development through time (circa 3000 BC to 300 CE). Topics include mythology, temple and cult, magic, and personal piety. P/NP or letter grading.

M108. Qur’an. (4) (Same as Arabic M108.) Lecture, three hours. Examination of Qur’an, its early history, art, form and function in history. Letter grading.

M110. Religion and Violence. (4) Seminar, three hours; discussion, one hour. Exploration of capacity of religion to mobilize and legitimate violence. Material includes theoretical texts by such authors as Burkett, Jonathan Z. Smith, and David Rapport and case studies dealing with religion and violence in India, Northern Ireland, Egypt, Lebanon, Israel, Palestine, Sri Lanka, and the U.S. Letter grading.

M115. Islam and Other Religions. (5) (Same as Islamic Studies M115.) Lecture, three hours; discussion, one hour. Students gain familiarity with historical cases and modes of interaction between Muslims and non-Muslims in plural societies. Emphasis on axis of questions such as how does Qur’an reflect religious pluralism; how does it situate Islam vis-à-vis its alternatives; what encounters did rapid expansion of Islam bring about in diverse societies; how did Islam and other religions change through debate, war, and exchange of ideas; what roles has political power played in conditioning interreligious interaction; how have conversion and hybridity affected what it means to be Muslim; what is different about interreligious interactions in secular states and societies; and how has past invoked to justify opinions and policies today. Investigation of these questions by conducting microstudies: close readings of sources through theoretical lens. P/NP or letter grading.

118B. Kirkegaard and Philosophy of Religion. (4) (Same as Philosophy M118B.) Lecture, four hours; discussion, one hour (when scheduled). Preparation: one course study. Philosophy of religion. Study of Kirkegaard on philosophy of religion, with emphasis on interpretation of texts. P/NP or letter grading.


M132. Ancient Egyptian Religion. (5) (Same as Ancient Near East M132.) Lecture, three hours; discussion, one hour. Introduction to religious beliefs, practices, and sentiments of ancient Egypt to study Egyptian religion as coherent system of thought and sphere of action that once served as meaningful and relevant framework for understanding physical reality and human life for inhabitants of Nile Valley. General principle: growth as development through time (circa 3000 BC to 300 CE). Topics include mythology, temple and cult, magic, and personal piety. P/NP or letter grading.

M133. Bible and Qur’an. (4) (Same as Middle Eastern Languages and Civilizations M133.) Lecture, three hours. Study of Hebrew Bible/Old Testament, New Testament, and Qur’an to familiarize students with content of scriptures of Judaism, Christianity, and Islam, and to explore major themes and consider variety of approaches to scripture. Development
of appreciation for role script plays in these religious systems and in American culture and society. P/N or letter grading.

M135. Religion in Ancient Israel. (4) (Same as Ancient Near East M135.) Lecture, three hours. Introductory survey of various ancient Israelite religious beliefs and practices, with special attention to the effects of these religious ideas and practices, their origin, and development, with special emphasis on Near East M135.) Lecture, three hours, discussion, one hour. Knowledge of Indian languages not required. Overview of social and political history of Buddhism from its origin to its disappearance in India, based not only on textual analysis but also on historical and inscriptive sources. Examination of both formal doctrine and actual practices and on what learned Buddhas and ordinary Buddhists did, saw, and made. Letter grading.

M134D. Buddhism in India. (4) (Same as South Asian CM160.) Lecture, three hours; discussion, one hour. Knowledge of Indian languages not required. Overview of social and political history of Buddhism from its origin to its disappearance in India, based not only on textual analysis but also on historical and inscriptive sources. Examination of both formal doctrine and actual practices and on what learned Buddhas and ordinary Buddhists did, saw, and made. Letter grading.


M173C. Shinto, Buddhism, and Japanese Folk Religion. (4) (Same as History M173C.) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Religious conflict, religious education, and use of media to enact—or manage—clashing visions of what Los Angeles is and ought to be: theoretical and practical ways citizens work out tensions in what city of angels means. Key themes include city and utopia, social and secular economy, trust, solidarity, access, equality, liberty, philanthropy, and eschatology. May be repeated for credit with topic change. P/N or letter grading.

M186A. New Testament: Jesus of Nazareth in Historical Research. (4) (Same as History M185G.) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Examination of interplay of factors that, from Christian missionaries to Islamic madrassa schools and colonial rebellions, gave shape to multifaceted Muslim reformation in context of colonial modernity. P/N or letter grading.

M186B. Religious Environment of Early Christians. (4) (Same as History M185G.) Lecture, three hours; discussion, one hour (when scheduled). Designed for juniors/seniors. Main polytheistic systems of ancient Near East, with emphasis on Mesopotamia and Syria and with reference to religion of ancient Israel: varying concepts of divinity, hierarchies of gods, prayer and cult, magics, wisdom, and moral conduct. P/N or letter grading.

M185A. Jesus of Nazareth in Historical Research. (4) (Same as History M185A and History M185D.) Lecture, three hours; discussion, one hour (when scheduled). May be repeated for credit with topic change. P/N or letter grading.

M185A. Jesus of Nazareth in Historical Research. (4) (Same as History M185A and History M185D.) Lecture, three hours; discussion, one hour (when scheduled). May be repeated for credit with topic change. P/N or letter grading.

M185B. Religious Environment of Early Christians. (4) (Same as History M185G.) Lecture, three hours; discussion, one hour (when scheduled). May be repeated for credit with topic change. P/N or letter grading.

M185C. Jesus of Nazareth in Historical Research. (4) (Same as History M185L.) Lecture, three hours; discussion, one hour (when scheduled). Examination of role script plays in these religious systems and in American culture and society. P/N or letter grading.

M161A. Chinese Buddhism. (4) (Same as Chinese CM160.) Lecture, three hours; discussion, one hour. Knowledge of Chinese not required. Introduction and development of Buddhism in China, interaction between Chinese culture, rise of Chinese schools of Buddhism. Letter grading.

M161B. Japanese Buddhism. (4) (Same as Japanese CM160.) Lecture, three hours; discussion, one hour. Knowledge of Japanese not required. Development of Buddhism in Japan in its cultural context, with emphasis on key ideas and teachings. Letter grading.

M161C. Korean Buddhism. (4) (Same as Korean CM160.) Lecture, three hours; discussion, one hour. Knowledge of Korean not required. Introduction and development of Buddhism in Korea, interactions be-
The Scandinavian Section offers two majors, one minor, and a Master of Arts program. The BA in Scandinavian Languages and Cultures provides students with a broad, yet robust, knowledge of the languages, literatures, and cultures of the Nordic countries. The BA in Nordic studies trains undergraduate students in a broad, interdisciplinary understanding of the Nordic region. The goal of this major is to provide students with a robust knowledge of the cultures and histories of this region from a global and transdisciplinary perspective. This major allows interested students an opportunity to explore the Nordic region from the perspective of non-Humanities disciplines, if they choose, while requiring a strong grounding in the history and cultures of the region. The minor in Scandinavian Languages is designed to give students a command of the intellectual history of the region and a developing appreciation of its literatures and cultures.

Graduate study leads to the Master of Arts in Scandinavian. Graduate students are expected to concentrate on one Scandinavian language, though they study the literatures of the other areas.

### Undergraduate Study

The Scandinavian Languages and Cultures and Nordic Studies majors are designated capstone majors. Under the guidance of faculty members, students are required to devise, research, and complete either a substantial research paper, film/video, or a website that reflects significant engagement with a challenging question in the realm of Scandinavian languages and cultures or Nordic studies. Through their capstone work, all students are expected to demonstrate their skills in articulating a clear and sophisticated research question, devising a realizable set of research goals, deploy their advanced knowledge of a Nordic language to access target language research materials and incorporate them into the research corpus, devise an appropriate modality for the final project, present a concise engaging public presentation of their research and respond to questions, and archive their project in an appropriate form.

### Language Acquisition Courses

No credit is allowed for completing a less advanced course after successful completion of a more advanced course in Danish, Norwegian, and Swedish grammar and/or composition. Students with demonstrated preparation may be permitted a more advanced program by the section or may be transferred to a more advanced course with consent of the instructor.

Native speakers of Norwegian, Swedish, and Danish may not enroll in any language course (including courses 105, 106, 107) in the Scandinavian Section except by petition in writing to the section. Students who are not Nordic Studies or Scandinavian Languages and Cultures majors or Scandinavian minors with knowledge of one of these Scandinavian languages may not take courses in the others except by petition in writing. Petitions must include a description of the student’s linguistic background and the reason for wanting to take the language course in question.

### Nordic Studies BA

#### Capstone Major

**Learning Outcomes**

The Nordic Studies major has the following learning outcomes:

- Demonstrated command of the linguistic and cultural diversity of the Nordic region
- Demonstrated command of the economics, politics, environments, and histories of the Nordic region
- Demonstrated specific skills and expertise, including research, analysis, and writing
- Demonstrated understanding of the role of the Nordic region in global context, and the impact of global phenomena on the region
- Identification, evaluation, and analysis of appropriate primary sources
- Working knowledge of scholarly discourse from broad range of disciplines
- Conception and execution of a project that identifies and engages with a specialized topic
- Engagement with peers through presentation, discussion, and critique of student work

### The Major

Required: Nine courses from the following five tracks, with at least one course in four of the tracks: (1) early Nordic literatures and cultures—Scandinavian C131, C133A, 134, C137, 138, (2) theory, genres, and authors—Scandinavian C141A, 141C, 142A, 143C, C145A, C145B, C146A, 147A, C147B, (3) literary periods—Scandinavian C155, 156, 157, (4) Scandinavian cinema—Scandinavian 161, C163A, C165A, C166C, (5) cultural studies—Scandinavian C171, 173A, C174A, 174B, C180; and one senior capstone course (Scandinavian 199) under the direction of a faculty member.

As an option, four upper-division courses in a related field may be taken if approved in advanced by the undergraduate adviser. In general, the courses must include significant content related to the Nordic region.

### Scandinavian Languages and Cultures BA

#### Capstone Major

**Learning Outcomes**

The Scandinavian Languages and Cultures major has the following learning outcomes:

- Demonstrated written and oral mastery of a single Nordic language
- Demonstrated knowledge of the other Nordic languages
- Demonstrated specific skills and expertise, including research, analysis, and writing
- Identification, evaluation, and analysis of appropriate primary sources

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**SCANDINAVIAN SECTION**

**College of Letters and Science**

332 Royce Hall
Box 951537
Los Angeles, CA 90095-1537

**Scandinavian Section**

310-825-6828
Dominic R. Thomas, PhD, Head

**Professor**

Timothy R. Tangherlini, PhD

**Professors Emeriti**

Jesse L. Byock, PhD
James R. Massengale, PhD
Mary Kay Norseng, PhD
Ross P. Shideeler, PhD

**Associate Professor**

Anne O. Lundé, PhD

**Lecturer**

Patrick J. Wen, PhD

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**Scope and Objectives**

Scandinavia consists of five northern European countries: Denmark, Finland, Iceland, Norway, and Sweden. These countries form a geographic bridge between the American and European continents, and a political bridge between Western and Eastern Europe. For all students of literature, language, the arts, and the social and physical sciences, Scandinavia is of particular interest.

The Scandinavian Section offers two majors, one minor, and a Master of Arts program. The BA in Scandinavian Languages and Cultures provides students with a broad, yet robust, knowledge of the languages, literatures, and cultures of the Nordic countries. The BA in Nordic studies trains undergraduate students in a broad, interdisciplinary understanding of the Nordic region. The goal of this major is to provide students with a robust knowledge of the cultures and histories of this region from a global and transdisciplinary perspective. This major allows interested students an opportunity to explore the Nordic region from the perspective of non-Humanities disciplines, if they choose, while requiring a strong grounding in the history and cultures of the region. The minor in Scandinavian Languages is designed to give students a command of the intellectual history of the region and a developing appreciation of its literatures and cultures.

Graduate study leads to the Master of Arts in Scandinavian. Graduate students are expected to concentrate on one Scandinavian language, though they study the literatures of the other areas.

### Undergraduate Study

The Scandinavian Languages and Cultures and Nordic Studies majors are designated capstone majors. Under the guidance of faculty members, students are required to devise, research, and complete either a substantial research paper, film/video, or a website that reflects significant engagement with a challenging question in the realm of Scandinavian languages and cultures or Nordic studies. Through their capstone work, all students are expected to demonstrate their skills in articulating a clear and sophisticated research question, devising a realizable set of research goals, deploy their advanced knowledge of a Nordic language to access target language research materials and incorporate them into the research corpus, devise an appropriate modality for the final project, present a concise engaging public presentation of their research and respond to questions, and archive their project in an appropriate form.

### Language Acquisition Courses

No credit is allowed for completing a less advanced course after successful completion of a more advanced course in Danish, Norwegian, and Swedish grammar and/or composition. Students with demonstrated preparation may be permitted a more advanced program by the section or may be transferred to a more advanced course with consent of the instructor.

Native speakers of Norwegian, Swedish, and Danish may not enroll in any language course (including courses 105, 106, 107) in the Scandinavian Section except by petition in writing to the section. Students who are not Nordic Studies or Scandinavian Languages and Cultures majors or Scandinavian minors with knowledge of one of these Scandinavian languages may not take courses in the others except by petition in writing. Petitions must include a description of the student’s linguistic background and the reason for wanting to take the language course in question.

### Nordic Studies BA

#### Capstone Major

**Learning Outcomes**

The Nordic Studies major has the following learning outcomes:

- Demonstrated command of the linguistic and cultural diversity of the Nordic region
- Demonstrated command of the economics, politics, environments, and histories of the Nordic region
- Demonstrated specific skills and expertise, including research, analysis, and writing
- Demonstrated understanding of the role of the Nordic region in global context, and the impact of global phenomena on the region
- Identification, evaluation, and analysis of appropriate primary sources
- Working knowledge of scholarly discourse from broad range of disciplines
- Conception and execution of a project that identifies and engages with a specialized topic
- Engagement with peers through presentation, discussion, and critique of student work

### The Major

Required: Nine courses from the following five tracks, with at least one course in four of the tracks: (1) early Nordic literatures and cultures—Scandinavian C131, C133A, 134, C137, 138, (2) theory, genres, and authors—Scandinavian C141A, 141C, 142A, 143C, C145A, C145B, C146A, 147A, C147B, (3) literary periods—Scandinavian C155, 156, 157, (4) Scandinavian cinema—Scandinavian 161, C163A, C165A, C166C, (5) cultural studies—Scandinavian C171, 173A, C174A, 174B, C180; and one senior capstone course (Scandinavian 199) under the direction of a faculty member.

As an option, four upper-division courses in a related field may be taken if approved in advanced by the undergraduate adviser. In general, the courses must include significant content related to the Nordic region.

### Scandinavian Languages and Cultures BA

#### Capstone Major

**Learning Outcomes**

The Scandinavian Languages and Cultures major has the following learning outcomes:

- Demonstrated written and oral mastery of a single Nordic language
- Demonstrated knowledge of the other Nordic languages
- Demonstrated specific skills and expertise, including research, analysis, and writing
- Identification, evaluation, and analysis of appropriate primary sources
Graduate Study
Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Division website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Graduate Degree
The Scandinavian Section offers the Master of Arts (MA) degree in Scandinavian.

Scandinavian
Lower-Division Courses
1. Elementary Swedish. (4) Discussion, four hours. P/NP or letter grading.
4. Elementary Swedish: Intensive. (12) Lecture, 15 hours; laboratory, five hours. Intensive basic course in Swedish equivalent to courses 1, 2, and 3. Offered in summer only. P/NP or letter grading.
5. Elementary Norwegian. (4) Discussion, four hours. P/NP or letter grading.
8. Accelerated Elementary Norwegian. (6–6) Lecture, four hours. Requisite for course 14B: course 14A. Accelerated courses 14A and 14B equival- ent to courses 11, 12, and 13. Introduction to basics of Norwegian language. Development of ability to con- verse and write in Norwegian through oral and written exercises. Students read and listen to online sample texts, watch clips of Norwegian programs, and ex- pand on daily homework exercises. P/NP or letter grading.
9. Fiat Lux Freshman Seminars. (1) Seminar, three hours. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.
10. Elementary Danish. (4) Discussion, four hours. P/NP or letter grading.
14. Heroic Journey in Northern Myth, Legend, and Epic. (4) Lecture, three hours. Not open for credit to students with credit for course 40W. All readings in mythology, legend, folklore, and epic, including Ni- belungenlied, Völsunga Saga, Edda, and Beowulf. Cultural and historic backgrounds to texts. P/NP or letter grading.
15. Heroic Journey in Northern Myth, Legend, and Epic. (4) Lecture, three hours; discussion, one hour. Enforced requisite: English Composition 3 or 3H or English as a Second Language 36. Not open for credit to students with credit for course 50. Designed for students in general and for those wishing to prepare for more advanced and specialized studies in Scandinavian literature and culture. Selected works from literatures of Denmark, Norway, Sweden, Iceland, and Finland, ranging from myth, national epic, saga, and folktale through modern novel, poem, play, short story, and film, read in English and critically discussed. P/NP or letter grading.
16. Introduction to Scandinavian Literatures and Cultures. (5) Lecture, three hours; discussion, one hour. Not open for credit to students with credit for course 50W. Designed for students in general and for those wishing to prepare for more advanced and specialized studies in Scandinavian literature and culture. Selected works from literatures of Denmark, Norway, Sweden, Iceland, and Finland, ranging from myth, national epic, saga, and folktale through modern novel, poem, play, short story, and film, read in English and critically discussed. P/NP or letter grading.
17. Scandinavian Section / 709
142A. Introduction to Nordic Theater and Drama. (4) Lecture, three hours. Examination of artistic legacy of Henrik Ibsen and August Strindberg in context of emergency of modernism and drama as whole, as well as important contributions of their contemporaries and successors. Readings include plays, letters, speeches, and memoirs by Ludvig Holberg, Henrik Ibsen, August Strindberg, Pär Lagerkvist, Knut Hamsun, and Jonas Hassen Khemiri. P/NP or letter grading.

143A. Scandinavian Detective Fiction, (4) Seminar, three hours. Scandinavian authors have been writing detective fiction for years. Maj Sjöwall and Per Wahlöö were famous worldwide in 1960s and 1970s, especially with their Martin Beck series, and once they had established that Scandinavian writers could be successfully translated into many languages, others followed. Scandinavian authors, while following traditional rules of crime fiction, also analyze and often criticize values and cultures of their societies. Reading of these works as representations of social and intellectual problems not only in Scandinavia, but in Europe and world at large. P/NP or letter grading.


144A, Henrik Ibsen. (4) Seminar, three hours. Readings and discussion of selected plays by Henrik Ibsen. May be concurrently scheduled with course C245A, P/NP or letter grading.

145B. Knut Hamsun. (4) Seminar, three hours. Readings and discussion of selected works by Knut Hamsun and other 19th- and 20th-century Scandinavian writers who explored theme of nature as modern dyf. May be concurrently scheduled with course C245B. P/NP or letter grading.

146A. August Strindberg. (4) Seminar, three hours. August Strindberg’s portrayals of marital conflict repositioned and shaped literary representation of so-called battle of sexes. His works, as well as its literary transformations, placed into Scandinavian, European, and feminist context. May be concurrently scheduled with course C246A. P/NP or letter grading.

147A. Hans Christian Andersen. (4) Lecture, two hours; discussion, one hour. Study of works of Hans Christian Andersen as a dramatist, and writer of tales, including consideration of his literary background and of his times. Analysis of his works in terms of their structure, style, and meaning. P/NP or letter grading.

147B. Soren Kierkegaard. (4) Seminar, three hours. Readings and discussion of selected works by Soren Kierkegaard and other existentialist writers. May be concurrently scheduled with course C247B. P/NP or letter grading.


154. Romanticism. (4) Seminar, three hours. Exploration of Romanticism in Scandinavian literature. Reading and discussion of different approaches to Romanticism and analysis of works of prominent Scandinavian writers from Romantic period to understand Scandinavian Romanticism in larger European context, including work from both English and German Romantic writers and artists. P/NP or letter grading.

155. Modern Breakthrough. (4) Formerly numbered 155.) Seminar, three hours. Readings and discussions of selected works of realism, naturalism, and symbolism in late 19th-century Scandinavian literature and art. Concurrently offered with course C255. P/NP or letter grading.

156. Scandinavian Literature of 20th Century. (4) Seminar, three hours. Readings and discussion of selected works of modern Scandinavian literature from beginning of century to present. P/NP or letter grading.

157. Contemporary Nordic Literature. (4) Seminar, three hours. Readings and analysis of selected texts by leading 20th-century Swedish authors. P/NP or letter grading.


162A. Introduction to Scandinavian Cinema. (4) Lecture, three hours. Introduction to and exploration of history of Swedish cinema from silent era to present. Filmmakers include auteurs in international canon, such as Victor Sjöström and Mauritz Stiller, and Ingmar Bergman, as well as other key Swedish filmmakers such as Gustaf Molander, Alf Sjöberg, Ma Zetterling, Vigot Sjoman, Jan Troell, Lukas Moodysson, and Jan-Ole Dahl. Development of high art cinema and popular genres such as rural romanticism, melodrama, sex, crime, and horror. All films have English subtitles. Concurrently scheduled with course C256B. P/NP or letter grading.

162B. Introduction to Swedish Cinema. (4) Lecture, three hours. Introduction to and exploration of history of Swedish cinema from silent era to present. Filmmakers include Taran Tsen, Arne Sid, Victor Sjöström and Mauritz Stiller, and Ingmar Bergman, as well as other key Swedish filmmakers such as Gustaf Molander, Alf Sjöberg, Ma Zetterling, Vigot Sjoman, Jan Troell, Lukas Moodysson, and Jan-Ole Dahl. Development of high art cinema and popular genres such as rural romanticism, melodrama, sex, crime, and horror. All films have English subtitles. Concurrently scheduled with course C256B. P/NP or letter grading.

162C. Introduction to Norwegian Cinema. (4) Seminar, three hours. Introduction to and exploration of history of Norwegian cinema from silent era to present. Filmmakers include Taranc Tsen, Arne Sid, Victor Sjöström and Mauritz Stiller, and Ingmar Bergman, as well as other key Swedish filmmakers such as Gustaf Molander, Alf Sjöberg, Ma Zetterling, Vigot Sjoman, Jan Troell, Lukas Moodysson, and Jan-Ole Dahl. Development of high art cinema and popular genres such as rural romanticism, melodrama, sex, crime, and horror. All films have English subtitles. Concurrently scheduled with course C256B. P/NP or letter grading.

165B. Vikings on Film. (4) Seminar, three hours. Exploration of representations of Vikings in medium of film, considering Viking films within their historic and cultural contexts. How does representation of Vikings on film correspond to historical reality of Vikings? What have Vikings come to signify in modern era and why? Do we see development in idea of Vikings over time that is reflected in films from different periods? How do representations of Vikings in films produced in Scandinavia differ from their representations in films from other cultures? How do we see changing ideas about gender, ethnicity, disability, sexual preference, and other aspects of identity reflected in Viking films? Development of critical thinking and close textual analysis skills. All readings and films in English or with English subtitles. P/NP or letter grading.

166A. Inamg Bergman. (4) Seminar, three hours. Exploration of Ingmar Bergman’s development as film artist through various periods, spanning mid-1940s and late 1970s. Contextualization of work of this most prominent of Scandinavian filmmakers within works of postwar Swedish film industry, international art cinema movement, and issues of auteur filmmaking. Course readings and viewing of 10 Bergman films. All films have English subtitles. Concurrently scheduled with course C256A. P/NP or letter grading.

166C. Carl Dreyer. (4) Seminar, three hours. Carl Theodor Dreyer (1889 to 1968) is not only one of great masters of Nordic cinema, but of world cinema as well. Focus on films that Dreyer made during near half
C171. Introduction to Scandinavian Folklore. (4) Seminar, three hours. Introduction to fairy tales and legends of Scandinavian tradition as well as to interpretive and comparative approaches to answering why do people tell stories that they tell? Concurrently scheduled with course C271. Letter grading.

172A. Nordic Folk and Fairy Tales. (4) Seminar, three hours. Exploration of Nordic version of classic tale types such as Dragon Slayer, Cindrella, Hansel and Gretel, and King Lindorm in historic and cultural contexts. Reading of important works of Nordic and international folk tale scholarship, representing historical-geographic, structuralist, psychological, feminist, disability-theory, and queer-theory approaches. Development of critical thinking and close textual analysis skills, and understanding and appreciation of genre that contextualizes popular culture. Readings in English translation. P/NP or letter grading.

173A. Popular Culture in Scandinavia. (4) Seminar, three hours. Examination of popular culture in Scandinavia through study of contemporary Scandinavian literature, film, music, and art. Investigation of how issues such as globalization, immigration, and nationalism are portrayed in popular culture in Denmark, Norway, Sweden, Finland, and Iceland. Discussion of how and why human condition is interpreted through study of cultural expressions and how it is possible—to taking literature, film, and art as point of departure—to analyze cultural, historical, and political expression in given piece of art. P/NP or letter grading.

174A. Minority Cultures in Scandinavia. (4) Seminar, three hours. Exploration of emergence of immigrant cultures in Nordic region. Beginning in 1960s, large numbers of people from Turkey, Italy, and Pakistan began immigrating to Nordic countries, followed in subsequent decades by immigrants and refugees from Vietnam, India, Iran, Iraq, Afghanistan, Cambodia, and countries throughout Africa. Cultural landscape is heavily marked by relatively high degree of cultural homogeneity now characterized by broad cultural diversity. Examination of emergence of new voices in landscape of cultural expression in wide range of cultural expressive media, including literature, film, and visual and performing arts. Exploration of emergence of new forms of Nordic languages, such as well-documented phenomenon of Rinkeby Swedish. Concurrently scheduled with course C274A. P/NP or letter grading.

174B. Queer Scandinavia. (4) Seminar, three hours. Queer themes in Scandinavian literature, mainly from 19th and 20th centuries. Scandinavian countries have had more progressive view on homosexuality than most other countries, and Scandinavian writers portrayed homosexuality in explicit and radical ways as early as 1840s and 1850s. Introduction to key theoretical works within field of gay and lesbian studies and queer studies, as well as presentation of historical view of how homosexuality has been perceived in Western society. Individual faculty mentor required. May be concurrently scheduled with course C274B. P/NP or letter grading.

178FL. Special Studies: Readings in Scandinavian. (2) Seminar, two hours. Requisite: course 105B or 106B or 107B. Students must be concurrently enrolled in affiliated main course. Additional work in Nordic languages (Danish, Icelandic, Norwegian, Swedish) to augment work assigned in main course. May be included for credit. P/NP or letter grading.

188A. Individual Studies for USIE Facilitators. (1) Tutorial, to be arranged. Enforced corequisite: Honors College course 101E. Individual study in regularly scheduled meetings with faculty mentor to discuss selected USIE seminar topic. Concurrently scheduled with course C137. Graduate students may meet as group one additional hour each week and write research papers of greater length and depth. S/U or letter grading.

188B. Individual Studies for USIE Facilitators. (1) Tutorial, to be arranged. Enforced corequisite: course 188A. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor while facilitating USIE courses. Individual contract with faculty mentor required. May not be repeated. Letter grading.

188C. Individual Studies for USIE Facilitators. (2) Tutorial, to be arranged. Enforced corequisite: course 188B. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor while facilitating USIE courses. Individual contract with faculty mentor required. May not be repeated. Letter grading.

189. Advanced Studies in Scandinavians. (1) Seminar, three hours. Open to Limited to 20 students. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

189HC. Honors Contracts. (1) Tutorial, three hours. Limited to juniors/seniors. Honors contracts are signed as adjunct to upper-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. Individual contract with faculty mentor required. May be repeated for credit. P/NP or letter grading.

199. Directed Research in Scandinavian. (1) Seminar, two hours. Requisite: course 105B or 132B or 154B or 180B or 184B or 192B. Readings of mythological, heroic, and heroic poems from Iceland. Individual study with faculty mentor required. May be repeated for credit. Individual contract required. P/NP or letter grading.

Graduate Courses

C231. Introduction to Viking Age. (4) Lecture, three hours. History of early Scandinavians. All texts in English, including readings in Old Norse sagas and Eddas. Concurrently scheduled with course C131. Graduate students do additional readings and write more extensive research papers. Letter grading.

C233A. Saga. (4) Seminar, three hours. Sagas are largest extant medieval prose literature. Texts in English, with selections from different types of Icelandic sagas. Consideration of society that produced these narratives. Concurrently scheduled with course C133A. Graduate students do additional readings and write more extensive research papers. Letter grading.

C233B. Advanced Old Norse Prose. (4) Lecture, three hours. Requisite: course 132B. Readings of major saga texts. Also, secondary sources that bear on specific issues in Old Norse literature and medieval Scandinavian history. S/U or letter grading.

C247B. Søren Kierkegaard. (4) Seminar, three hours. Preparation: advanced knowledge of one modern Scandinavian language. Readings and discussion of selected works by Kierkegaard. Concurrently scheduled with course C145A. Graduate students may meet as group one additional hour each week and write research papers of greater length and depth. S/U or letter grading.

C254B. Knut Hamsun. (4) Seminar, three hours. Preparation: advanced knowledge of one modern Scandinavian language. August Strindberg's portrayals of marital conflict reflected and shaped literary representation of so-called battle of sexes. His work, as well as his literary transformations, placed into Scandinavian, European, and international contexts. Concurrently scheduled with course C145A. Graduate students may meet as group one additional hour each week and write research papers of greater length and depth. S/U or letter grading.

C263A. Introduction to Danish Cinema. (4) Seminar, three hours. Preparation: advanced knowledge of one modern Scandinavian language. Readings and discussion of selected works by Knut Hamsun. 20th-century Scandinavian writers who explored theme of nature as modern idyll. Concurrently scheduled with course C145B. Graduate students may meet as group one additional hour each week and write research papers of greater length and depth. S/U or letter grading.


C264A. August Strindberg. (4) Seminar, three hours. Preparation: advanced knowledge of one modern Scandinavian language. Readings and discussion of selected works by August Strindberg. Concurrently scheduled with course C145A. Graduate students may meet as group one additional hour each week and write research papers of greater length and depth. S/U or letter grading.
C263C. Introduction to Norwegian Cinema. (4) Seminar, three hours. Introduction to and exploration of history of Norwegian cinema from silent era to present. Filmmakers include Tancred Ibsen, Arne Skouen, Edith Carin, Nils Gaup, Erik Skjoldbjærg, Bert Haanner, Khaldal Heinain, and Petter Haase. Personal focus on popular genres such as war films, horror, noir, romantic comedies, and documentaries. Concurrently scheduled with course C163C. S/U or letter grading.

C265. Seminar: Scandinavian Literature. (4) Seminar, three hours. Preparation: reading knowledge of a Scandinavian language. Selected topics in Scandinavian prose, poetry, and drama. May be repeated for credit with consent of instructor and graduate adviser. May be concurrently scheduled with course C185. S/ U or letter grading.

C266A. Ingmar Bergman. (4) Seminar, three hours. Exploration of Ingmar Bergman’s development as film artist through various periods, spanning mid-1940s and late 1960s. Contextualization of work of this most personal of filmmakers within multiple frameworks of postwar Swedish film industry, international art cinema movement, and issues of auteur filmmaking. Course readings and viewing of 10 Bergman films. All films have English subtitles. Concurrently scheduled with course C166A. S/U or letter grading.

C266C. Carl Dreyer. (4) Seminar, three hours. Carl Theodor Dreyer (1889 to 1968) is not only one of great masters of Nordic cinema, but of world cinema as well. Focus on films that Dreyer made during near half century between 1919 and 1964. Contextualization of silent and sound works of this most personal of filmmakers works worldwide. Danish national film industry, transnational European cinema, and issues of auteur filmmaking. Writings by key Dreyer scholars such as David Bordwell, Ray Carney, Paul Schrader, Mark Sandberg, and others, as well as Dreyer’s own writings on cinema. All films have English intertitles or subtitles. Concurrently scheduled with course C166C. S/U or letter grading.

C271. Introduction to Scandinavian Folklore. (4) Seminar, three hours. Preparation: advanced knowledge of one modern Scandinavian language. Introduction to fairy tales and legends of Scandinavian tradition as well as modern interpretive methodologies that strive to answer questions why do people tell stories that they tell? Concurrently scheduled with course C171. Letter grading.

M271. Study of Oral Tradition: History and Methods. (4) Same as English M205A.) Seminar, three hours. Exploration of scholarly and literary attempts to study, define, analyze, promote, and/or appropriate oral traditions, from Homer and ancient Greece to origins of vernacular literatures. European romantic reconstructions of oral tradition, 20th-century heuristic models of oral composition, and modern-day electronic media and popular verbal genres, such as jokiness and song. S/U or letter grading.
Science Education

Lower-Division Courses

1SL. Classroom Practices in Elementary School Science, (2) Seminar, 90 minutes; fieldwork, three hours per week for eight weeks. Introduction for prospective science teachers to field of elementary education and teaching and learning of science in elementary school classrooms. Pairs of students are placed in local elementary school classrooms to observe, participate, and assist mentor teachers in instruction. Discussion of inquiry-based learning practices, national and California standards, assessment, and learning differences in children, and cognitive ability of elementary-age children as it relates to introduction of concepts, curriculum planning, classroom management, and learning assessment. P/NP grading.

10SL. Classroom Practices in Middle School Science, (1) Seminar, 90 minutes; fieldwork, three hours. Recommended requisite: course 1SL. Introduction for prospective science teachers to field of secondary education and teaching and learning of science in middle school classrooms. Pairs of students are placed in local middle school classrooms to observe, participate, and assist mentor teachers in instruction. Discussion of learning in middle school culture, cognitive development of students at this level, and best means to teach appropriate science concepts at this level. P/NP grading.

189HC. Honors Contracts, (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to upper-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

SLAVIC, EAST EUROPEAN, AND EURASIAN LANGUAGES AND CULTURES

College of Letters and Science

322 Kaplan Hall
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Los Angeles, CA 90095-1502

Slavic, East European, and Eurasian Languages and Cultures

310-825-3856

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Igor Polschikov, PhD
Ronald W. Vroon, PhD (Vladimir and Lydia Markov Professor of Russian Literature)

Professors Emeriti

Henning Andersen, PhD
Peter C. Hodgson, Jr., PhD
Emily R. Klien, PhD
Aleksandr L. Osipov, PhD

Assistant Professor

Vadim Shneyder, PhD

Senior Lecturers

Susan C. Kresin, PhD
Anna Kudyma, PhD

Lecturers

Melinda Borbely, MA
Yelena Furman, PhD
Georgiana Galateanu, PhD
Viktorija Leiko-Lacan, PhD

Adjunct Professor

Vladimir Paperny, PhD

Scope and Objectives

The Department of Slavic, East European, and Eurasian Languages and Cultures offers a wide array of courses in the languages and cultures of Russia and of central and eastern Europe. Instruction is offered in Czech, Hungarian, Polish, Romanian, Russian, Serbian/Croatian, and Ukrainian to provide students with the necessary linguistic skills to pursue advanced work in the literature, culture, history, politics, and social structures of these areas. Students have the choice of several majors and minors and the opportunity to enhance their knowledge and skills through programs of study abroad.

The department offers two majors in Russian. The Russian Language and Literature major is designed to provide students with basic mastery of the Russian language and familiarity with the classics of Russian literature. Students typically begin to study Russian in their first year, but those contemplating a Russian major later in their academic program can fulfill the Russian language requirement by combining regular coursework with summer programs or with the University of California Education Abroad Program (EAP) in Moscow, which is open to students who have completed the equivalent of one or more years of study (level I on the American Council on Teaching of Foreign Languages [ACTFL] scale). Students interested in this program should consult with the undergraduate adviser as early as possible.

The major in Russian Studies is designed for students who wish to complement mastery of the language with an array of courses on Russian history, politics, literature, and culture.

The major in Central and East European Languages and Cultures is designed to provide students with a mastery of two languages of central or eastern Europe and familiarity with the literature, as well as general background in the cultural, political, and social history of the Slavic peoples.

The graduate program provides advanced training in Slavic literatures and linguistics leading to the MA and PhD degrees in Slavic, East European, and Eurasian Languages and Cultures. The primary task of the department faculty is to develop and refine the critical and analytic skills of its students in preparation for productive careers in college teaching and research in the Slavic field. Alternative careers include language teaching, business, translation, interpreting, librarianship, and government service.

Undergraduate Study

The department offers three majors: (1) Central and East European Languages and Cultures, (2) Russian Language and Literature, and (3) Russian Studies. The equivalent of a major in Central and East European Languages and Cultures or Russian Language and Literature is normally required for admission to the department graduate program and is used to determine the number of courses in Russian literature and/or linguistics that students majoring in Russian Studies are expected to take in order to receive graduate degrees in the department. Students not majoring in Central and East European Languages and Cultures or Russian Language and Literature who intend to pursue graduate study in the department are strongly encouraged to take courses in Russian literature and linguistics during their undergraduate years to reduce the number of makeup courses required. Qualified seniors may also take graduate courses numbered below 220 with consent of the instructor and the graduate and undergraduate advisers.

The three majors offered in the department are designated capstone majors. Students majoring in Central and East European Languages and Cultures and Russian Language and Literature, and Russian Studies must complete a capstone seminar and present their final paper in the department annual Undergraduate Research Conference. Students draw on their previously acquired subject matter knowledge.
and skills to plan a research project and write a substantial academic paper. They also gain experience engaging in scholarly discourse, preparing appropriate media for public presentation, and submitting their work to an academic journal.

Central and East European Languages and Cultures BA

Capstone Major

Learning Outcomes

The Central and East European Languages and Cultures major has the following learning outcomes:

- Incorporation of knowledge acquired to formulate an independent study topic and research project
- Selection and use of original sources in Russian or a related language to prepare a thesis
- Acquisition of skills relating to development of discourse and argument that is clear, reasoned, reflective, informed by evidence, and aimed at deciding what to believe
- Determination of what information should be developed and analyzed
- Completion of conference presentation that includes fielding audience questions
- Mastery of oral communication including interpersonal communication, presentation, and discussion
- Editing of the research paper into a journal article, and submission of it to an academic journal

Preparation for the Major

Required: Central and East European Studies 91 or Slavic 90.

Transfer Students

Transfer applicants to the Central and East European Languages and Cultures major with 90 or more units must complete the following introductory course prior to admission to UCLA: one culture, history, or civilization course on one or more European nations.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

The Major

Required: (1) One three-quarter (12 to 15 units) introductory central and east European language sequence, or one 12-unit intensive introductory central and east European language course, to be selected from Czech 101A, 101B, 101C, Hungarian 101A, 101B, 101C, Polish 101A, 101B, 101C, Romanian 101A, 101B, 101C, 103, Serbian/Croatian 101A, 101B, 101C, 103, or Ukrainian 101A, 101B, 101C; (2) one three-quarter (12 to 15 units) language sequence to be selected from Czech 102A, 102B, 102C, Hungarian 102A, 102B, 102C, Polish 102A, 102B, 102C, Romanian 102A, 102B, 102C, Serbian/Croatian 102A, 102B, 102C, or Ukrainian 102A, 102B, 102C, or any three courses from Russian 100A, 100B, 100C, 101A, 101B, 101C, 102A, 102B, 102C, 103A, 103B, 103C, 130A, 140A; (3) three courses (12 units) from the following list (187 courses are 2 units each; no more than 8 units may be from the 187 series): Central and East European Studies M120, 125, 126, Czech 155, 187A through 187M, History 120A through 120D, Hungarian 187A through 187M, Polish 152A, 152B, 152C, 187A through 187M, Romanian 152, 187A through 187M, Russian CI24G, Serbian/Croatian 187A through 187M, Ukrainian 152, 187A through 187M; one of the three courses may be selected from Russian M118, 119, 120, CI24C, CI24D, CI24N, CI24T.

During their senior year, students must also take Slavic 191TA, 191TB, and 191TC in which they complete a capstone senior thesis. Students may petition to substitute courses after consulting with the undergraduate adviser. Each major course must be taken for a letter grade, and students must have an overall grade-point average of 2.0 or better.

Russian Language and Literature BA

Capstone Major

Learning Outcomes

The Russian Language and Literature major has the following learning outcomes:

- Incorporation of knowledge acquired to formulate an independent study topic and research project
- Selection and use of original sources in Russian or a related language to prepare a thesis
- Acquisition of skills relating to development of discourse and argument that is clear, reasoned, reflective, informed by evidence, and aimed at deciding what to believe
- Determination of what information should be developed and analyzed
- Completion of conference presentation that includes fielding audience questions
- Mastery of oral communication including interpersonal communication, presentation, and discussion
- Editing of the research paper into a journal article, and submission of it to an academic journal

Preparation for the Major

Required: Russian 6 or 20 or equivalent proficiency, one course from 25, 25W, 90A, 90B, or 90BW.

Transfer Students

Transfer applicants to the Russian Language and Literature major with 90 or more units must complete the following introductory courses prior to admission to UCLA: two years of Russian and one Russian civilization course.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

The Major

Required: Ten courses (44 to 47 units), including (1) three Russian language courses selected from Russian 100A, 100B, 100C, 101A, 101B, 101C, 102A, 102B, 102C, 103A, 103B, 103C, 107A, 107B, 107C, 108 (consult with the undergraduate adviser for appropriate placement); (2) five Russian literature and culture courses selected from 119, 120, 121, 129, 130A, 130B, 130C, 140A through 140D; and (3) two additional Russian language and/or literature courses selected from 102A, 102B, 102C, 103A, 103B, 103C, 107A, 107B, 107C, 108, M118, 122, CI24C, CI24D, CI24G, CI24N, CI24P, CI24T, M127, Slavic CM114.

During their senior year, students may also take Slavic 191TA, 191TB, and 191TC in which they complete a capstone senior thesis. Students may petition to substitute courses after consulting with the undergraduate adviser. Each major course must be taken for a letter grade, and students must have an overall grade-point average of 2.0 or better.

Russian Studies BA

Capstone Major

Learning Outcomes

The Russian Studies major has the following learning outcomes:

- Incorporation of knowledge acquired to formulate an independent study topic and research project
- Selection and use of original sources in Russian or a related language to prepare a thesis
- Acquisition of skills relating to development of discourse and argument that is clear, reasoned, reflective, informed by evidence, and aimed at deciding what to believe
- Determination of what information should be developed and analyzed
- Completion of conference presentation that includes fielding audience questions
- Mastery of oral communication including interpersonal communication, presentation, and discussion
- Editing of the research paper into a journal article, and submission of it to an academic journal

Preparation for the Major

Required: Russian 6 or 20 or equivalent proficiency, one course from 25, 25W, 90A, 90B, or 90BW.

Transfer Students

Transfer applicants to the Russian Studies major with 90 or more units must complete the following introductory courses prior to admission to UCLA: two years of Russian and one Russian civilization course.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

The Major

Required: Ten courses (44 to 47 units), including (1) three Russian language courses selected from Russian 100A, 100B, 100C, 101A, 101B, 101C, 102A, 102B, 102C, 103A, 103B, 103C, 107A, 107B, 107C, 108 (consult with the undergraduate adviser for appropriate placement); (2) three additional Russian language and/or literature courses selected from 102A, 102B,
To enter the Russian Language minor, students must have an overall grade-point average of 2.0 or better.

Required Lower-Division Courses (9 to 17 units): Russian 6 or 20 or equivalent proficiency, one course from 25, 25W, 90A, 90B, or 90BW.

Required Upper-Division Courses (20 to 23 units): Students select one of the following options: (1) Russian 101A, 101B, 101C and two additional Russian language or literature courses; (2) Russian 100A, 100B, 100C and two additional Russian language or literature courses; or (3) five Russian language and literature courses selected from 102A, 102B, 102C, 103A, 103B, 103C, 107A, 107B, 107C, 130A, 130B, 130C, 140A through 140D, with a minimum of three courses in Russian language.

Students may petition to substitute courses after consulting with the undergraduate adviser. A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor. Each minor course must be taken for a letter grade, and students must have an overall grade-point average of 2.0 or better.

Required Lower-Division Courses (9 to 17 units): Five Russian language and literature courses, including at least two from Russian M118, 119, 120, 130A, 130B, 130C, 140A through 140D.

Students may petition to substitute courses after consulting with the undergraduate adviser. A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor. Each minor course must be taken for a letter grade, and students must have an overall grade-point average of 2.0 or better in the minor. Successful completion of the minor is indicated on the transcript and diploma.

Russian Studies Minor
To enter the Russian Studies minor, students must have an overall grade-point average of 2.0 or better.
Upper-Division Courses

101A-101B-101C. Elementary Bulgarian. (5–6–5) Lecture, five hours. Course 101A is recommended preparation for 101B, which is recommended preparation for 101C. Each course may be waived with consent of instructor. Bulgarian in Bulgarian language. P/NP or letter grading.

189. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. Letter grading.

189HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to upper-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

Central and East European Studies

Lower-Division Courses

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

31. Introduction to Slavic, East European, and Central Asian Cultures through Film. (6) Lecture, three hours; discussion, one hour. Interdisciplinary introduction to diversity of languages and cultures represented in Department of Slavic, East European, and Eurasian Languages and Cultures through medium of film. P/NP or letter grading.

89. Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to lower-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

89HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to lower-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

91. Culture and Society in Central and Eastern Europe. (6) Lecture, three hours; discussion, one hour. Interdisciplinary study of current trends and concepts in main themes and concepts of central and east European studies, including historical background, nation states and ethnic groups, languages spoken in area, and culture and politics of communism and post-communist periods: religion, literature, mass media, music, art, and cinema. P/NP or letter grading.

99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Courses

M120. Women and Literature in Southeastern Europe. (4) Same as Comparative Literature M120. Seminar, three hours. Examination of changing roles of women in Balkan countries (Albania, Bosnia-Herzegovina, Bulgaria, Croatia, Greece, Macedonia, Montenegro, Romania, Serbia, Slovenia, Turkey) in last forty years. Emphasis on cultural, social, political, and economic factors affecting women’s roles during countries’ transition from agricultural to industrial economy and from communism to post-communism (in former communist countries). Sensitizes students to complexity of issues in region and helps them better understand multiplicity of conditions. Interdisciplinary study, drawing on sociological, women’s studies, articles, and short fiction by women writers for analysis. Discussion and debating of topics covered in articles, different positions taken by authors, and way in which aspects of these realities are rendered in fictional form by women writers from region. P/NP or letter grading.

125. Interwar Central European Prose. (4) Lecture, three hours. Analysis of selected novels, stories, plays, and essays of representative authors of 1920s and 1930s in translation. Special attention to relation between literature and historical and ethnic concerns. P/NP or letter grading.

126. Cold War Central European Culture. (4) Lecture, three hours. Examination of cold war Central European culture through prism of proue fiction, essays, and film from 1947 to 1989. Analysis of novels by Polish, Czech, Hungarian, and East German writers as articulation of tensions, contradictions, and compromises informing communist rule in central and eastern Europe, with focus on culture as node of resistance as well as accommodation to communist system. P/NP or letter grading.

127. Central European Culture after Fall of Communism. (4) Lecture, three hours. Examination of Central and East European culture through literature, film, visual arts, music, and other cultural artifacts from 1989 to present. Analysis of Polish, Czech, Slovak, Romanian, Hungarian, former Yugoslav, and East German writers, essayists, filmmakers, musicians, visual artists, and graphic novelists in order to reflect on nature of political and societal changes after fall of communism. P/NP or letter grading.

130. Balkan Cultures in Film and Literature. (4) Lecture, three hours. Examination of literature and linguistic issues in Western Balkans (Bosnia, Croatia, Serbia) through literature, film, music, and visual arts. Examination of interaction of political, cultural, economic factors affecting women’s roles during communism and from communism to post-communism. Sensitizes students to complexity of issues in region and helps them better understand multiplicity of conditions. Interdisciplinary study, drawing on sociological, women’s studies, articles, and short fiction by women writers for analysis. Discussion and debating of topics covered in articles, different positions taken by authors, and way in which aspects of these realities are rendered in fictional form by women writers from region. P/NP or letter grading.

189. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

189HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to upper-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

191. Variable Topics Research Seminars: Central and East European Studies. (4) Seminar, three hours. Study and discussion of specialized issues and approaches in history, structure of central and eastern European languages and literatue, topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.
Czech

Lower-Division Courses

19. Fiat Lux Freshman Seminars. (1 Seminar, one hour. Discussion and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

89. Honors Seminars. (1 Seminar, three hours. Limited to 20 students. Designed as adjunct to lower-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. Letter grading.

69HC. Honors Contracts. (1 Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to lower-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. Letter grading.

89. Honors Seminars. (1 Seminar, three hours. Limited to 20 students. Designed as adjunct to upper-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. Letter grading.

Hungarian

Lower-Division Courses

19. Fiat Lux Freshman Seminars. (1 Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

101A-101B-101C. Introduction to Hungarian and Culture. (5-5-5) Lecture, five hours. Course 101A is recommended preparation for 101B, which is recommended preparation for 101C. Each course may be waived with consent of instructor. Beginning Hungarian language courses with strong cultural component. P/NP or letter grading.

102A-102B-102C. Advanced Hungarian. (4-4-4) Lecture, three hours. Recommended preparation: course 101C (may be waived with consent of instructor). Course 102A is recommended preparation for 102B, which is recommended preparation for 102C. Each course may be waived with consent of instructor. P/NP or letter grading.


104. Intensive Advanced Hungarian. (12 Lecture, 25 hours. Intensive advanced course in Hungarian equivalent to courses 102A, 102B, 102C. Offered in summer only. P/NP or letter grading.

155. Survey of Hungarian Literature from Middle Ages to Present. (4 Lecture, three hours. Lectures and readings in English. P/NP or letter grading.

157. A. Advanced Tutorial Instruction in Hungarian. (2 Tutorial, one hour; laboratory, one hour. Enforced requisites: course 102C or Czech placement test. Tutorial and guided independent study of advanced Czech: advanced conversation, composition, vocabulary development, and review of selected grammar topics. May be repeated for credit with topic change. P/NP or letter grading.

187B-187M. Advanced Tutorial Instruction in Hungarian. (2 Tutorial, one hour; laboratory, one hour. Preparation: prior course in sequence or Czech placement test. Tutorial and guided independent study of advanced Czech: advanced conversation, composition, vocabulary development, and review of selected grammar topics. May be repeated for credit with topic change. P/NP or letter grading.

189. Advanced Honors Seminars. (1 Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

189HC. Honors Contracts. (1 Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to upper-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

Lithuanian

Lower-Division Courses

19. Fiat Lux Freshman Seminars. (1 Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

101A-101B-101C. Elementary Lithuanian. (4-4-4) Lecture, three to four hours. Course 101A is recommended preparation for 101B, which is recommended preparation for 101C. Each course may be waived with consent of instructor. Introductory grammar; instruction in speaking, listening, and writing. P/NP or letter grading.

102A-102B-102C. Advanced Lithuanian. (4-4-4) Lecture, three hours. Recommended preparation: course 101C (may be waived with consent of instructor). Course 102A is recommended preparation for 102B, which is recommended preparation for 102C. Each course may be waived with consent of instructor. P/NP or letter grading.

121. Survey of Lithuanian Literature in Translation. (4 Lecture, three hours. Designed for students in general and comparative literature, as well as students interested in Finno-Ugric studies. Survey of main trends and contacts with other literatures. P/NP or letter grading.

187A. Advanced Tutorial Instruction in Lithuanian. (2 Tutorial, one hour; laboratory, one hour. Preparation: two years of Lithuanian and/or Hungarian placement test. Tutorial and guided independent study of advanced Lithuanian: advanced conversation, composition, vocabulary development, and review of selected grammar topics. May be repeated for credit with topic change. P/NP or letter grading.

187B-187M. Advanced Tutorial Instruction in Lithuanian. (2 Tutorial, one hour; laboratory, one hour. Preparation: two years of Lithuanian and/or Hungarian placement test. Tutorial and guided independent study of advanced Lithuanian: advanced conversation, composition, vocabulary development, and review of selected grammar topics. May be repeated for credit with topic change. P/NP or letter grading.

Upper-Division Courses

101A-101B-101C. Elementary Lithuanian. (4-4-4) Lecture, four to five hours. Course 101A is recommended preparation for 101B, which is recommended preparation for 101C. Each course may be waived with consent of instructor. Introduction to grammar; instruction in speaking, listening, and writing. P/NP or letter grading.

102A-102B-102C. Advanced Lithuanian. (4-4-4) Lecture, three hours. Recommended preparation: course 101C (may be waived with consent of instructor). Course 102A is recommended preparation for 102B, which is recommended preparation for 102C. Each course may be waived with consent of instructor. P/NP or letter grading.

99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Courses

101A-101B-101C. Elementary Lithuanian. (4-4-4) Lecture, five hours. Course 101A is recommended preparation for 101B, which is recommended preparation for 101C. Each course may be waived with consent of instructor. Basic courses in Lithuanian language. P/NP or letter grading.

102A-102B-102C. Advanced Lithuanian. (4-4-4) Lecture, three hours. Recommended preparation: course 101C (may be waived with consent of instructor). Course 102A is recommended preparation for 102B, which is recommended preparation for 102C. Each course may be waived with consent of instructor. Review and reinforcement of grammar introduced in first year of study, expansion of vocabulary, further training in written and oral expression. P/NP or letter grading.
Polish

Lower-Division Courses

19. Fiat Lux Freshman Seminars. (1 Seminar) one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

89. Honors Seminars. (1 Seminar) three hours. Limited to students in College Honors Program. Designed as adjunct to lower-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

89HC. Honors Contracts. (1 Tutorial) three hours. Limited to students in College Honors Program. Designed as adjunct to lower-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

99. Student Research Program. (1 to 2 Tutorial) supervised research or other scholarly work. three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be at a certain standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Courses

101A—101C. Elementary Polish. (5–5–5) Lecture, five hours. Course 101A is recommended preparation for 101B, which is recommended preparation for 101C. Each course may be waived with consent of instructor. Basic courses in Polish language. P/NP or letter grading.

102A—102B—102C. Advanced Polish. (4–4–4) Lecture, three hours. Recommended preparation: course 101C (may be waived with consent of instructor). Course 102A is recommended preparation for 102B, which is recommended preparation for 102C. Each course may be waived with consent of instructor. P/NP or letter grading.

152A—152B—152C. Survey of Polish Literature. (4–4–4) Lecture, three hours. Lectures and readings in English. Letter grading. 152A. From the Middle Ages to Neoclassicism; 152B. Reimagining a Nation. Readings in 19th-century Polish literature and culture. 152C. Dada, Mocking, and Writing “as if.” Readings in modern Polish literature and culture.

C180. Variable Topics in Polish Literature. (4) Seminar, three hours. Reading knowledge of Polish recommended but not required. Topics include major writers, genres, or periods. May be repeated for credit with topic change. Concurrently scheduled with course C280. P/NP or letter grading.

187A. Advanced Tutorial Instruction in Polish. (2) Tutorial, one hour; laboratory, one hour. Preparation: two years of Polish and/or Polish placement test. Tutorial and guided independent study of advanced Polish: advanced conversation, composition, vocabulary development, and review of selected grammar topics. May be repeated for credit with topic change. P/NP or letter grading.

187B—187M. Advanced Tutorial Instruction in Polish. (2 each) Tutorial, one hour; laboratory, one hour. Preparation: prior course in sequence or Polish placement test. Tutorial and guided independent study of advanced Polish: advanced conversation, composition, vocabulary development, and review of selected grammar topics. May be repeated for credit with topic change. P/NP or letter grading.

189. Advanced Honors Seminars. (1 Seminar) three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

189HC. Honors Contracts. (1 Tutorial) three hours. Limited to students in College Honors Program. Designed as adjunct to upper-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

Graduate Course

C280. Variable Topics in Polish Literature. (4) Seminar, three hours. Reading knowledge of Polish recommended but not required. Topics include major writers, genres, or periods. May be repeated for credit with topic change. Concurrently scheduled with course C180. S/U or letter grading.

Rumanian

Lower-Division Courses

19. Fiat Lux Freshman Seminars. (1 Seminar) one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

89. Honors Seminars. (1 Seminar) three hours. Limited to students in College Honors Program. Designed as adjunct to lower-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

89HC. Honors Contracts. (1 Tutorial) three hours. Limited to students in College Honors Program. Designed as adjunct to lower-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work). three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be at a certain standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Courses

101A—101B—101C. Elementary Romanian. (5—5—5) Lecture, five hours. Course 101A is recommended preparation for 101B, which is recommended preparation for 101C. Each course may be waived with consent of instructor. Basic courses in Romanian language. P/NP or letter grading.

102A—102B—102C. Advanced Romanian. (5—5—5) Lecture, five hours. Recommended preparation: course 101C (may be waived with consent of instructor). Course 102A is recommended preparation for 102B, which is recommended preparation for 102C. Each course may be waived with consent of instructor. Differences between oral and written discourse, expansion of student’s vocabulary, and increase of range of grammatical structures for use in speaking and writing. Cultural information to be included in readings. P/NP or letter grading.


152. Survey of Romanian Literature. (4) Lecture, three hours. Lectures and readings in English. Survey of Romanian literature from Middle Ages to present. P/N or letter grading.

187A. Advanced Tutorial Instruction in Romanian. (2) Tutorial, one hour; laboratory, one hour. Enforced requisite: course 102C or Romanian placement test. Tutorial and guided independent study of advanced Romanian: advanced conversation, composition, vocabulary development, and review of selected grammar topics. May be repeated for credit with topic change. P/NP or letter grading.

187B—187M. Advanced Tutorial Instruction in Romanian. (2 each) Tutorial, one hour; laboratory, one hour. Preparation: prior course in sequence or Romanian placement test. Tutorial and guided independent study of advanced Romanian: advanced conversation, composition, vocabulary development, and review of selected grammar topics. May be repeated for credit with topic change. P/NP or letter grading.

189. Advanced Honors Seminars. (1 Seminar) three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

189HC. Honors Contracts. (1 Tutorial) three hours. Limited to students in College Honors Program. Designed as adjunct to upper-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

Russian

Lower-Division Courses

1. Elementary Russian. (5) Recitation, five hours; lab- oratory, one hour. P/NP or letter grading.

2. Elementary Russian. (5) Lecture, five hours; labora- tory, one hour. Requisite: course 1 or Russian placement test. P/NP or letter grading.

3. Elementary Russian. (5) Lecture, five hours; labo- ratory, one hour. Requisite: course 2 or Russian placement test. P/NP or letter grading.


5. Intermediate Russian. (5) Lecture, five hours; lab- oratory, one hour. Requisite: course 4 or Russian placement test. P/NP or letter grading.
6. Intermediate Russian. (5) Lecture, five hours; lab-oratory, one hour. Requisite: course 5 or Russian placement test. P/NP or letter grading.

10. Intensive Elementary Russian. (12) Lecture, 19 hours. Intensive basic course in Russian language equivalent to courses 1, 2, 3. P/NP or letter grading.

15A-15B. Elementary Russian. (5) Recitation, five hours; laboratory, two hours. Material of first-year Russian course to be covered in two terms, with extensive use of language laboratory and the Russian Room. P/NP or letter grading.

19. Fiat Lux Freshman Seminars. (1) Seminar; one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.


30. Russian Literature and World Cinema. (4) Lecture, three hours. Survey of Russian literature's impact on world cinema, one hour. Examination of Russian literary masterpieces and their screen adaptations in various national cinematic traditions, with focus on problems of perception and misperception arising when literature is translated into cinema, and one national culture is viewed through the eyes of another. P/NP or letter grading.

31. Introduction to Russian Film. (5) Lecture, three hours; discussion, one hour; film screening, two hours. Key works, names, events, and concepts of Russian cinematic tradition. Development of skills in analyzing and interpreting films and acquisition of critical terminology of film studies. How film form and aesthetics are conditioned by technology, ideology, economics, theory, tradition, and culture. How cinema in Russia has created and contested narratives of history and identity. How screen interests compose, and how it has defined them. P/NP or letter grading.

32. Russia and Asia: Cultural Dialogues. (5) Lecture, three hours; discussion, one hour. Since end of Soviet Union, cultural and political flux within non-Christian lands neighboring Russia has accelerated dramatically. Given radical rejection of Russian heritage in most former Soviet territories, key distinctions in humanities have become unclear, including fundamental confusion between limits of Slavic and Near Eastern studies. Examination of relation of Russia's culture to that of its neighbors. Kievan Russia and its culture, Appa- rance principalities and towns; Mongol invasion; uni- fication of Russia state by Muscovy, Autocracy and its Servodoms. P/NP or letter grading.

38. Russia and Europe in the 19th Century. (4) Lecture, three hours. Course 90 is recommended for first-year students. Emphasis on relationships between Russian and European literature, theater, cinema, television, press, music, and arts. Emphasis on contemporary period, with constant reference to Russian and early Soviet antecedents. Students are expected to learn the language laboratory and the Russian Room. P/NP or letter grading.

40B. Russian Civilization in 20th Century. (5) Lecture, three hours; discussion, one hour. Requisite: English Composition 3. Not open for credit to students with credit for course 40BW. Survey of literature, theater, cinema, television, press, music, and arts. Emphasis on contemporary period, with constant reference to Russian and early Soviet antecedents. Weekly reading assignments and discussions. P/NP or letter grading.

40BW. Russian Civilization in 20th Century. (5) Lecture, three hours; discussion, one hour. Requisite: English Composition 3. Not open for credit to students with credit for course 40. Survey of literature, theater, cinema, television, press, music, and arts. Emphasis on contemporary period, with constant reference to Russian and early Soviet antecedents. Weekly reading assignments and discussions. P/NP or letter grading.

89. Honors Seminars. (1 to 2) Tutorial (supervised research or other scholarly work), five hours per week under direction of faculty member for lower-division students under guidance of faculty mentor. Stu-dents must be in good academic standing and en-rolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

89HC. Honors Contracts. (1) Tutorial, three hours. May be taken independently and may be repeated for credit. P/NP or letter grading. P/NP or letter grading.

90. Russian for Business: Language and Culture. (5) Lecture, 19 hours. Designed for students with high proficiency in Russian. Intensive academic preparation in course in Russian language covering reading, writing, speaking, listening, and grammar. Lectures on Russian history also included. Opportunity to interact with Russian speakers outside of course. May be taken independently and may be repeated for credit. Offered in summer only. Letter grading.


91A-127A. Russian for Business: Language and Culture. (5) Lecture, three hours. Designed for seniors. Russian majors are advised to take this course in their senior year. Lectures and readings in English. Survey of 19th-century Russian literature (Pushkin, Gogol, Tolstoy, Dostoevsky, Chekhov) in its cultural, political, and social contexts. P/NP or letter grading.

100A-100B-100C. Literacy in Russian. (4–4–4) Lecture, three hours. Course 100A or Russian placement test is enforced requisite to 100B. Course 100B or Russian placement test is enforced requisite to 100C. For students who speak Russian but have difficulty reading and writing. Focus on improving reading and writing skills, increasing vocabulary, and developing speaking skills required for academic discourse. P/NP or letter grading.

101A-101B-101C. Third-Year Russian. (5–5–5) Lecture, three hours; discussion, two hours. Enforced requisite: course 101A or Russian placement test. Course 101A or Russian placement test is enforced requisite to 101B; course 101B or Russian placement test is enforced requisite to 101C. Advanced grammar, reading, and conversation. Satisfies Writing II requirement. P/NP or letter grading.

102A-102B-102C. Topics in Advanced/Superior Russian. (4–4–4) Lecture, three hours. Enforced requisite: course 102C or Russian placement test. Course 102A or Russian placement test is enforced requisite to 102B; course 102B or Russian placement test is enforced requisite to 102C. Focus on specific topics such as art criticism, the Russian theater, the Russian film, the Russian press, and the Russian novel. Each course may be taken independently and may be repeated for credit. P/NP or letter grading.

103A-103B-103C. Russian for Native and Near-Native Speakers. (4–4–4) Lecture, three hours. Course 103A is not requisite to 103B, which is not requisite to 103C. Improvement of oral and written language skills, emphasizing correct and diversified use of language and its forms. P/NP or letter grading. May be repeated for credit with topic and/or instructor change. P/NP or letter grading. 103A. Russian Na-tional Identity. Readings in literature, philosophy, criti-cism, film, 103B. Literature and Film. Film adaptation of Russian literature. Readings and screenings. 103C. Special Topics.

107A-107B-107C. Russian for Social and Cultural Experience. (4–4–4) Lecture, three hours. Recommended preparation: third-year Russian. Lectures and readings in Russian. Exploration of texts and media in social sciences and culture, with emphasis on press, television, the Internet. Each course may be taken independently and may be repeated for credit. P/NP or letter grading.


110. Russian Flagship Program Abroad: Intensive Advanced Russian. (12) Lecture, 19 hours. Enforced requisite: courses 101A, 101B, 101C or equivalent coursework as determined by department. Taught in Russian. Designed for students with high proficiency in Russian. Intensive academic preparation in course in Russian language covering reading, writing, speaking, listening, and grammar. Lectures on Russian history also included. Opportunity to interact with Russian speakers outside of course. May be taken independently and may be repeated for credit. Offered in summer only. Letter grading.

119. Golden Age and Great Realists. (4) Lecture, three hours. Designed for juniors/seniors. Russian ma-jors are advised to take this course in their sophomore year. Lectures and readings in English. Survey of 19th-century Russian literature (Pushkin, Gogol, Tolstoy, Dostoevsky, Chekhov) in its cultural, political, and social contexts. P/NP or letter grading.

120. Literature and Revolution. (4) Lecture, three hours. Designed for seniors. Russian majors should take this course in their senior year. Lectures and readings in English. Major works of the 20th century (Belyi, Pasternak, Bulgakov, Solzhenitsyn, and others) from prerevolutionary avant-garde to the present. P/NP or letter grading.

121. Russian Pop Culture. (5) Lecture, three hours. Designed for juniors/seniors. Lectures and readings in English. Overview of Russian popular culture today, with emphasis on status of Russian classics. Exploration of texts and media in social sciences and culture, with emphasis on press, television, the Internet. Each course may be taken independently and may be repeated for credit. P/NP or letter grading.

122. Siberia. (5) Lecture, three hours. Introductory survey of which current cultural and historical issues are situated in their geographical and historical back-
ground, including analysis of Siberian human geography before first contact with European colonizers and development of modes of interaction among different cultural groups. Reading in English of selection of literary works by well-known 20th-century Siberian writers whose texts serve as locus for closer examination of Siberian regional literary culture and ecological network within which it exists. Letter grading.


C124D. Studies in Russian Literature: Dostoevsky. (4) Lecture, three hours. Lectures and readings in English. In-depth reading of major fictional works such as Crime and Punishment, Notes from the Underground, and The Brothers Karamazov. Concurrently scheduled with course C224D. P/NP or letter grading.


C124H. Studies in Russian Literature: Pushkin. (4) Lecture, three hours. Lectures and readings in English. Major works in all genres, including lyric poetry, narrative poems, plays, prose fiction, and selected letters. Concurrently scheduled with course C224H. P/NP or letter grading.

C124T. Studies in Russian Literature: Tolstoy. (4) Lecture, three hours. Lectures and readings in English. Early and late stories and novellas, excerpts from the diaries and one major novel such as War and Peace or Anna Karenina. Concurrently scheduled with course C224T. P/NP or letter grading.


127. Women in Russian Literature. (4) (Same as Gender Studies M127.) Lecture, three hours. Designed for juniors/seniors. Lectures and readings in English. Introduction to alternative tradition of women’s writings in Russia and Soviet Union. Emphasis on images of women expressed in this tradition as compared with those found in works of contemporary male writers. P/NP or letter grading.


129. Animation and Music Video. (5) Lecture, three hours; discussion, one hour. Designed for juniors/seniors. Lectures and readings in English. Humanities have recently passed through so-called visual turn: traditional emphases on language(s) in field have been reconsidered by looking increasingly visually. New attitude toward our own changing culture (i.e., toward its future) has equal value if applied retrospectively to multiple cultures of one era/stable empire. In text and parallel traditions needed to be ironed out, visual often plays special role in social cohesion. Because of past politics and today’s profit-driven events, small fickle forms of visual narrative reflect change and social change much better than ponderous genre of feature-length cinema. Letter grading.

130A-130B-130C. Russian Poetry. (4-4-4) Lecture, three hours. Preparation: third-year Russian recommended. Lectures and readings in Russian. May be repeated for credit with topic and/or instructor change. 130A. Introduction to Analysis of Russian Poetry. Role of biography, cultural subtexts, rhetoric, and form in interpreting poetic texts. 130B. Poetry of Russian Neoclassicism, Romanticism, and Realism. Major works of late 18th and 19th centuries in their historical and cultural contexts. 130C. Russian Poetry in the 20th Century. Major poetic schools from early modernism (symbolism, futurism, acmeism) to contemporary avant-garde.

131. History of Russian Cinema. (4) Lecture, three hours. Overview of most popular art form in world’s largest nation to show how cinema struggled under inconstant capitalism in Russia, how moviemaking on other side of world departed from path marked out by Hollywood and London, how films operate as form of wide influence, persuasion, relationship between word and image in those acts of persuasion, how even frightening dogma cannot escape importance of audience desires, different forms of social existence as refuge from both capitalism and communism, and what values of world’s biggest country are. Role of language in self-definition of verbal or visual matter? P/NP or letter grading.

M132. Comparative Media Studies. (4) (Same as Comparative Literature M112.) Lecture, three hours. History, form, and function of various media. Groundwork in political experience of eastern Europe, comparative investigation of media technologies, today’s burgeoning markets, and yesterday’s tragic abuses. Development of media form(s) and content across various times, places, and cultures, with special attention to Slavic phenomena. Letter grading.


C140. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

189HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Design and conduct of advanced individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

191. Variable Topics Research Seminars: Russian Literature. (4) (Seminar for 220AC, 220AD.) Lecture, three hours. Reading and discussion of selected authors; culminating seminar paper required. May be repeated for credit with topic and/or instructor change. P/NP or letter grading.

Graduate Courses

201A-201B-201C. Russian: Vocabulary, Pronunciation, Style. (4-4-4) Lecture, three hours. Required: course 102C. Conducted in Russian. Reading and analysis of texts with focus on vocabulary, pronunciation, and style, respectively, in three consecutive terms. S/U or letter grading.


211. Literature of Medieval Rus’. (4) Lecture, three hours. Required for MA (literature). Survey of the literature from its beginning through the rule of Muscovite emperors to the end of the 17th century.


219A. 20th-Century Russian Literature, 1890 to 1929. (4) Lecture, three hours. Required for MA (literature). Lectures and readings in major literary trends of modernist period, such as decadence, symbolism, futurism, acmeism, and ornamental school. Analysis of representative works by Blok, Belyi, Khlebnikov, Pasternak, Platonov, and others. S/U or letter grading.


220A. Structure of Modern Russian. (4-4-4 Lecture, three hours. S/U or letter grading. Required for MA (literature, linguistics). Survey of basic concepts and categories (graphics, phonetics, phonology, morphology, syntax, discourse). 220B. Required
Concurrently scheduled with course C124G. S/U or letter grading.

C124T. S/U or letter grading.

C124N. S/U or letter grading.

296. Seminar: History of Russian Culture. (4)
Lecture, three hours. Lectures and readings in English. Survey of short stories, novels, and major plays (The Seagull, Uncle Vanya, Three Sisters, The Cherry Orchard), with discussion of Russian and American productions. Concurrently scheduled with course C124D. S/U or letter grading.

294. Studies in Russian Literature: Pushkin. (4)
Lecture, three hours. Lectures and readings in English. Major works in all genres, including lyric poetry, narrative poems, plays, prose fiction, and selected letters. Concurrently scheduled with course C124P S/U or letter grading.

292. Seminar: History of the Russian Literary Language. (4)
Lecture, three hours. Requisites: course 204, Slavic 201. Evolution of literary Russian from the 11th to 20th century. Lectures and analysis of texts.

270. Russian Poetics. (4)
Lecture, three hours. Introduction to technical study of Russian poetic forms and terminology, with attention to metrics, stanza forms, rhyme, and development of various verse types from the 18th into the 20th century.

277. Studies in Russian Literature: Nabokov. (4)
Lecture, three hours. Lectures and readings in English. Russian novelist (The Gift), American novelist (Lolita), autobiographer (Speak Memory), and critic. Concurrently scheduled with course C124N. S/U or letter grading.

264. History of the Russian Literary Language. (4)
Lecture, three hours. Requisites: course 204, Slavic 201. Evolution of literary Russian from the 11th to 20th century. Lectures and analysis of texts.

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294. Studies in Russian Literature: Pushkin. (4)
Lecture, three hours. Lectures and readings in English. Major works in all genres, including lyric poetry, narrative poems, plays, prose fiction, and selected letters. Concurrently scheduled with course C124P S/U or letter grading.

292. Seminar: History of the Russian Literary Language. (4)
Lecture, three hours. Requisites: course 204, Slavic 201. Evolution of literary Russian from the 11th to 20th century. Lectures and analysis of texts.

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294. Studies in Russian Literature: Pushkin. (4)
Lecture, three hours. Lectures and readings in English. Major works in all genres, including lyric poetry, narrative poems, plays, prose fiction, and selected letters. Concurrently scheduled with course C124P S/U or letter grading.

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277. Studies in Russian Literature: Nabokov. (4)
Lecture, three hours. Lectures and readings in English. Russian novelist (The Gift), American novelist (Lolita), autobiographer (Speak Memory), and critic. Concurrently scheduled with course C124N. S/U or letter grading.
May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

89HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to lower-division lecture and laboratory courses. Individual study with licensed instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

90. Introduction to Slavic Civilization. (5) Lecture, three hours; discussion, one hour. Introductory survey of social and cultural history of Slavic peoples and their historical background. P/NP or letter grading.

99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Courses

CM114. Teaching and Learning of Heritage Languages. (4) (Same as Asian CM124 and Near Eastern Languages CM1144) Lecture, three hours. Consideration of issues relevant to heritage language learners (HLLs) and HL (heritage) instruction. Review and discussion on such topics as definitions of HLLs and HLLs; linguistic, demographic, sociolinguistic, and sociocultural profile of HLLs, particularly HLL groups most represented among UCLA students; institutional and instructor attitudes toward HLLs; impact of student motivation and expectations on HL curriculum and teaching approaches; similarities and differences between HLLs and foreign language learners (FLLs) regarding teaching methods and materials; diagnostic testing and needs analysis; use of oral/aural proficiency as springboard for literacy instruction; optimization of instruction of mixed HL and FL classes. Action research component included. Concurrently scheduled with course CM214. P/NP or letter grading.

188A. Introduction to Eurasia. (2) Lecture, 90 minutes. Experimental or temporary courses in East European and Eurasian studies, such as those taught by resident or visiting faculty members. May be repeated for credit on topic and course range. P/NP or letter grading.

188B. Languages of Eastern Europe and Eurasia. (2) Lecture or tutorial, 90 minutes. Program-sponsored experimental or temporary course, such as those taught by resident or visiting faculty members, introducing heritage learners to coursework under guidance of faculty mentor. Topics chosen through consultation with faculty mentor. Students meet regularly with faculty adviser to report on progress and discuss readings. Individual contract required. Letter grading.

198A. Honors Research in Slavic, East European, and Eurasian Languages and Literatures. (4) Tutorial, three hours. Limited to senior departmental honors program students. Development of research bibliography and survey of literature in field of Slavic, East European, and Eurasian languages and cultures. Topics chosen through consultation with faculty mentor. Students meet regularly with faculty adviser to report on progress and discuss readings. Individual contract required. Letter grading.

198B. Honors Research in Slavic, East European, and Eurasian Languages and Literatures. (4) Tutorial, three hours. Limited to senior departmental honors program students. Re- search and writing field of Slavic, East European, and Eurasian languages and cultures under direct supervision of faculty mentor. Topics chosen through consultation with faculty mentor. Students meet regularly with faculty adviser to report on their research, discuss drafts of thesis chapters, and revise writing. Individual contract required. Letter grading.


199. Directed Research in Slavic Languages and Literatures. (2 to 8) Tutorial, to be arranged. Limited to junior/seniors. Individual research under guidance of faculty mentor. Culminating paper required. May be repeated for credit. Individual contract required. P/NP or letter grading.

Graduate Courses

200A. Literary Prosemen. (4) Seminar, three hours. Designed for first-year (literature) graduate students. Preparatory for upcoming graduate students for scholarly work by introducing them to resources, departmental, intramural, and extramural, methodologies, and techniques for analysis of literary materials and cultural studies. Letter grading.


201. Introduction to Old Church Slavic. (4) Lecture, three hours. Required for MA (linguistics, literature). Introduction to Old Church Slavic texts and manuscripts. S/U or letter grading.

202. Introduction to Comparative Slavic Linguistics. (4) Lecture, three hours. Requisite: course 201. Required for MA (linguistics). Introduction to comparative phonology and grammar of Slavic languages. CM214. Teaching and Learning of Heritage Languages, Lecture, three hours. Consideration of issues relevant to heritage language learners (HLL) and to heritage language (HL) instruction. Readings and discussion on such topics as definitions of HLLs and HLs; linguistic, demographic, sociolinguistic, and sociocultural profile of HLLs, particularly HL groups most represented among UCLA students; institutional and instructor attitudes toward HLLs; impact of student motivation and expectations on HL curriculum and teaching approaches; similarities and differences between HLLs and foreign language learners (FLLs) regarding teaching methods and materials; diagnostic testing and needs analysis; use of oral/aural proficiency as springboard for literacy instruction; optimization of instruction of mixed HL and FL classes. Action research component included. Concurrently scheduled with course CM114. S/U or letter grading.

M229. Introduction to Slavic Bibliography. (2) (Same as Information Studies M229C.) Introduction to Slavic and East European bibliography for the humanities and social sciences. Emphasis to be determined by requirements and background of enrolled students. Topics include relevant library terminology and concepts; survey of languages and transliteration systems; acquisition of Slavic and East European library materials; Slavic and East European scholarship in the West; relevant reference sources, archival research, and research methods; survey of online databases; compilation of bibliographies. S/U grading.

230A-230B. Topics in Comparative Slavic Literature. (4–4) Lecture, three hours. Recommended preparation: upper-division courses in Czech, Polish, Russian, and Yugoslav literatures. Two terms required (literature). May be taken for credit with consent of instructor and graduate adviser. 230A. Middle Ages through Baroque; 230B. Classicism to Romanticism; 230C. Realism to Modernism.


281. Seminar: Slavic Linguistics. (3) Seminar, three hours. Selected topics in comparative and historical linguistics. May be repeated for credit with consent of instructor and graduate adviser.

375. Teaching Apprenticeship Practicum. (1 to 4) Seminar, to be arranged. Preparation: apprentice personnel employment as teaching assistant, associate, or fellow. Teaching apprenticeship under active guidance and supervision of regular faculty member responsible for curriculum and instruction at UCLA. May be repeated for credit.

495. Teaching Slavic Languages at College Level. (4) Seminar, 90 minutes; discussion, 90 minutes. Designed for graduate students. Theory and practice of language teaching. Discussion of contemporary language teaching methods and materials; acquisition of Slavic and Baltic language teaching proficiency. S/U grading.

556. Directed Individual Study or Research. (2 to 8) Tutorial, to be arranged. S/U grading.


Ukrainian

Lower-Division Courses

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating issues of current importance. S/U or letter grading.

89. Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to lower-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

91. Senior Capstone Thesis in Slavic Languages and Literatures. (2–2) Seminar, three hours. Course 91TA is enforced requisite to 91TB, which is enforced requisite to 91TC. Limited to senior departmental majors. Editing and completion of senior capstone thesis. Use of student target language for research required. Verbal and written pre- sentations required. Letter grading.

91TA. Senior Capstone Thesis in Slavic Languages and Literatures. (2–2) Seminar, three hours. Course 91TA is enforced requisite to 91TB, which is enforced requisite to 91TC. Limited to senior departmental majors. Editing and completion of senior capstone thesis. Use of student target language for research required. Verbal and written pre-

91TB-91TC. Senior Capstone Thesis in Slavic Languages and Literatures. (2–2) Seminar, three hours. Course 91TA is enforced requisite to 91TB, which is enforced requisite to 91TC. Limited to senior departmental majors. Editing and completion of senior capstone thesis. Use of student target language for research required. Letter grading.

197. Individual Studies in Slavic Languages and Literatures. (2 to 4) Tutorial, to be arranged. Limited to juniors/seniors. Individual intensive study, with scheduled meetings to be arranged between faculty member and student. Assigned reading and tangible evidence of mastery of subject matter required. May be repeated for credit. Individual contract required. P/NP or letter grading.

198A. Honors Research in Slavic, East European, and Eurasian Languages and Literatures. (4) Tutorial, three hours. Limited to senior departmental honors program students. Development of research bibliography and survey of literature in field of Slavic, East European, and Eurasian languages and cultures. Topics chosen through consultation with faculty mentor. Students meet regularly with faculty adviser to report on progress and discuss readings. Individual contract required. Letter grading.

198B. Honors Research in Slavic, East European, and Eurasian Languages and Literatures. (4) Tutorial, three hours. Limited to senior departmental honors program students. Re- search and writing field of Slavic, East European, and Eurasian languages and cultures under direct supervision of faculty mentor. Topics chosen through consultation with faculty mentor. Students meet regularly with faculty adviser to report on their research, discuss drafts of thesis chapters, and revise writing. Individual contract required. Letter grading.

198C. Honors Research in Slavic, East European, and Eurasian Languages and Literatures. (4) Tutorial, three hours. Requisites: courses 198A, 198B. Limited to senior departmental honors program students. Completion of honors thesis in field of Slavic, East Euro-

199. Directed Research in Slavic Languages and Literatures. (2 to 8) Tutorial, to be arranged. Limited to junior/seniors. Individual research under guidance of faculty mentor. Culminating paper required. May be repeated for credit. Individual con-

Graduate Courses

200A. Literary Prosemen. (4) Seminar, three hours. Required for MA (literature). Designed to prepare in-

200B. Prosemen: Slavic Linguistics. (4) Seminar, three hours. Required for MA (linguistics). Introduction to synchronic and diachronic study of Slavic lan-
Upper-Division Courses

101A-101B-101C. Elementary Ukrainian. (5–5–5) Lecture, five hours. Course 101A is recommended preparation for 101B, which is recommended preparation for 101C. Each course may be waived with consent of instructor. Basic courses in Ukrainian language, literature, and culture. P/NP or letter grading.

102A-102B-102C. Advanced Ukrainian. (4–4–4) Lecture, three hours. Recommended preparation: course 101C (may be waived with consent of instructor). Course 102A is recommended preparation for 102B. Course 102C may be waived with consent of instructor. Advanced-level courses in Ukrainian language, literature, and culture. May be repeated for credit with topic change. P/NP or letter grading.

152. Ukrainian Literature. (4) Lecture, three hours. Lectures and readings in English. Survey of writers, literary trends, and issues in Ukrainian literature from the late 18th century to the present. Special attention to works of such major figures as Kotlyarevsky, Shevchenko, Franko, Ukrainka, and Tychyna.

C180. Variable Topics in Ukrainian Literature. (4) Seminar, three hours. Reading knowledge of Ukrainian recommended but not required. Topics include major writers, genres, or periods. May be repeated for credit with topic change. Concurrently scheduled with course C280. S/U or letter grading.

187A. Advanced Tutorial Instruction in Ukrainian. (2) Tutorial, one hour; laboratory, one hour. Preparation: two years of Ukrainian and/or Ukrainian placement test. Tutorial and guided independent study of advanced Ukrainian: advanced conversation, composition, vocabulary development, and review of selected grammar topics. May be repeated for credit with topic change. P/NP or letter grading.

187B-187M. Advanced Tutorial Instruction in Ukrainian. (2 each) Tutorial, one hour; laboratory, one hour. Preparation: prior course in sequence or Ukrainian placement test. Tutorial and guided independent study of advanced Ukrainian: advanced conversation, composition, vocabulary development, and review of selected grammar topics. May be repeated for credit with topic change. P/NP or letter grading.

189. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

189HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designated as adjunct to upper-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

Graduate Course

C280. Variable Topics in Ukrainian Literature. (4) Seminar, three hours. Reading knowledge of Ukrainian recommended but not required. Topics include major writers, genres, or periods. May be repeated for credit with topic change. Concurrently scheduled with course C180. S/U or letter grading.

**SOCIAL SCIENCE**

*Interdepartmental Program College of Letters and Science*

2500 Public Affairs Building

Box 957174

Los Angeles, CA 90095-7174

**Social Science**

310-825-3565

Juliet A. Williams, PhD, Chair

**Faculty Committee**

Andrew Aptor, PhD (Anthropology, History)
Robin L.H. Derby, PhD (History)
Tamar Kramer-Sadlik, PhD (Anthropology)

P/NP or letter grading.

**Scope and Objectives**

The Division of Social Sciences is home to leading researchers working to advance understanding of human societies around the globe. With over 250 faculty members housed in more than 15 departments and programs, the division encourages students to explore diverse perspectives and approaches to the study of social life.

The Social Science Interdepartmental Program offers the Master of Social Science (MSS) self-supporting degree. Drawing from current theories, methods, and professional practices from across the social sciences, students develop proficiency with quantitative and qualitative research methods used to address complex social problems. The intensive one-year curriculum emphasizes creative problem-solving and collaborative research practices. Graduates will be prepared for academic and professional careers.

**Graduate Study**

Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Division website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

**Graduate Degree**

The Social Science Interdepartmental Program offers a self-supporting Master of Social Science (MSS) degree.

**Social Science Lower-Division Courses**

19. Fiat Lux Freshman Seminars. (1 Seminar, one hour) Discussion of and reflection on topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

**Upper-Division Courses**

188. Academic Innovation in Industry. (1) Lecture, one hour (six weeks). Exploration of how to apply disciplinary knowledge to the world of business and technology trends. Students build skills to enable them to create novel ways of meeting challenges, build networks, and communicate their ideas and expertise. Students also learn problem-solving techniques like lean startup approach. Uses case study approach to show how social scientists have connected with recent technology trends to produce impactful innovation. P/NP grading.

**Graduate Courses**

375. Teaching Apprentice Practicum. (1 to 4) Seminar, to be arranged. Preparation: apprentice personnel employment as teaching assistant, associate, or fellow. Teaching apprenticeship under active guidance and supervision of regular faculty members responsible for curriculum and instruction at UCLA. May be repeated for credit. S/U grading.

400A-400B. Social Science Research and Perspectives. (4–4) Seminar, three hours. Exploration of contribution of social science research to addressing complex social problems. Students engage wide array of disciplinary perspectives, research methods, and analytical approaches. Emphasis placed on development of multidisciplinary, integrative approaches to social science research. Students learn how to identify and frame social problem; how to identify, interpret, and evaluate relevant research; how to synthesize research findings generated from different theoretical, methodological, and disciplinary approaches. Development of essential research, writing, and analytic skills. Letter grading.

401. Qualitative Social Science Research Methods. (4) Seminar, three hours. Introduction to range of qualitative approaches used in social science research and analysis through combination of theoretical discussions and practical experience. Examination of practical and epistemological issues in qualitative research in workshop format. Covers practical workings of qualitative research: gathering data through interviews, focus groups, observation, experiments, and archival research; strategies for recording, coding, and analyzing qualitative data; and evaluating and presenting qualitative research. Prepares students to undertake research using qualitative methods through collaborative class project research. Letter grading.

402. Qualitative Data Analysis in Social Science. (4) Lecture, two and one half hours; discussion, one hour. Introduction to fundamentals of data analysis and statistics, focusing on application of statistical methods in social problems research. Students develop skills and strategies for evaluating research evidence, and for comparing and synthesizing results of studies that adopt different research methodologies. Descriptive statistics, inferential statistics, probability, statistical tests, correlation, and causation, and regression analysis. Other topics include organizing quantitative data (e.g., tables, graphs), methods for describing data with respect to central tendency, dispersion, and association. At course end students should be able to perform data analysis using appro-
private software, to interpret results, and to make critical evaluations of quantitative social science research. Letter grading.

403. Quantitative Evidence and Analysis in Social Science. (Seminar, three hours; laboratory, one hour. Advanced training in data analysis and statistics, and training in written and visual presentation skills. Students work in small groups to critically evaluate research evidence and comparing results of studies that adopt varying research methodologies. Students gain experience working with large datasets, and with designing, building, and validating statistical modeling techniques. Students are familiarized with datasets most relevant to their individual research interests. Students may propose a research topic and individualized mentoring in selecting appropriate dataset for their major research paper (MRP). Letter grading.

404. Research Design in Social Science. (Lecture, three hours. Introduction to main components of research projects, focusing on research questions, theoretical frameworks, and research design. Students design feasible research plan for individual project. Students identify research topic and specify research question; identify existing data for original analysis; compare theoretical frameworks for social scientific analysis of data; assess relevant evidence and literature; and explore approaches to data analysis. Students submit assignments, and complete research proposal. Letter grading.

410. Engaged Social Science. (Seminar, three hours. Exploration of theory and practice of engaged social science, tracing its historical development from policy studies and related fields to more activist methodologies of critique and intervention. Drawing on classic and contemporary studies in sociology, anthropology, political science, environmental studies, and social justice, to engage students in larger debates about politics of knowledge in relation to issues, such as poverty, racism, public health, refugees, gang culture, gender hierarchies, public education, and citizenship. Letter grading.

419. Data Analysis. (Lecture, three hours. Workshop in which students develop research and analysis skills related to establishing and executing data analysis plan. Students engage in intensive peer-review process, working collaboratively in small groups. Students receive detailed feedback from instructor, teaching assistants, and faculty readers, and are expected to routinely revise their work. Students refine their presentation skills and prepare three- to five-minute presentation. Letter grading.

420. Research Design and Analysis. (Seminar, three hours. Guided completion of major research paper (MRP). Students receive detailed feedback from instructor, revise literature review, finalize analysis, tighten rhetoric, and improve organization of manuscript to transform it into final research paper. Letter grading.

430. Community-Based Research. (Lecture, three hours; fieldwork, two hours. Study of principles, ethics, and methods of community-based research (CBR), and place and purpose of scholarly inquiry. Working in teams, students conduct small-scale research projects in collaboration with local community organizations. Teams work closely with instructors and organization agents on all aspects of research design, execution, and data analysis. Students apply qualitative and quantitative research methods skills acquired in courses 401 and 402 to research projects. Attendance at research site meetings, team meetings, and weekly on-campus class meetings required. Each team submits and submits final research report to community partner by end of quarter. Letter grading.

M460A. Voting Rights Policy and Law I. (2) (Same as Political Science M296B.) Clinic, three hours. Required course. Collaborative course taught from perspective of social science research, civil rights, and voting rights. Exposes students to voting rights act theory, case law, history, research, and implementation. Faculty guest experts from across campus provide their perspective on how to study, research, and document various aspects related to voting rights. Includes factors such as history of discrimination against minority group in areas of employment, education, housing, and political representation. Students learn and implement in-depth study of methodology and statistical approach to document presence or absence of vote dilution or vote denial in different jurisdictions. Discussion of history and legal principles of federal Voting Rights Act and California Voting Rights Act led by leading voting rights attorney. May be repeated for credit. S/U or letter grading.

M460B. Voting Rights Policy and Law II. (2) (Same as Political Science M296B.) Clinic, three hours. Required course. Collaborative course taught from perspective of social science research, civil rights, and voting rights. Exposes students to voting rights act theory, case law, history, research, and implementation. Faculty guest experts from across campus provide their perspective on how to study, research, and document various aspects related to voting rights. Includes factors such as history of discrimination against minority group in areas of employment, education, housing, and political representation. Students learn and implement in-depth study of methodology and statistical approach to document presence or absence of vote dilution or vote denial in different jurisdictions. Discussion of history and legal principles of federal Voting Rights Act and California Voting Rights Act led by leading voting rights attorney. May be repeated for credit. S/U or letter grading.

M460C. Voting Rights Policy and Law III. (2) (Same as Public Policy M296C.) Clinic, three hours. Required course. Collaborative course taught from perspective of social science research, civil rights, and voting rights. Exposes students to voting rights act theory, case law, history, research, and implementation. Faculty guest experts from across campus provide their perspective on how to study, research, and document various aspects related to voting rights. Includes factors such as history of discrimination against minority group in areas of employment, education, housing, and political representation. Students learn and implement in-depth study of methodology and statistical approach to document presence or absence of vote dilution or vote denial in different jurisdictions. Discussion of history and legal principles of federal Voting Rights Act and California Voting Rights Act led by leading voting rights attorney. May be repeated for credit. S/U or letter grading.

Social Thought

The Social Thought minor is limited to students who formally apply and are admitted. To apply, students must submit an application, a personal statement supporting their interest in pursuing the minor, a letter of recommendation from a faculty mentor, and a transcript to the College Academic Counseling Office, A316 Murphy Hall.

Undergraduate Study

To enter the minor, students must have an overall grade-point average of 2.0 or better and apply for admission only after successfully completing the following lower-division requirements: Clusters 21A and 21B, or two courses from German 56, Honors Collegium 20, 21W, 55, 57, 83W, Philosophy 6, Political Science 10, Sociology 10.


Required Research Colloquia and Senior Thesis (12 units): Students must also complete Social Thought 190A and 190A in one term and courses 190B and 199B in the following term. A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor. Each minor course must be taken for a letter grade, and students must have an overall grade-point average of 2.0 or better in the minor. Successful completion of the minor is indicated on the transcript and diploma.
Social Thought

Lower-Division Courses

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

89. Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to lower-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be repeated for credit. Individual honors contract required. Honors content noted on transcript. P/NP or letter grading.

89HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to lower-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Courses

189. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. Letter grading.

189HC. Honors Contracts. (1) Tutorial. Limited to students in College Honors Program. Designed as adjunct to upper-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

190A–190B. Research Colloquia in Social Thought I, II. (2–2) Seminar, two hours. Corequisite for course 190A: course 199A; for 190B: course 199B. Limited to juniors/seniors. Required of students in Social Thought minor. Designed to bring together students undertaking supervised senior thesis work in seminar setting with one or more faculty members to discuss their work or related work in Social Thought minor. Led by one supervising faculty member. Course 190A may be repeated for credit. P/NP grading.

190A–190B. Directed Research or Senior Thesis in Social Thought I, II. (4–4) Tutorial, to be arranged. Corequisite for course 199A: course 190A; for 199B: course 190B. Limited to juniors/seniors. Required of students in Social Thought minor. Supervised individual research under guidance of faculty mentor. Culminating paper or project required. May be repeated for credit. Individual contract required. Letter grading.

Social Welfare

Sociology

Meyer and Renee Luskin School of Public Affairs

3357 Public Affairs Building
Box 951656
Los Angeles, CA 90095-1656

Social Welfare

310-825-2892

Laura S. Abrams, PhD, Chair and Director, MSW Program

Ian W. Holloway, MSW, MPH, PhD, Chair, Doctoral Program

Gerardo P. Lavina, LCSW, MSW, Director, Field Education

Professors

Laura S. Abrams, PhD
Ron A. Astor, MSW, PhD (Marjorie Crump Professor of Social Welfare)
David Cohen, PhD
Todd M. Franke, PhD
Mark S. Kaplan, DrPH
Ananya Roy, PhD (Meyer and Renee Luskin Professor of Inequality and Democracy)
Fernando M. Torres-Gil, PhD

Professors Emeriti

Rosina M. Becerra, PhD
A.E. Benjamin, PhD
Diane S. de Anda, PhD
Aurora P. Jackson, PhD
Stuart A. Kirk, DSW (Marjorie Crump Professor Emeritus of Social Welfare)
James E. Lubben, MSW, MPH, DSW
Allee Moon, PhD
Alex J. Norman, DSW
Jack Rothman, PhD
Robert F. Schilling, PhD
Leonard Schneiderman, PhD

Associate Professors

Ian W. Holloway, MSW, MPH, PhD
Alfreda P. Iglehart, PhD
Lené F. Levy-Stroms, MPH, PhD
Carlos E. Santos, PhD
Laura Wray-Lake, PhD

Assistant Professors

Leyla Karimli, PhD
Brian T.H. Keum, MA, PhD
Judith L. Perrigo, LCSW, PhD
Amy E. Ritterbusch, PhD
Cindy C. Sangalang, MSW, PhD
Latoya A. Small, PhD
Lee Ann S. Wang, PhD

Adjunct Professors

Helmut K. Anheier, PhD
Jorja J. Leap, PhD

Adjunct Assistant Professors

Khush E. Cooper, MSW, PhD
Ayako Miyashita Ochoa, JD

Fieldwork Consultants

Laura Alongi, LCSW
Larthia R. Dunham, MSW
Woo K. (Tobby) Hur, MSW
Tranisha L. James, LCSW
Hector R. Palencia, LCSW

Social Welfare / 725

Scope and Objectives

The primary objectives of the Department of Social Welfare graduate program are to prepare leaders for the profession of social work and to develop the empirical base for all facets of practice. In response to changing demographic trends and the emergence of new social problems, the department provides leadership in the areas of policy, practice, and research and in the development of an innovative curriculum for training students and professionals to meet the service needs of a multicultural clientele.

The educational program is based on the premise that all students need to acquire a common body of knowledge and basic skills, and a common understanding of the philosophy and values of the profession. These then form a sound foundation for the development of more specialized knowledge and skills along the lines of each student’s interests and the needs of the field.

Students are encouraged to take advantage of the resources within UCLA by selecting elective courses in related disciplines. In addition, as a department within the Luskin School of Public Affairs, the program affords students instructional opportunities in the other affiliated departments—Public Policy and Urban Planning.

Beyond national opportunities in the profession of social work, there is increasing demand for qualified and experienced social workers to serve in the international field, where many social service programs are conducted under the auspices of the United Nations, the U.S. government, and national sectarian organizations. Graduates of the doctoral program generally secure appointments at major universities or research centers.

The challenge to the department, the profession, and those who join us as students is to prepare to forge the paths, build the bridges, and shape the future to ensure that all individuals, families, and communities enjoy better education, better health care, better job training, and better economic futures.

Graduate Study

Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Division website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Graduate Degrees

Social Welfare

Lower-Division Courses

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion and presentation of generative topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

89. Honors Seminars. (3) Seminar, three hours. Limited to 20 or fewer students as adjunct to lower-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Courses

100A. Introduction to Social Welfare: Policies and Programs. (4) Lecture, four hours. Origin and development of welfare policies; policies guiding them, with emphasis on analysis of policy developments/issues related to provision of social welfare services. Study of historical and current responses to provision to major social problems. P/ NP or letter grading.

100B. Social Welfare Policy: Overview. (4) Lecture, four hours. Requisite: course 100A. Review of existing policy regarding major social issues in field of social welfare. Examination of the capacity of agencies to provide services, and the capacity of social agencies to address need. Exploration of differential impact of policy on various populations. P/NP or letter grading.

101. Social Welfare in Multicultural Society. (4) Lecture, four hours. Social policy viewed from perspective of various cultural groups. Students to become aware of their own cultural perspective and learn to recognize similarities and differences in values, perspectives, and beliefs across cultural groups. P/NP or letter grading.


103. Introduction to Direct Practice with Individuals, Families, and Groups. (4) Lecture, four hours. Requisites: courses 100A, 100B, 101. Description and demonstration of basic skills employed in direct social work practice via casework process. Students practice these skills in written, role-play, small group, and video or audio exercises. P/NP or letter grading.

M104C. Diversity in Aging: Roles of Gender and Ethnicity. (4) Same as Chicana and Chicano Studies M104B, Gender Studies M104C, Gerontology M104C, and Public Affairs M131.) Lecture, four hours. Exploration of diversity of social aging in forms of intergenerational perspective utilizing faculty from variety of fields to address issues of diversity. Letter grading.


M104E. Social Aspects of Aging. (4) (Same as Gerontology M104E.) Lecture, four hours. Topics include theories of aging, economic factors, changing roles, social relationships, and social policies towards the aged. Weekly seminars organized around key aspect of social gerontology. P/NP or letter grading.

105. Social Welfare Policy in Modern America: Historical Perspectives, four hours. Exploration of history of the U.S. welfare state, its development over time, and features that make it distinctive as compared to welfare states in other nations. Letter grading.

106. Research Seminar and Field Observation: Social Welfare. (4) Seminar, three hours; discussion, one hour; outside study, eight hours. Didactic component with focus on development of basic skills in the areas of research. Students select one field of observation experience (module) from a number of field settings. P/NP or letter grading.

107. Field Practice: Social Welfare. (4) Lecture, three hours; discussion, one hour; outside study, eight hours. Requisite: course 106. Field practice students are placed in local agency where they observe the function of agencies and their relationship to specific agency tasks and roles under instruction of agency mentor and a UCLA faculty member. P/NP or letter grading.


110. Inequality and Democracy: Analysis and Praxis of Public Problems. (4) (Same as Urban Planning M110.) Lecture, three hours; discussion, one hour. Requisites: courses 100A, 100B, 101. Analysis of public problems. Taking up case of persistent inequality in liberal democracies, coverage of key frameworks and methodologies for understanding and analyzing poverty and inequality and examination of forms of action, from role of government to social movements, that seek to intervene in such problems. Study of problems, programs, policies, and politics in globally interconnected, transnational world, while dividing between global north and global south. Letter grading.

130A-130B. Community Research and Services Seminars. (4-13) Seminar, three hours; service learning, four hours; outside study, three hours. Course 130A is requisite to 130B. Limited to juniors/seniors. Overview of social work roles to combat poverty, particularly Aid to Families with Dependent Children (AFDC) and Personal Responsibility and Work Opportunity Reconciliation Act (PROWA); and critical appraisal of recently enacted state welfare reform policies. Relationship between research knowledge about poverty and current policies, and effects of gender, ethnicity, and class on patterns of poverty and policy responses. P/NP or letter grading.

132. Community Analysis and Community Needs. (4) Lecture, three hours. Limited to juniors/seniors. Perspective for understanding and depicting demographic composition of communities and for determining community needs. Use of systems theory as organizing framework. Community-level interventions are affected by community’s social ecology, culture, economic system, political system, ethnic composition, and class structure. Agencies can seek to define community needs and develop interventions to respond to those needs. Knowledge of community infrastructure necessary for ascertaining its strengths and resources that can be mobilized for addressing and responding to community needs, issues, and concerns. Social service agencies and communities can work together in partnership to enhance quality of community life. P/NP or letter grading.

M140. Introduction to Study of Aging. (4) (Same as Psychology M140C.) Lecture, three hours. Limited to juniors/seniors. Perspectives on major features of human aging—biological, social, psychological, and humanistic. Introduction to information on range of influences on aging to prepare students for subsequent specialization. P/NP or letter grading.

M142SL. Intergenerational Communication across Lifespan. (4) (Same as Gerontology M142SL.) Lecture, three hours; fieldwork, one hour. Limited to juniors/seniors. What do you talk to your grandparents? Does your family talk well to one another as group? How do you communicate well with boss who is 30 years older than you? Increasingly, we interact with one another, and their interactions have significance throughout their lives. Introduction to psychological, interpersonal, and societal issues related to intergenerational communication across lifespan. Letter grading.

151. Child Welfare Policy in America. (4) Lecture, three hours. Limited to juniors/seniors. Examination of public welfare system from U.S. Review of social policies and programs that impact children. History of social policies and programs for children, including discussion of orphans, foster care, and adoption. Transformation of welfare system into child protection system. Impact of welfare reform on child policies and programs in the U.S. Major programs designed to provide safety net for disadvantaged children, including welfare, food stamps, child care, child support, and children's allowance programs. Review of research and analysis in this area. Overview of social policies and programs that impact children in the U.S. Examination of comparative policies in other countries. P/NP or letter grading.

162. Health Policy and Services. (4) Seminar, three hours. Limited to juniors/seniors. Contemporary issues in healthcare financing and delivery and historical perspective on these issues. Role of government in healthcare and ways controversy about this role continues to shape and constrain public policy in health. Major public programs, notably Medicare and Medicaid, and their relationship to issues of access and cost for diverse vulnerable populations. Various public and private approaches to healthcare reform and ways of thinking about their predicted impact, cost, and political feasibility. Issues in care of persons with chronic illness and debate about public and private approaches to long-term care reform. Social work roles in healthcare policy and practice. P/NP or letter grading.

163. Prevention of Risky Substance Use and Related Problems. (4) Lecture, four hours. Limited to juniors/seniors. Prevention of substance use and related harms from legal and illegal substances is major con-
164. HIV Prevention in U.S. and Developing World. (4) Lecture, three hours. Limited to juniors/seniors. Examination of various approaches to HIV prevention, drawing on diverse paradigms from public health and theories of behavior change from fields of psychology, sociology, and communications. Sexual behavior and injection drug use, existing and promising techniques to reduce HIV transmission, fiscal, cultural, ethical, and moral dilemmas in allocation of prevention resources. P/NP or letter grading.

M165. Disability Policy and Services in Contemporary America. (4) Same as Disability Studies M130 and Gerontology M165.) Lecture, three hours. Limited to juniors/seniors. Growing numbers of people of all ages with disabilities are leading active and productive lives in American communities. Many others are struggling to do so or are people waiting to do so. How do the communities in which they live accommodate the needs and interests of people with disabilities? How do communities change for the better? How do advocates for people with disabilities ensure that the government addresses their needs? What do we know about extent to which public policies and programs are responsive to people in need? How do socioeconomic, political, and economic priorities influence access to services and supports. P/NP or letter grading.

188A. Individual Studies for USIE Facilitators. (1) Tutorial, to be arranged. Enforced corequisite: Honors College 101E. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to finalize course syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.

188B. Individual Studies for USIE Facilitators. (1) Tutorial, to be arranged. Enforced corequisite: Honors College 101E. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to finalize course syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.

Graduate Courses

202A-202B. Dynamics of Human Behavior. (4–4) Lecture, two and one half hours; discussion, one hour. Requisites: courses 201A, 201B. Deviation from established social norms in physical, emotional, and social areas of human functioning as they impact the individual and societal processes of human adaptation and non-adaptation. S/U or letter grading.


M203X. Special Topics in Public Affairs. (4) Requisites: course 201A or 210A.) Seminar, three hours; outside study, nine hours. Advanced seminar on emerging issues across public policy, social welfare, and urban planning. May be repeated for credit. S/U or letter grading.

M206A. Homelessness: Housing and Social Service Issues. (4) Same as Urban Planning M270.) Lecture, 90 minutes; discussion, 90 minutes; one field trip. Review of current status of homelessness: who homeless are, what social services and housing are available, existing and proposed programs—appropriate architecture, management, and sources of funding. Outside speakers include providers of services to homeless. Letter grading.


210B. Foundations of Social Work Practice II. (4) Lecture, two and one half hours. Corequisite: course 401B. Weighing and carrying out evidence-supported practice, including disability issues, and service delivery to individuals and their situations, with particular focus on following intervention approaches: case management, motivational interviewing, crisis intervention, cognitive, task-centered, and strengths-based solutions to problems as well as interventions appropriate for family functioning, small group processes, and environmental modification (advocacy and community organization). Continued evaluation of social work. Letter grading.

210C. Foundations of Social Work Practice III. (4) Lecture, two and one half hours. Corequisite: course 401C. Core concepts of social work practice in organizational, community, and policy settings. Exploration of leadership style and development of group work skills. Role of macro practice in agency-based social work in advancing strategies of organizational and social change. Interface and interaction among policy decisions, community needs, and program development. How societal values influence formulation, implementation, and evaluation of social welfare policies, programs, and initiatives of social, economic, and political context of community practice in order to understand policy roots of economic and social injustices. Letter grading.

211A. Human Behavior in Social Environment: Theoretical Perspectives. Same as Social Work M211A and Social Welfare I. (4) Lecture, two and one half hours. Introduction to terminology and scope of systems framework that underlies social work practice interventions. Students learn how to identify and assess small- and large-scale forces that influence problems presented by clients. Letter grading.


212. Human Behavior in Social Environment: Critical Self-Awareness and Intergroup Dialogue. (2) Lecture, 75 minutes. Introduction to critical self-awareness and intergroup dialogue. Students learn about the concerted study of racism, oppression, and social functioning covering various perspectives on roots and significance of racism and other forms of oppression in U.S. (and other societies) today. Forces contributing to initiation and maintenance of institutional oppression and inequality across social categories such as race, ethnicity, gender, sexuality, religion, ability, and age, are examined. Letter grading.

213A. Social Welfare Research Methods. (4) Lecture, two and one half hours. Introduction to various research methodologies, including experimental and quasi-experimental designs, survey research methods, qualitative methods, and single subject and group-based research designs. Exploration of ethical issues pertaining to social science research. Students learn to produce research proposals, conduct research, and design and implement research projects. Letter grading.

213B. Applied Statistics in Social Welfare. (4) Lecture, two and one half hours. Discussion, one hour. Introduction to statistical methods taught in course 213A, and designed to help students develop basic understanding of descriptive and inferential statistical approaches. Introduction to statistical reasoning with emphasis on how statistics can help us understand world. Topics include numerical and graphical summaries of data, data acquisition and experimental design, probability, hypothesis testing, confidence intervals, correlation, and regression. Letter grading.
214A. Foundations of Social Welfare Policy. (4) Lecture, two and one half hours. Overview of key areas of social welfare policy. Roots of American social welfare policy and how they have given rise to today’s social policy structure. Path of social welfare policy development and growth of profession of social work and how it has paralleled major social policy issues from early colonial settlements to present day. Specific events and important individuals that have influenced public policy decisions and vulnerable populations, such as racial and ethnic minorities, women, children, the poor, and other diverse populations. Examination of role of social research in informing social welfare policy. Letter grading.

214B. Leadership for Social Change. (4) Lecture, two and one half hours. Overview and understanding of leadership and social policy elements for effective social change in dynamic and diverse society. Builds on foundations of social welfare history and policy developments. Examination of elements of policy advocacy and competencies for effective social work leadership in organizational and community settings and integration of theory and research in addressing and resolving complex social problems. Letter grading.

M215. Global Public Affairs: Governing in Interconnected World. (4) (Same as Public Policy M228B and Urban Planning M220M) Three hours of lecture, two and one half hours of laboratory work, nine hours. Conceptually, focuses on interplay between three major institutional complexes of modern, globalizing societies and organizations that operate within these frameworks: state, market, and civil society. Focuses on interplay theory and concrete examples, offers sense of where these institutions and organizations have come from, and helps chart their present trajectories. From perspective of governance, assessment of roles and configurations of institutions and organizations to address today’s challenges. S/U or letter grading.

223. Seminar: Social Work Profession. (2) Seminar, two hours. Crossroads and role of social work in contemporary society; relationships with other professions; probable future trends in profession; social work ethics, professional organizations, certification licensing; professional responsibility for continued self-criticism and improvement of profession. S/U grading.

229A. Craft of Social Welfare Scholarship I. (4) Lecture, three hours; outside study, nine hours. Limited to PhD students. Exploration of one problem for student in social welfare research, moving from understanding of evolution and context of general problem to more detailed and intensive review of literature on specific research questions to independent understanding of existing knowledge on topic and begin to identify one or more critical gaps in knowledge to explore. Discussion of different methods of summarizing research literatures, identifying seminal works, and interpreting contradictory findings. Regular meetings to discuss ongoing work and to encourage students to review their work with their faculty advisers and to provide them with expertise in their problem areas. Letter grading.

229B. Craft of Social Welfare Scholarship II. (4) Lecture, three hours; outside study, nine hours. Enforced requisite: course 229A. Limited to PhD students. Continued narrowing of student focus on one social welfare research problem, moving from understanding of evolution and context of general problem to more detailed and intensive review of literature on specific research questions to independent understanding of existing knowledge on topic and begin to identify one or more critical gaps in knowledge to explore. Discussion of different methods of summarizing research literatures, identifying seminal works, and interpreting contradictory findings. Regular meetings to discuss ongoing work and to encourage students to review their work with their faculty advisers and to provide them with expertise in their problem areas. Letter grading.

231A. Family Systems Interventions. (4) Lecture, two and one half hours. Application of theories and techniques to develop framework for couples and family social work practice. Examples of social work practice with couples and families may include developing relationship skills for those struggling with mental illness; supportive interventions for family members of impaired or frail elderly; parent education and skill development for welfare recipients; individual, couples, and family therapy; prevention and treatment of abuse, bereavement support groups, or interventions helping families to recover from experiences with substance abuse, domestic violence, sexual difficulties, and more. S/U or letter grading.

231B. Advanced Social Welfare Practice. (4) Lecture, two and one half hours; outside study, nine hours. Corequisite: required social work practicum. Advanced-level, critical analysis of theories, concepts, and principles underlying social casework practice. Specific attention to deviation and stress as conditions affecting functioning of individuals and groups and to diagnostic knowledge and competence required in rehabilitation and prevention. S/U or letter grading.

231E. Advanced Social Welfare Practice: School Social Work. (4) Lecture, two and one half hours; outside study, nine hours. Corequisite: required social work practicum. Focus on early attachments relationships and role of liaison between pupils, family, school, and community. Uncovering current literature and case presentation to explore impact of social school social workers as change agents. S/U or letter grading.

231F. Advanced Social Welfare Practice: Cognitive-Behavioral Theories and Methods. (4) Lecture, two and one half hours; outside study, nine hours. Corequisite: required social work practicum. Advanced-level, critical analysis of key contributors, essential concepts, theoretical bases of practice, trends, new idioms, and practical applications. Focus on both conceptual and practical applications of current cognitive-behavioral therapy; case conceptualization from cognitive-behavioral perspective; specific cognitive and behavioral assessment techniques and intervention methods of training with children and their families. Letter grading.

231G. Advanced Social Welfare Practice: Substance Abuse Intervention. (4) Lecture, two and one half hours; outside study, nine hours. Corequisite: required social work practicum. Advanced-level, critical analysis of major intervention approaches—individual, family, group, and environmental—to treating substance abuse and dependency. Specific attention to skills and self-awareness to integrate biological, psychological, and social factors in assessing and intervening with substance-using clients and target populations. S/U or letter grading.

231J. Advanced Social Welfare Practice: Child Welfare. (4) Lecture, two and one half hours; outside study, nine hours. Corequisite: required social work practicum. Advanced-level, critical analysis of role of public child welfare practitioners in relationships with consumers, agency, and community. Further development of social work and case management skills in context of public child welfare practice. Practical case management focused on intervention and use of its mechanism as a tool in developing relationships with children and families to other systems, agencies, and interventions. Interpretation of understanding of public child welfare services and factors that related to direct practice issues. S/U or letter grading.

231K. Advanced Social Welfare Practice: Mental Health. (4) Lecture, two and one half hours; outside study, nine hours. Corequisite: required social work practicum. Designed to provide students with grounding in social work practice with adults in mental health settings. Emphasis on evidence-based approaches to providing services to pervers and persistent mentally ill. Exploration of strength-based recovery-oriented approaches that are consistent with knowledge and values of social work practice. Exposure to range of interventions applicable to most common mental health problems and barriers to service delivery for this vulnerable population, such as stigma, criminalization, cultural bias, and gaps in knowledge. S/U or letter grading.

231M. Advanced Social Welfare Practice: Health. Lecture, two and one half hours; outside study, nine hours. Corequisite: required social work practicum. Advanced-level, critical analysis of various roles and skill sets and strategies for working with healthcare teams. From case-based approach, examination of variety of clinical challenges, assessment techniques for use in multiple settings, and interventions to implement with individuals, families, groups, and multidisciplinary healthcare teams. Evaluation of policy implications that impact social work practice in health settings. S/U or letter grading.

231N. Early Childhood Mental Health. (4) Lecture, two and one half hours; outside study, nine hours. Evidence-based practice training with children and their caregivers in agency-based settings. Integration of developmental and sociocultural considerations, including human diversity and other cultural and developmental factors, in arriving at case conceptualizations and treatment plans. S/U or letter grading.

231Q. Advanced Social Welfare Practice: Psychopharmacology. (4) Lecture, two and one half hours. Focus on how psychopharmacologic agents are studied and approved by FDA. Review of current effectiveness and safety data (and placebo effects) for main classes of drugs, and highlighting of current crisis of confidence in field. Brief summaries of basic neurobiological actions of drugs. Examination of previous and emerging roles of social workers around medications, as well as legal and ethical dictates of practice. Four practice skills are taught as essential for beginning social workers: reviewing relevant literature critically, taking psychiatric medication histories, understanding clients’ subjective views and meanings of medications, and monitoring medications to reduce harms. Letter grading.

231U. Child and Adolescent Trauma. (4) Lecture, two and one half hours. Introduction to common concepts (general theory and foundational knowledge), ways in which children are affected by events and their interaction with traumatized children and adolescents. Strength-based practice highlighted along with focus on identification of protective and promotive factors that tend to reduce harm and factors that tend to increase growth. Trauma is broadly defined, and includes children and adolescents exposed to traumatic events including but not limited to natural disasters, war, abuse and neglect, medical trauma, and personal crime (e.g. domestic violence) and other traumatic events. Highlights role of development, culture, and empirical evidence in trauma-specific case conceptualization and treatment planning. Addresses level of
functioning of primary care giving environments and assesses capacity of community to facilitate restor- 
active processes. Letter grading.

232. Prevention and Promotion in Health and Men- 
tal Health. (4) Lecture, two and one half hours. Core 
course. Health and Mental Health Across the Life 
span area of concentration. Introduction to social 
determinants/paths/ways of health, one of over-arching 
integrative and evidence-based frameworks ac- 
counting for upstream influences on health and mental 
health that underpin social welfare practice. Analysis 
approach and illustration of them with examples from 
efforts to prevent health and mental health prob-
lems and improve health status of different populations. 

241K. Advanced Social Welfare Practice: Policy 
Practice. (4) Lecture, two and one half hours; outside 
study, nine hours. Corequisite: required social 
work practicum. Methods of social work policy practice and 
policy. Discussion of current and emerging policy 
problems and practice of development of alternative 
strategies, and use of different advocacy tools/ 
techniques to gain support for policy change. S/U or 
letter grading.

242. Resilience, Risk, and Thriving among Children 
and Families. (4) Lecture, two and one half hours. 
outside study, nine hours. Corequisite: previous 
work practicum. Designed to deepen student knowl-
dge of community practice in health promotion and 
disease prevention. Letter grading.

M241E. Leadership, Development, and Gover-
nance of Nonprofit Organizations. (4) Same as 
Public Policy M228 and Urban Planning M288.) 
Lecture, three hours; outside study, nine hours. 
Designed for graduate students. Various patterns of community 
action for attaining social welfare objectives; research and 
field experience directed toward study of social 
problems within context of community planning; 
emerging patterns of physical, social, and economic 
change in framework of social change theory. 
Letter grading.

M241F. Strategic Planning for Public and Nonprofit 
Organizations. (4) Same as Public Policy M247 and 
Urban Planning M290.) Lecture, three hours; outside 
study, nine hours. Corequisite: required social 
work practicum. Designed to familiarize students with use 
of professional and knowledge and skill set pos-
duced by agency and program administrators on one 
hand and by policy analysts and policymakers on 
other. Letter grading.

241G. Advanced Social Welfare Practice: Commu-
nity Mapping. (4) Lecture, two and one half hours; 
outside study, nine hours. Corequisite: required social 
work practicum. Designed to familiarize students with use 
of professional and knowledge and skill set pos-
duced by agency and program administrators on one 
hand and by policy analysts and policymakers on 
other. Letter grading.

241H. Advanced Social Welfare Practice: Insti-
tutional Governance and Human Service Manage-
ment. (4) Lecture, two and one half hours; outside 
study, nine hours. Corequisite: required social 
work practicum. Conceptual framework and analytic tools 
provided to understand organizational features of human 
services. Human Service organizations work on 
people to improve, sustain, or prevent decline of well-
being. Because of their function these organizations 
have special attributes that distinguish them from 
other organizations. Examination of these attributes, 
theoretical perspective to study them, and analysis of 
factors that shape nature of work they do. Explanation 
of determinants of relations between workers and cli-
cients that work to further or undermine these as policy environ-
ment, values and mission, internal structure, service 
technology, reward structure, organizational re-
sponses to staff and client diversity, and power rela-
tions between workers and clients. S/U or letter 
grading.

241I. Advanced Social Welfare Practice: Grant 
Writing. (4) Lecture, two and one half hours; outside 
study, nine hours. Corequisite: required social 
work practicum. Designed to familiarize students with 
learning necessary skills to construct functional grant 
proposals. Application of problem-solving knowledge to 
development of human service grants. Various steps in 
writing, planning, and preparing. Emphasis on write-
design/prepare grant proposals. S/U or letter grading.

241J. Advanced Social Welfare Practice: Commu-
nity Practice. (4) Lecture, two and one half hours; 
outside study, nine hours. Corequisite: required social 
work practicum. Designed to deepen student knowl-
dge of community practice methods and empirical 
base that supports these methods in field of social 
wellfare, theory, practice, and research methods re-
lated to major community practice approaches in con-
text of evidence-based philosophies and processes. 
Development of skills to address community problems using 
best available data by applying course concepts to 
student projects. S/U or letter grading.

Lecture, two and one half hours. Core course for So-
cial and Economic Justice area of concentration. 
Trains students to understand philosophies of social 
justice, history of ideas, and key ethical frameworks 
underpinning social work. Concept and prac-
tice through focus on poverty interventions, welfare 
policy, mass incarceration, community organizing, 
homelessness, and displacement. Focus on U.S. with 
emphasis on global and comparative approach to so-
cial welfare. Letter grading.

258. Critical Problems in Social Welfare. (2) Dis-
sussion, two hours. Designed for PhD students. 
Current problems in field of social welfare. Specific topics 
are selected based on importance of social justice issues and 
need of class. May be repeated for credit. S/U 
grading.

259. Variable Topics in Statistics in Social Scienc-
es. (4) Lecture, two hours. Limited to graduate stu-
dents. Designed to provide in-depth understanding of 
particular topics in area of applied statistics/measure-
ment to graduate students engaged in conducting re-
search in broad area of fields that comprise social 
sciences. Letter grading.

260A. Research Capstone I: Project Development. 
(4) Lecture, two and one half hours. Formulation of re-
search problems, questions, and hypotheses that 
guide critical review of relevant literature and under-
standing of project area. Working in groups of three to 
four, development of proposal for research capstone 
project that includes literature review and outlines plans 
for collecting data and addressing applied problem. 
Culminates in completion of full proposal for research capstone project and articu-
lated work plan for team members. Letter grading.

260B. Research Capstone II: Data Gathering, Anal-
yses, and Interpretation. (2) Research 
group meeting, two hours. Supports students in imple-
menting their research capstone, including data gather-
ing and preliminary analysis. Class meetings may 
focus on small or large groups to assist with trouble 
shooting or to teach specialized research skills. Culmi-
nates in presentation of project methods and initial re-
sults. In Progress grading (credit to be given only on 
completion of course 260C).

260C. Research Capstone III: Data Gathering, Anal-
yses, and Interpretation. (2) Research 
group meeting, two hours. Analysis and interpretation of 
data and compilation of presentation formats for results. 
Grounding of interpretation of results in existing litera-
ture and discussion of findings for real-world applica-
tions. Culminates in final paper that includes abstract, 
theory/interpretation, exploration of alternative explana-
tions, and implications for social welfare. Letter 
grading.

281A-281B-281C. Advanced Social Welfare Re-
search. (2–5–2) Discussion, two hours. Individual or 
group project. The process of conducting research in social 
work that trains students to understand social work theory and 
practice through focus on upstream influences on health and mental 
health, one of over-arching determinants/pathways of health, 
focus/prepare grant proposals. S/U 
grading.

284A-284B-284C. Doctoral Research Apprentice-
ship. (2 to 4 each) Tutorial, to be arranged. Limited to 
PhD students. Exposes first-year PhD students to pro-
cess of conducting research in social welfare. Stud-
ents develop range of research skills and under-
standing of ethical procedures in research. Students 
participate in various activities depending on specific 
research project with which they work. Activities in-
clude research tasks such as conducting literature re-
views, developing research questions, collecting data, 
cleaning and preparing data, analyzing data, and 
writing up research proposal and presentation formats for 
submissions. Students work closely with their faculty 
mentor and other graduate students. Introduction to 
research process and skills necessary for conducting 
research in social sciences. In Progress (284A, 284B) 
and S/U or letter grading.

4) Discussion, three hours. Review of areas of re-
search of concern to social workers, with special at-
tention to design and implementation, data col-
lection, data processing, data reduction, analysis, and
285D. Research in Child Welfare. (4) Lecture, three hours. Integrated examination of development of empirical research in child welfare, with emphasis on current approaches to meet needs of children who come to attention of child welfare agencies. Examination of research and theory in child welfare field. Review of student knowledge of research methods and statistical and qualitative techniques. Letter grading.

285E. Research in Gerontology. (4) Lecture, three hours. Overview of research in aging. Development of research questions, selection of appropriate theoretical frameworks, and design of research. Operational definition of variables and selection of appropriate methods for research in aging. Special considerations in aging research, including sampling, questionnaire design, and recruitment issues. Letter grading.

285F. Research in Health. (4) Lecture, three hours. Research in area of health policy and services. Discussion of readings about range of research from field of health services, identification of research design issues, design and selection of research instruments, analysis of strengths and limitations of current approaches to health services research, consideration of alternative roles for social work practitioners in arena of health services. Letter grading.


285H. Program Evaluation Research. (4) Lecture, three hours. Discussion of differences and similarities between evaluation and other research, alternative program evaluation roles and limitations and evaluation research in real world, development of proposals for feasible program evaluation research. Letter grading.

285I. Research in Youth Populations. (4) Lecture, three hours. Research methods as applied to problems, issues, and interventions pertaining to youth populations. Instruction and experience in applying experimental and quasi-experimental designs, survey research methods, field methods, case studies, participatory methods, and observational techniques. Letter grading.

286A. Survey of Research Methods. (4) Seminar, three hours. Basic concepts underlying research methods. Content includes theoretical and conceptual approaches to research problem formulation; research design, including experimental, comparative, and survey; sampling; statistical methods; methods of observation and techniques of data analysis. Letter grading.

286B. Advanced Research Methods. (4) Seminar, three hours. Advanced concepts underlying research methods. Continuing study of theoretical and conceptual approaches to research problem formulation; research design, including experimental, comparative, and survey; sampling; statistical methods; methods of observation and techniques of data analysis. Letter grading.

286C. Research Internship. (4) Fieldwork. Four hours. Supervised study and training through participation in on-going research project or one initiated by students and carried out under faculty supervision, enabling students to apply research skills developed in prior courses. May be repeated for credit. S/U or letter grading.

289A-289B-290C. Seminars: Social Work. (4-4-4) Seminar, three hours; outside study, nine hours. Series of seminars dealing with trends in social welfare and social welfare with special emphasis on current social problems affecting individuals, groups, and communities and new patterns of intervention based on recent demonstrations and research. S/U or letter grading.

290D. Criminal Justice and Mass Incarceration. (4) Lecture two and one half hours. Exploration of relationship between social welfare and criminal justice system focusing on gangs, prison organization, reform, and reentry. Examination of life trajectories, development of substance response to parenting, U.S. and globally. Examination of origin and development of major criminal justice policy surrounding gangs and relationship to punishment, incarceration, dehuman, and development and theory, and social policy and services. Analysis of criminal justice system history, future directions, and capacity of social welfare programs to address needs of marginalized populations. Letter grading.

290E. Lesbian, Transgender, Health Law, and Public Policy. (4) Lecture two and one half hours. Examination of LGBT-identified communities throughout U.S. Identification of health disparities that exist within broad conception of LGBT-identified communities, including disparities among most marginalized individuals and those living at intersections of multiple identities. Use of law and policy by analyzing goal of achieving health equity for LGBT communities in current political climate. Offers opportunity to evaluate how better health outcomes for LGBT people may be helped by bringing relevant social science research to understanding law and policy matters moving forward. Letter grading.

290F. Firearm Violence Prevention Policy. (4) Lecture, two and one half hours. Introduction to upstream way of thinking about firearm-related violence. Examination of range of contemporary debates about firearm violence in U.S. using collection of philosophical, social, and epidemiological literature. Ways of thinking theoretically and scientifically about causes and consequences of firearm violence in different contexts, from mass shootings to firearm suicides. Major theories advanced to explain firearm violence, methods used in scientific study of firearm violence, and important findings about correlates, patterns, processes, and trends related to firearm violence. S/U or letter grading.

290G. Psychotropic Drugs and Medications: Harm Reduction Policies. (4) Lecture, two and one half hours. Philosophy and policy applications of harm reduction approaches to legal (including prescription) and illegal psychoactive drug use in U.S. and elsewhere. Visions and obstacles for future management of psychoactive drugs such as opioids, stimulants, psychedelics, and benzodiazepines according to harm reduction principles. Implications for social work practice across lifespan. Letter grading.

290H. Children’s Healthcare Needs: Systems Perspective. (4) (Same as Community Health Sciences M420 and Health Policy M420.) Lecture, three hours; fieldwork, one hour. Examination and evaluation of primary care, and practices that have evolved to identify, assess, and meet special needs of infants, children, and adolescents with developmental disabilities or chronic illness and their families. Letter grading.

290J. Child Welfare Policy. (4) (Same as Public Policy M212.) Lecture, three hours. Development of social policy as it affects families and children from different cultural backgrounds and as it is given form in public child welfare by examination of development of an infrastructure to support needs of children and families. S/U or letter grading.

290K. Mental Health Policy. (4) (Same as Public Policy M213.) Lecture, three hours. Examination of evolution of social policy and services for mentally ill, with emphasis on political, economic, ideological, and sociological factors that affect views of mental illness and services they are provided. S/U or letter grading.

290L. Poverty and Welfare Reform. (4) (Same as Public Policy M214 and Urban Planning M246.) Lecture, three hours. Major policy and research issues concerning poverty and social welfare policy directed toward poor in U.S. S/U or letter grading.

290M. Health Policy. (4) (Same as Public Policy M215.) Lecture, three hours. Introduction to contemporary issues in healthcare financing and delivery, providing historical perspective on emergence of these issues. Examination of major public programs and their relationship to issues of access and cost. S/U or letter grading.

290N. Public Policy for Children and Youth. (4) (Same as Public Policy M216.) Lecture, three hours. Policy issues that affect children and adolescents in relation to their interaction with society and community, with emphasis on impact of policy across federal, state, and local levels. S/U or letter grading.

290P. Aging Policy, Elderly and Families. (4) Lecture, three hours; outside study, nine hours. Designed for graduate students. Examination of theoretical models and concepts of policy process and application to aging policy. Analysis of decision-making processes that affect social policies. Description of historical development of contemporary policy. Exploration of current proposals and issues. Letter grading.


290R. Law and Policy. (4) (Same as Public Policy M237 and Urban Planning M248.) Lecture, three hours. Designed for graduate students. Study of major income-maintenance programs in U.S., with emphasis on interaction of moral attitudes toward poor and structure and implementation of law, policy, and administration. Current reform consensus and major reforms. Letter grading.

290S. Politics, Power, and Philanthropy. (4) (Same as Public Policy M227 and Urban Planning M287.) Lecture, three hours; outside study, nine hours. Use of political economy perspective to analyze forces that have shaped rise and characteristics of nonprofit sector and its constituent elements. Examination of social history of nonprofit sector in U.S. Exploration of legal and policy environments and distinct organizational forms. Comparative perspective between U.S. and other countries. S/U or letter grading.

290T. Juvenile Justice Policy. (4) Lecture, two and one half hours; outside study, nine hours. Designed for graduate students. Exploration of evolution of juvenile justice system in U.S. and issues that have shaped current system. Policy related to system to be theme throughout course. Letter grading.

290U. Community Development and Housing Policies: Roles of State, Civil Society, and Nonprofits. (4) (Same as Public Policy M243 and Urban Planning M275.) Lecture, three hours; outside study, nine hours. Designed for graduate students. Examination of role of U.S. housing policy and role of government agencies and community organizations. Is problem housing or economic development? Should interventions be directed toward inner city housing markets or through neighborhood strategies? What lessons can be learned from experiences of other countries? Letter grading.

290W. International Social Welfare. (4) Lecture, three hours; outside study, nine hours. Intended for graduate students interested in pursuing analysis of key international social welfare issues. Topics approached from perspective of globalization of social, economic, and political activities. Problems of global poverty, social injustice and inequality, and issues of racial, ethnic, and cultural diversity, with emphasis on multifaceted contributions of social work, social services, and social welfare and international social development within and rich and poor countries. Acquisition of knowledge of international social policies, activities, as well as analytical skills to address and debate complex international issues. S/U or letter grading.

290X. Comparative Perspective on States, Markets, and Civil Society. (4) (Same as Public Policy M278 and Urban Planning M262.) Lecture, two and one half hours. Governance is about solving and managing societal problems, such as climate change, pov- ery, migration, security, mobility, pollution, or trade re- lations. Contemporary governance is complex set of
laws, rules, and regulations involving rights and responsibilities of the institutional complexes of modern societies (state, market, and civil society), interests that guide them, and legitimacy and resources they command. Actors often reach across systemic, jurisdictional, and national boundaries; their relationships can be cooperative, neutral, or fraught with conflict, and governance outcomes can vary significantly. These dynamics involve fundamental challenges and, consequently, require significant governance readiness. Lectures, debates, in-class exercises, and student presentations. Exploration of several issues in more detail, e.g., types of state capacities, democracy, crisis management, governance innovation, and specific policy fields such as infrastructure or global finance. S/U or letter grading.

375. Teaching Apprentice Practicum. (1 to 4) Seminar, to be arranged. Preparation: apprentice personnel employment as teaching assistant, associate, or fellow. Teaching apprenticeship under active guidance and supervision of regular faculty member responsible for curriculum and instruction at UCLA. May be repeated for credit. S/U grading.

401A-401B-401C. Practicum: Social Work. (3–3–3) Laboratory, 16 hours. Educationally directed practicum conducted in selected health, welfare, and educational facilities. Provides opportunities for students to test their theoretical knowledge and to acquire disciplined practice foundation in profession. In Progress (401A, 401B) and letter (401C) grading.


596A. Special Study and Research in Social Welfare. (2 to 8) Tutorial, to be arranged. Individual programming for selected students to permit pursuit of subject in greater depth. S/U or letter grading.

596B. Special Study and Research for PhD Candidates. (2 to 12) Tutorial, to be arranged. Limited to PhD students. S/U grading.

597A. Preparation for MSW Comprehensive Examination. (2 to 8) Tutorial, to be arranged. S/U grading.

597B. Preparation for PhD Qualifying Examinations. (2 to 12) Tutorial, to be arranged. Limited to PhD students. S/U grading.

and to employ interdisciplinary skills to help solve them

Admission

Admission to the Human Biology and Society BA major is by application and competitive, using courses, grades, grade-point averages, and personal statements as minimum standards for consideration. Only a limited number of students are admitted each year. Applicants are not automatically accepted into the major.

Students must apply for major standing at the beginning of spring quarter of their sophomore year. Applications submitted after the spring quarter deadline are considered during fall quarter of the junior year only as space in the program permits. No applications are considered after fall quarter of the junior year.

Premajor standing is not required to apply for the major. A copy of the major application is available on the department major web page.

Premajor

Incoming freshmen may be admitted as premajors on acceptance to UCLA. All other students must first complete Society and Genetics 5, M71A, or M72A, and then contact the undergraduate counselor in 3360 Life Sciences to request premajor standing.

Preparation for the Major

Required Core: One course from Society and Genetics 5, M71A, or M72A.

Also required are Anthropology 1, Chemistry and Biochemistry 14A, Life Sciences 1 and 2, or 7A, 7B, and 7C, Statistics 10 or 13, and two social theory courses from American Indian Studies M10, Anthropology 3, Asian American Studies 20, Chicana and Chicano Studies 10A, 10B, Clusters M19A through M20B, Gender Studies 10, Geography 3, History 3C, Honors Collegium 70A, Molecular, Cell, and Developmental Biology 50, 60, Philosophy 4, 6, 8, 22 or 22W, Public Policy 10A, Society and Genetics 85, Sociology 1N, 5S.

Each course must be taken for a letter grade, and students must complete all premajor courses with a cumulative minimum grade-point average of 2.9.

Transfer Students

Transfer applicants to the Human Biology and Society BA major with 90 or more units must complete the following preparatory courses prior to admission to UCLA: one year of general biology (the equivalent of Life Sciences 1 and 2, or 7A, 7B, and 7C), introductory chemistry, one statistics course, one anthropology human evolution course, and two introductory social sciences or history courses. Society and Genetics 5 must be taken at UCLA once a transfer student is admitted to the University.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

The Major

Required: Society and Genetics 101, 105A, 105B, 108; 4 units from course 195CE, 196, or 199; and five courses (at least one of which must be a society and genetics course) from one of the following concentration areas:


- Historical and Social Studies of Science: Anthropology 100, 131, 143, Asian American Studies 105, Bioengineering 165EW, Disability Studies 101 or 101W, M121, Ecology and Evolutionary Biology 100, 120, C126, 130, 175, Environmental Health Sciences 100, C185A, C185B, Epidemiology 100, Gender Studies M134, M162, M164, M180B, Geography M125, M131, Global Studies 102, 104, History M151C, 179A, 179B, 180A, 180C, Honors Collegium 177, Human Genetics C144, Life Sciences 107, Neurobiology M169, Philosophy 124, 125, 129, 130, 137, 155A, Society and Genetics 120, 121, 120, 130, 131, M133, M140, M144, 160, 161, 162, 163, 164, 165, 175, 180, 188, 195CE, 197, 199, Sociology M138, 143, M148, 154, 156, 170. See below for additional course options in the subfocus areas of cell development, microbiology and immunology, molecular biology and genomics, psychology, and psychology and mental health.

- Molecular Biology and Genetics: Molecular, Cell, and Developmental Biology 142, 143, 144, 172, and one course from CM156, Human Genetics CM124, CM144, Microbiology, Immunology, and Molecular Genetics CI22, or 158

- Physiology: Physiological Science 111A, 111B, and one course from 147, 149, or 177


Each course must be taken for a letter grade and passed with a grade of C– or better, and all courses must be completed with a cumulative minimum grade-point average of 2.0.

Optional Subfocus Areas

The subfocus options are designed and recommended for students who intend a career in medicine or allied health services or are planning to go on to graduate school in the life or health sciences. Students may select any subfocus option listed in their concentration area and complete three subfocus courses that may then be used to satisfy as many as three of the five courses required in their concentration area.

Cell Development: Molecular, Cell, and Developmental Biology 138, 165A, 168

Ecology and Evolutionary Biology: Three courses from Anthropology 124P, 124Q, 124S, 126Q, Ecology and Evolutionary Biology 100, 116, 120, 121, C126, 129, 130, C135, 175, 176

Microbiology and Immunology: Microbiology, Immunology, and Molecular Genetics 101, C185A, and one course from 103AL, 106, 107, 158, or 168

Molecular Biology and Genomics: Molecular, Cell, and Developmental Biology 144, 172, and one course from CM156, Human Genetics CM124, CM144, Microbiology, Immunology, and Molecular Genetics CI22, or 158

Psychology: Physiological Science 111A, 111B, and one course from 147, 149, or 177

Population Genetics: Two courses from Ecology and Evolutionary Biology C135, Human Genetics CM124, Society and Genetics 120, and one course from Ecology and Evolutionary Biology 120, 121, or Human Genetics C144

Psychology and Mental Health: Three courses from Psychology M107, 112A, 112B, 115, 127A, 129C

Human Biology and Society BS

Learning Outcomes

The Human Biology and Society major has the following learning outcomes:

- Demonstrated strong foundation of knowledge in social science and evolutionary biology and genetics
• Skills to critically analyze and evaluate qualitative and quantitative data and social biological theories
• Formulation of effective and convincing written and oral arguments that integrate biological and social evidence
• Demonstrated broad comprehension of mathematical, physical, and life sciences as preparation for medical school
• Work well in multidisciplinary teams
• Skills at communicating across disciplines and leveraging knowledge from multiple perspectives
• Demonstrated proficiency in at least one area of concentration at the interface between biology and society
• Integration of ethical, legal, and societal concerns in planning, conducting, and assessing research
• Use of societal and biological information to critically assess complex real-world problems and to employ interdisciplinary skills to help solve them
• Use of societal and biological information to critically assess complex real-world problems and to employ interdisciplinary skills to help solve them

Admission
Admission to the Human Biology and Society BS major is by application and competitive, using courses, grades, grade-point averages, and personal statements as minimum standards for consideration. Only a limited number of students are admitted each year. Applicants are not automatically accepted into the major.

Students must apply for major standing at the beginning of spring quarter of their sophomore year. Applications submitted after the spring quarter deadline are considered during fall quarter of the junior year only as space in the program permits. No applications are considered after fall quarter of the junior year.

Premajor standing is not required to apply for the major. A copy of the major application is available on the department major web page.

Preparation for the Major
Required Core: One course from Society and Genetics 5, M71A, or M72A.

Also required are Anthropology 1; Chemistry and Biochemistry 14A, 14B, 14C, 14D (or 20A, 20B, 20L, 30A, 30AL, 30B); Life Sciences 30A, 30B, and 40 or Statistics 13, or Mathematics 3A, 3B, 3C, and Statistics 10 or 13, or Mathematics 31A, 31B, 32A, and Statistics 10 or 13, Physics 1A, 1B, 4A, 4B (or 5A, 5B, 5C); and two social theory courses from American Indian Studies M10, Anthropology 3, Asian American Studies 20, Chicana and Chicano Studies 10A, 10B, Clusters M1A through BOCW, Gender Studies 10, Geography 3, History 3C, Molecular, Cell, and Developmental Biology 40, 50, 60, Philosophy 4, 6, 8, 22 or 22W, Public Policy 10A, Society and Genetics BS, Sociology 1, MS.

Students must also complete one of two life sciences sequences—either Life Sciences 1, 2, 3, 4, and 23L, or 7A, 7B, 7C, and 23L. They may not substitute courses in either sequence.

Each course must be taken for a letter grade and students must complete all premajor courses with a cumulative minimum grade-point average of 2.5.

Transfer Students
Transfer applicants to the Human Biology and Society BS major with 90 or more units must complete the following introductory courses prior to admission to UCLA: one year of general biology with laboratory for majors, preferably equivalent to Life Sciences 1 and 2, or 7A, 7B, and 7C, one year of calculus, one year of general chemistry with laboratory for majors, and one semester of organic chemistry with laboratory.

Transfer applicants must also complete at least two of the following introductory courses prior to admission to UCLA: one statistics course, one anthropology human evolution course, and two introductory social sciences or history courses. A second semester of organic chemistry or one year of calculus-based physics is strongly recommended but not required for admission. Society and Genetics 5 must be taken at UCLA once a transfer student is admitted to the University.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

The Major
Required: Life Sciences 107 (if Life Sciences 7A, 7B, 7C, and 23L are taken); Society and Genetics 102, 105A, 105B, 108, 4 units from course 195CE, 196, or 199; and five courses (at least one of which must be a society and genetics course) from one of the following concentration areas:


Each course must be taken for a letter grade and passed with a grade of C– or better, and all courses must be completed with a cumulative minimum grade-point average of 2.0.

Optional Subfocus Areas
The subfocus options are designed and recommended for students who intend a career in medicine or allied health services or are planning to go on to graduate school in the life or health sciences.
Students may select any subfocus option listed in their concentration area and complete three subfocus courses that may then be used to satisfy as many as three of the five courses required in their concentration area.

Cell Development: Molecular, Cell, and Developmental Biology 138, 165A, 168

Psychology and Mental Health: Evolutionary Biology C135, Human Genetics CM124, C144, Microbiology, Immunology, and Molecular Genetics CM166, Molecular, Cell, and Developmental Biology CM156, Philosophy 13A, C154, HSA, C165, Psychology M140, Society and Genetics 120, 121, 130, 131, M133, M140, M144, 160, 161, 162, 163, 164, 165, 175, 180, 189, 197, 199, Social Welfare M140, Sociology 143, M162, 170.

Microbiology and Immunology: Microbiology, Immunology, and Molecular Genetics 101, C185A, and one course from 103AL, 106, 107, 158, or 168

Molecular Biology and Genomics: Molecular, Cell, and Developmental Biology 144, 172, and one course from CM156, Human Genetics CM124, C144, Microbiology, Immunology, and Molecular Genetics C122, or 158

Ecology and Evolutionary Biology: Three courses from Anthropology 124P, 124Q, 124S, 128P, Ecology and Evolutionary Biology 100, 116, 120, 121, C126, 129, 130, C135, 175, 176

Physiology: Physiological Science 111A, 111B, and one course from 147, 149, or 177

Population Genetics: Two courses from Ecology and Evolutionary Biology C135, Human Genetics CM124, Society and Genetics 120, and one course from Ecology and Evolutionary Biology 120, 121, or Human Genetics C144

Psychology and Mental Health: Three courses from Psychology M107, 112A, 112B, 127A, 129C

Honors Program

To receive departmental honors, students must take each course in the major for a letter grade and complete all upper-division courses in the major with an overall grade-point average of 3.5 or better. For highest departmental honors, students must also take Society and Genetics 197 or 199 in which they write a research paper in their major concentration area and receive a grade of A or better.

Society and Genetics Minor

Admission to the Society and Genetics minor is by application and competitive, using courses, grades, grade-point averages, and personal statements as minimum standards for consideration. Applicants must be in their junior year and have an overall grade-point average of 2.5 or better. Only a limited number of students are admitted each year. Applicants are not automatically accepted into the minor. Students must apply for admission to the minor at the beginning of fall quarter of their junior year. No applications are considered after that.

Information about the application process is available on the minor website and by consultation with the undergraduate counselor in 3360 Life Sciences.

Required Upper-Division Courses (30 to 34 units): Society and Genetics 101 (or, if Life Sciences 4 or 107 has been completed, one course from the approved list of electives), 102, 191S, and at least four from the approved list of electives), 102, 191S, and at least four from the approved list of electives). Students must apply for admission to the minor at 3360 Life Sciences.

A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor.

Each minor course must be taken for a letter grade of C- or better. Successful completion of the minor is indicated on the transcript and diploma.

Society and Genetics Minor

Lower-Division Courses

5. Integrative Approaches to Human Biology and Society. (5) Lecture, three hours; discussion, one hour. Introduction to general problem-based approaches to study of biology and society and areas of concentration, such as health and medical policy, evolutionary biology, culture, and behavior, historical and social studies of life sciences, medical ethics, and public health, and population genetics and history, and central thematic issues shared across concentrations, such as commercialization of life and public understanding of science. Letter grading.

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

M71A-M71B-M71CW. Biotechnology and Society. (6–6–6) (Same as Clusters M71A-M71B-M71CW.) Course M71A is enforced requisite to M71B, which is enforced requisite to M71CW. Limited to first-year freshmen. Letter grading. M71A-M71B-M71CW. Lecture, three hours; discussion, two hours. Exploration of methods, applications, and implications of biotechnology and of ethical, social, and political implications as well as biological underpinnings. M71CW. Special Topics. Seminar, three hours. Enforced requisite: course M71B. Topics include in-depth examination of ethics and human genetics, bioweapons and biodefense, sex and biotechnology. Satisfies Writing II requirement.

M72A-M72B-M72CW. Sex from Biology to Gendered Society. (6–6–6) (Same as Communication M72A-M72B-M72CW, Clusters M72A-M72B-M72CW, and Society M72A-M72B-M72CW.) Course M72A is enforced requisite to M72B, which is enforced requisite to M72CW. Limited to first-year freshmen. Letter grading. M72A-M72B-M72CW. Lecture, three hours; discussion, two hours. Examination of many ways in which sex and sexual identity shape and are shaped by biological and social forces, approached from complementary perspectives of anthropology, biology, medicine, and sociology. Specific topics include biological origins of sex differences, intersex, gender identity, gender inequality, homosexuality, sex differences, sex/gender and law, and politics of sex research. M72CW. Special Topics. Seminar, three hours. Enforced requisite: course M72B. Topics may include politics of reproduction, sexuality, sexual identity, social construction of gender, and reproductive technologies. Satisfies Writing II requirement.

85. Critical Study of Health, Sickness, and Healing in Global Perspective. (4) Lecture, three hours; discussion, one hour. Introduction to sociocultural, historical, and global study of health and sickness. Use of case studies of globally important infectious and chronic diseases (diabetes, Ebola, HIV/AIDS) to analyze factors, including key dimensions of diversity (class, gender, urban/rural development) that influence how populations variously encounter, experience, understand, and cope with sickness. Special focus on relationships between Western medicine and traditional and alternative approaches to healing. Letter grading.

Honor Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to lower-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

89HC. Honors Contracts. (1) Tutorial, three hours. Limited to 8 students. Students in consultation with Department Chair. Designed as adjunct to lower-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. Limited to maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

Student Research Project. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Courses

101. Genetic Concepts for Human Sciences. (5) Lecture, three hours; discussion, one hour. Not open to students with credit for Life Sciences 4. Focused treatment of selected complex genetic concepts from molecular biology, population and quantitative genetics, and evolutionary biology, with emphasis on gene-environment interactions, at various levels and culminating in exploration of notion of co-evolution of genetics and society. Basic science concepts presented through real-world issues and research problems. Current research, cancer, immune system and development, and how this research is performed and adds to knowledge. Letter grading.

102. Societal and Medical Issues in Human Genetics. (5) Lecture, three hours; discussion, two hours. Sequence of entire human genome is now known. Consideration of how this knowledge impacts concepts of ourselves as individuals and of our place among, concepts of race/ethnicity and gender, ability of DNA-based forensics to identify specific individuals, ownership and commodification of genes, issues of privacy and confidentiality, issues of genetic discrimination, issues of predictive genetic testing. Discussion of human cloning for reproductive and therapeutic purposes. Exposure to medical genetics cases. Discussion of role of whole genome sequencing in clinical setting. Human Genome Project influence on medicine and on our concepts of self and identity. Letter grading.

105A. Ways of Knowing in Life and Human Sciences. (4) Lecture, three hours; discussion, one hour. Enforced requisite: course 5 or M71A or M72A. Course 105A is not requisite to 105B. Introduction to study of epistemology to train students to recognize different ways of knowing what we know. In life and human sciences, instruments and methods are used to study, measure, and experiment. Exploration of how they are manifest in technologies that cut across disciplines to help students evaluate experimental standards of proof, and qualitative versus quantitative studies. Explorations may include DNA sequencing, tissue culture, bioinformatics, statistics, photography and computer graphics, charts, trees, maps. DNA sequencing is used to study gene functions, evolutionary patterns, and disease and plays role in legal context to reconstruct aspects of human history or to trace identity of people. Databases play role in life sciences in
105B. Problems of Identity at Biology/Society Interface. (4) Lecture, three hours; discussion, one hour. Requisites: Anthropology 1, Life Sciences 1, Life Sciences 4, or 23L, or 7C (each may be taken concur-
rently). Course 105A is not requisite to 105B. Exploration of problems of human identity that are inherently biological and social. Topics vary and may include race, obesity and nutrition, autism, deafness or dis-
ability, gender, intelligence, or sexuality. Topics are chosen to reflect broad, complex, substantive questions that are difficult to define and that are connected up in conceptions of what it is to be human, that it has spawned research from va-
riety of perspectives in biological and human sci-
ences. Students critically engage various intellectual perspectives—some competing, some complement-
yary—that intersect on one particular topic. Examina-
tion of how researchers from social/historical and bio-
logical sciences construct topic as intellectual problem, methods they bring to bear on it, and find-
tings they have produced. Letter grading.

108. Human Biology, Genetics, and Society. (5) Lecture, three hours; laboratory, two hours. Limited to seniors. Society major in genetics or biology. Lecture, readings, discussions, and development of collabora-
tive culminating project. Group-based research proj-
ects in mapping and staging contemporary contro-
versies at the intersections of biology, genetics, and society. Reading of large amounts of material to make sense of both scientific concepts and social and polit-
ical issues, with original research project and presen-
tation required. Letter grading.

120. Genetics and Human History. (4) Lecture, three hours. Requisite: course 101 or Life Sciences 107. Ad-
vancements in genomic research have rapidly trans-
formed traditional archaeological and historical inves-
tigations. Drawing from recent research, focus on how genomic analysis has shed new light on old debates such as migration of Homo sapi-
eus out of Africa, human interbreeding with Nean-
derthals, first migration to North America, ethnic ex-
pansions throughout Europe, and genetic legacy of historical figures such as Thomas Jefferson and Genghis Khan. Discussion of practical and theoretical issues surrounding genetic research on history of hu-
mans, including challenges of using ancient and modern DNA, population genetic theory, and ethical implications of genetic research for understanding ethnic identity and history. Letter grading.

121. Race, Science, and Citizenship. (4) Seminar, three hours. Early development of scientific method and systematic exclusion of those in subordinate so-
cial groups, and the politics of science. Interrogation of scien-
tific practices and life sciences. Letter grading.

123. Social and Historical Study of Information, Science, Software, and Networks. (4) Lecture, three hours. In-
troduction to critical study of information technology, software, and networks. Thematic focus on history of software, operating systems and networks, free/open source software, standards, intellectual property, and telecommunications regulation. Theoretical focus on publics and public spheres, network theories, and the-
ories of information society. Particular attention to re-
tensions of information to scientific and engineering practices and life sciences. Letter grading.

132. Food Cultures and Food Politics. (5) Same as Anthropology 132L. Lecture, four hours; discussion one hour (when scheduled). Requisite: Environmental Composition 3. Introduction to in-
terdisciplinary field of food studies, with focus on how literature, art, science writing, and visual culture ad-
dress political dimensions of food and agriculture in specific contexts. P/NP or letter grading.

133. Environmental Sociology. (4) Same as Envi-
ronment M133 and Sociology M115S. Lecture, three hours; discussion, one hour. Examination of so-
ciety and environment. Analysis in detail of interrela-
tions between social factors (such as class, race, gender, and religion) and environmental factors (such as pollution, sustainability, and global warming). P/NP or letter grading.

134. Food and Health in Global Perspective. (4) Lecture, three hours. Study problematizes and adds depth to common-sense understandings of healthy and unhealthy consumption by examination of rela-
tionship between food and health, from critical and holistic perspective, that accounts for interplay of bi-
ology and culture within broader historical, societal, and global contexts. Topics include what is meant by health, especially in terms of diet; relationship be-
tween food practices and evolutionary biology, as well as particular environments of societies, cultural sys-
tems, and historical periods; and how major global food has come to dominate their dominance and consequences for health; and influences of food pro-
duction, distribution, and preparation on health. Letter grading.

M140. Hormones and Behavior in Humans and Other Animals. (4) Same as Anthropology M128R and Physiological Science M140L. Lecture, three hours; discussion, one hour. Examination of hor-
mones, and physiology and genetics involved in hor-
monal processes and function. Interactions among hormonal, environmental, and behavioral stimuli, and behavior. Sexual behavior, development and emigration, stress, social behavior, dominance relationships, aggression, chem-
ic communication, and reproductive suppression. Critical and interdisciplinary approach to behavior and repro-
duction about humans and other species. Consider-
ation of spectrum of noninvasive to highly invasive en-
docrine sampling methods, and which types of ques-
tions can be answered in laboratory and field, as well as ethics of hormonal studies and their implications for humans and other animals. Letter grading.

141. Nature versus Nurture: Genes and Environ-
ment. (4) Seminar, three hours. Comprehensive and practi-
cational examination of science and environment inter-
action. Discussion of primary compo-
nents of field, including role of metabolic pathways in modifying environmental responses and importance of environmental influences in human disease. Exploration of selected hot topics in field such as importance of epigenetics and of microbiome. Course is highly useful for further study in medical field or public health. Letter grading.

M142. Primate Genetics, Ecology, and Conserva-
tion. (4) Same as Anthropology M128S. Seminar, three hours. Focus on genetic research on wild pri-
mates at different geographic scales, using readings from primary literature in genetics, ecology, and behavior. Study of paternity and kinship, intrapop-
ulation variation, population genetics, biogeography, systematics, phylogenetics/phylogenomics and con-
temporary conservation biology. Cross-regional and cross-taxonomic study of var-
ious markers considered for different research ques-
tions, e.g., mitochondrial DNA, microsatellites, nuclear genes, Y-chromosome, as well as GWAS and ge-
nomic next generation sequencing platforms, and epi-
genetic markers. Discussion of methods in fieldwork and lab work, including sampling techniques, collec-
tion techniques, wet lab techniques, software analysis packages, and statistical analyses. Introduction-to-graduate understanding of genetics expected; study further illu-
minates areas in molecular biology relevant to case studies analyzed. Letter grading.

M143. Amazon in Anthropocene. (4) Same as An-
thropology M128T. Seminar, three hours. Consider-
ation of major issues faced in Amazon region today using lenses of biology, geography, biological anthrop-
ology, primatology, cultural anthropology/ethnogra-
phy, history, comparative literature, film studies, po-
litical science, and environmental science. Analysis of Amazon paleogeography and ecology over time to highlight charismatic species, biodiversity, and habitat types. Focus on human migration into Amazon, diver-
sity of indigenous groups today, and historic/present interactions with environment. Study of European ex-
peditions that carved out political boundaries within Amazon. Study of historical/contemporary effects of human en-
terprise. Required: Love on Ecology. Exploration of changing power dynamics, inequity, and (un)sustain-
ability of different cultural practices and technologies. Topics include rubber boom, indigenous resistance to oil exploration, hydroelectric dams and clean energy, deforestation and ocean, and international land grabs for soy plantations. Highlights value of different kinds of knowledge and expertise for devising solutions for current crises in Amazon. Letter grading.

M144. Stress and Society: Biology and Inequality. (4) Same as Sociology M144L. Lecture, three hours; discussion, one hour. Integrative view of health dispara-
rity as one of most pressing issues of society, through investigation of effects of socioeconomic status (SES) on health and disease, using specific lens of stress biology. Topics include introduction to funda-
mentals of physiology and genetics of litera-
ture on poverty and SES with studies on physiological consequences of poverty, and introduction of con-
cepts of life course by following stress biology through childhood development and into adulthood. Letter grading.

M157. Biology of Superheroes: Exploring Limits of Form and Function. (4) Same as Ecology and Evolu-
tionary Biology M157T. Lecture, four hours; discussion, one hour. Explores the role of genetics and society, as well as influences of controversy in behavior genetics using a variety of perspectives. Lecture, four hours; discussion, one hour. Requisites: Life Sciences 1 and 4, or 7A and 7B. Combines topics posed in popular graphic novels, movies, and television with primary scientific literature to understand phenomena in natural world and derive fundamental scientific principles. Topics covered include evolution, genetics, physiology, bio-
mechanics, brain-machine interfacing, and artifical in-
telligence among others. Students synthesize primary literature on diverse subjects presented. Letter grading.

160. Politics of Heredity. (4) Seminar, three hours. Exploration of intersection of politics and genetics in liberal democracies and totalitarian regimes. How ge-
netics has been used to consolidate and undermine political authority, and how political authority has been employed to both promote and restrict genetics. Con-
sideration of several historical episodes such as rise to power in Soviet Union of T.D. Lysenko, peasant agron-
omist who rejected Mendelism in favor of quasi-La-
marckian approach to genetics; participation of genet-
ic research in mobilization of Nazi ideology; and debates over compulsory sterilization of mental defec-
tives in U.S., Canada, and Europe from 1920s to 1940s. Contemporary cases such as controversies over genetically modified foods and regulation and governance of reprogrammatic technologies, and rise of disease advocacy groups as important players in de-
termining funding and direction of genetic research. Letter grading.

161. Controversy and Behavior Genetics. (4) Sem-
in, three hours. Behavior genetics is controversial and seeks genetic links to intelligence, personality, mental illness, and criminality, among many other traits. Differences among men and women, or racial groups, and what social policies might do about those differences. Analysis of causes and effects of controversy in behavior genetics using critical sociology and history. Consideration of scien-

162. Biotechnology, Law, and Body. (4) Seminar, three hours. Historical, ethical, social, legal, and policy issues emerging from new biotechnological developments. Examination of reproductive issues, including abortion, assisted reproduction, disputes regarding disposition of embryos, implantation genetic testing, cloning, and genetic enhancements. Letter grading.

163. Science and Popular Movements: Controversy, Conflict, and Collaboration. (4) Seminar, three hours. Historical and philosophical analysis of myth of separation between science and society. Consideration of how ethical and scientific principles are used to generate opposition to scientific analysis, in this course to biomedicine in 21st century. Introduction to political and legal discourse of rights. Historical perspective of how law and policy have treated our bodies. Legal and policy issues emerging from new biotechnological developments. Examination of reproductive issues, including abortion, assisted reproduction, disputes regarding disposition of embryos, implantation genetic testing, cloning, and genetic enhancements. Letter grading.

164. Ethics in Health and Research. (4) Lecture, three hours. Requisite: course 102. Should one be allowed to choose sex of babies or whether they will be tall enough to be next basketball star? Should terminally ill be helped to die? Do or whether they will be tall enough to be next basketball star? Should terminally ill be helped to die? Do

180. Special Courses in Society and Genetics. (4) Lecture, three hours. Departmentally sponsored experimental or temporary courses on selected topics, such as those taught by visiting faculty members. May be repeated for credit with topic change. Letter grading.

185S. Being Human: Identity in Age of Genomics and Neurosciences. (Same as Disability Studies 165M and Honors College 165M) Seminar, three hours. Examination of difference between and mental illness through different approaches to nature and treatment of biological and medical accounts of brain-based pathology (and identity) to Mad Pride movement emphasis on mental diversity. Considering philosophical questions regarding personal identity. Concepts of brain-based pathology and identity are investigated through consideration of conditions such as dissociative identity disorder, trauma, psychosis, autism, and depression. P/N or letter grading.

186. Special Courses in Society and Genetics. (4) Seminar, three hours. Departmentally sponsored experimental or temporary courses on selected topics, such as those taught by visiting faculty members. May be repeated for credit with topic change. Letter grading.

188A. Individual Studies for USIE Facilitators. (1) Tutorial, to be arranged. Enforced corequisite: Honors College 101E. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor. May be repeated for credit with topic change. Letter grading.


188C. Individual Studies for USIE Facilitators. (2) Tutorial, to be arranged. Enforced corequisite: course 188B. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor while facilitating USIE 885 course. Individual contract with faculty mentor required. May be repeated. Letter grading.

189. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as an adjunct to undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/N or letter grading.

189HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designated reading course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual contract required. Honors content noted on transcript. Letter grading.

190. Research Colloquia in Society and Genetics. (1) Seminar, one hour. Limited to juniors/seniors. Designed to bring together advanced undergraduate students undertaking faculty-supervised tutorial research to discuss their own work or related work in society and genetics. May be repeated once for credit with topic change. P/N or letter grading.

191. Variable Topics Research Seminars: Perspectives in Society and Genetics. (5) Seminar, three hours. Enforced prerequisites: courses 101 (or Life Sciences 4), 200A, 105B. Study of genetics itself is deeply social. Study of how biologists and anthropologists have conceptualized relations of genes and (social) environment. Reading of accounts of human nature, human flourishing, and dignity that seem to privilege nature as something that can guide ethical thought and action. How these accounts might encourage or discourage people from manipulating their genetic inheritance. Consideration of what is new in new genetics. Current discussions of promise and peril of genetics in relation to society. Cullminating paper required. May be repeated once for credit with topic change. Letter grading.

191R. Capstone Seminar: Human Biology and Society. (5) Seminar, three hours. Enforced prerequisites: courses 101 (or Life Sciences 4), 200A, 105B. Study of genetics itself is deeply social. Study of how biologists and anthropologists have conceptualized relations of genes and (social) environment. Reading of accounts of human nature, human flourishing, and dignity that seem to privilege nature as something that can guide ethical thought and action. How these accounts might encourage or discourage people from manipulating their genetic inheritance. Consideration of what is new in new genetics. Current discussions of promise and peril of genetics in relation to society. Cullminating paper required. May be repeated once for credit with topic change. Letter grading.

191S. Capstone Seminar: Society and Genetics. (5) Seminar, three hours. Enforced prerequisites: courses 101 (or Life Sciences 4), 200A, 105B. Study of genetics itself is deeply social. Study of how biologists and anthropologists have conceptualized relations of genes and (social) environment. Reading of accounts of human nature, human flourishing, and dignity that seem to privilege nature as something that can guide ethical thought and action. How these accounts might encourage or discourage people from manipulating their genetic inheritance. Consideration of what is new in new genetics. Current discussions of promise and peril of genetics in relation to society. Cullminating paper required. May be repeated once for credit with topic change. Letter grading.

191T. Individual Studies in Society and Genetics. (2-6) Seminar, one hour. Limited to undergraduate students. Discussion of topics related to guest speaker series. May be repeated for credit. P/N or letter grading.

195CE. Community or Corporate Internships in Society and Genetics. (4) Tutorial, to be arranged, fieldwork, eight to 10 hours. Limited to juniors/seniors. Internship in corporate, governmental, or nonprofit setting coordinated through Center for Community Learning. Students complete written reports, attend biweekly meetings with graduate student coordinator, and write final research paper. Faculty sponsor and graduate student coordinator coordinate internship. May be repeated once for credit with topic change. Letter grading.

197. Individual Studies in Society and Genetics. (2 to 4) Tutorial, to be arranged. Limited to juniors/seniors. Individual intensive study, with scheduled meetings to be arranged between faculty member and student. May be repeated for credit with topic change. P/N or letter grading.
Sociology / 737

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William M. Mason, PhD
Ruth M. Milkman, PhD
Jeffrey Prager, PhD
Jerome Ravitch, PhD
William G. Roy, PhD
Emmanuel A. Schegloff, PhD
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Warren D. Tenhouten, PhD
Donald J. Treiman, PhD
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Jeffrey J. Gruhn, PhD
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Aliza R. Luft, PhD
Desi Rodriguez-Lonebear, PhD
Giovanni Rossi, PhD

Min Zhou, PhD (Walter and Shirley Wang Professor of U.S./China Relations and Communications)
Lynne G. Zucker, PhD

Professors Emeriti
Jeffrey C. Alexander, PhD
Rodolfo Alvarez, PhD
Ronald M. Andersen, PhD (Fred W. and Pamela K. Wasserstein Professor Emeritus of Health Services)
Kenneth D. Bailey, PhD
Richard A. Berk, PhD
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Scope and Objectives
Sociology is the study of the organization, dynamics, and consequences of social life. The scope of the discipline is as broad and diverse as social life itself. Sociologists study social interaction and relationships, organizations and institutions, communities and whole societies. The methods of sociological investigation are also varied: sociologists immerse themselves in the daily life of groups, interview group participants, examine recorded interaction, interpret historical documents, analyze census data, and conduct large surveys. The methods and concepts of sociology yield powerful insights into the social processes shaping lives, problems, and possibilities in contemporary society. The capacity to identify and understand these processes—capacity that C.W. Mills called "the sociological imagination"—is valuable preparation for personal and professional participation in a changing and complex world.

In addition to contributing to a liberal arts education, the Sociology major prepares individuals for a broad range of career options and graduate and professional studies. The analytic perspectives and skills gained in the major are a foundation for careers in law, social welfare, urban planning, business, education, and public health. The major also supplies a foundation for students intending to pursue graduate work in sociology and related fields. Employment opportunities available to the graduate with a Bachelor of Arts degree in Sociology also include work in community service organizations and health agencies, government service, and human resources.

The Department of Sociology faculty includes internationally renowned scholars who address topics ranging in scope from the organization of face-to-face interaction to the consequences of globalization. The department boasts outstanding teachers—five of whom have won Distinguished Teaching Awards—and excellently trained teaching assistants, many of whom have also won awards. The select honors program has a record for training students in the fundamentals of research and generating honors theses of substantial accomplishment. The PhD in Sociology usually leads to a career in research and/or teaching. Although most sociologists are employed by universities, there are increasing career opportunities in government and other non-university research centers.

Undergraduate Study

Sociology BA
Learning Outcomes
The Sociology major has the following learning outcomes:

- Critical evaluation of social and political arguments using empirical data
- Effective and convincing formulation of written and oral arguments that integrate sociological evidence
- Demonstrated understanding of the difference between an individual-level and collective-level explanation of behavior
- Demonstrated understanding of the major sociological methods, including interviewing, ethnography, conversation analysis, content analysis, survey design, and statistical analysis, the types of questions they can be used to answer, and their limitations
- Demonstrated familiarity with several major classical contemporary sociological theoretical perspectives and how they can be used to analyze contemporary or historical events or phenomena
- Understanding of some ways in which biographies are shaped by institutions, patterns of social inequality, or cultural practice

Premajor
Only students with fewer than 90 units completed (excluding Advanced Placement units/credit) may declare the Sociology major once they complete either Sociology 1 or 20 with a grade of C or better.

mastery of subject matter (paper or other product) required. May be repeated for credit. Individual contract required. Letter grading.

199. Directed Research in Society and Genetics. (2 to 4) Tutorial, six to 12 hours. Preparation: submission of written proposal outlining study or research to be undertaken due to undergraduate advisor for department approval. Studies to involve laboratory research, not primarily literature surveys or library research. Proposal to be developed in consultation with instructor. Limited to juniors/seniors. Department majors may enroll with sponsorship from department faculty members or preapproved outside faculty members. Other undergraduates may enroll only with department faculty advisors. Supervised individual research under guidance of faculty mentor. At end of term culminating paper describing progress of project and signed by student and instructor must be presented to department. May be repeated for credit. Individual contract required. Letter grading.

Graduate Course
375. Teaching Apprentice Practicum. (1 to 4) Seminar, to be arranged. Preparation: apprentice personnel deployment as teaching assistant, associate, or fellow. Teaching apprenticeship under active guidance and supervision of regular faculty member responsible for curriculum and instruction at UCLA. May be repeated for credit. S/U grading.
Preparation for the Major

**Required:** Sociology 1, 20, and one course from Political Science 6, Statistics 10, or 13.

A minimum grade of C is required in each preparation for the major course. Students with a grade-point average less than 2.0 in the preparation coursework are not eligible for admission to the major. Students who repeat any preparation course more than once are automatically denied admission to the major.

**Freshman Students**

Students must petition to declare the Sociology major. If Sociology 101 or 102 has already been completed, a grade of C or better is required. Grades in any other completed sociology courses for the major must be C– or better.

**Transfer Students**

Transfer applicants to the Sociology premajors with 90 or more units must complete the following introductory courses prior to admission to UCLA: one introduction to sociology course and one statistics course. Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

**The Major**

**Required:** Eleven upper-division courses, including (1) two theory courses—Sociology 101, 102; (2) one methods course from Sociology 104A, 104B, 106A, 110, 111, 112, 113, M124A, 191H, or Statistics 112; (3) one course from each of the following core areas: (a) interactions—Sociology 111, M124A, CM125, 126, 130, 132, 133, 134, or 152, (b) institutions and social processes—course 116, 121, 143, 151, 181, 173, M174, M175, M176, or 1818, (c) power and inequality—course M115, 122, 123, 147A, M155, 156, 157, M161, M162, M164, M165, 181A, 182, 183, 185, or 186; and (4) any five upper-division sociology elective courses.

Students should complete course 101 and the core courses before taking other upper-division courses. Each course for the major must be taken for a letter grade. To graduate, students must have at least a 2.0 grade-point average in their upper-division major courses, with grades of C or better in Sociology 101 and 102.

Only 8 units of Sociology 199 are allowed. The two theory courses, three core area courses, one methods course, and one sociology elective (seven courses total) must be taken while in residence in the College of Letters and Science at UCLA.

**Honors Program**

The honors program in sociology provides opportunity for outstanding students to undertake an independent year-long research project under the guidance of a faculty member. Students who successfully complete the honors program graduate with departmental honors.

As preparation for the honors program, students must complete all preparation for the major courses.

After acceptance into the honors program, students are required to take courses 191H, 198A, 198B, and 198C (honors thesis seminars) which may be applied as electives toward the major requirements. Students must have a 3.5 overall grade-point average, have completed the sociology preparation requirements and, in most cases, have completed the required theory course. Applications are available from the undergraduate adviser’s office, 254E Haines Hall.

**Computing Specialization**

Majors in Sociology may select a specialization in Computing by (1) satisfying all the requirements for a bachelor’s degree in the major; (2) completing Program in Computing 10A, 10B, 10C, and (3) completing Sociology 111, 113. Each course must be taken for a letter grade. Students graduate with a bachelor’s degree in sociology and a specialization in Computing.

**Graduate Study**

Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Division website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

**Graduate Degrees**

The Department of Sociology offers Master of Arts (MA), Candidate in Philosophy (CPhil), and Doctor of Philosophy (PhD) degrees in Sociology.

**Sociology**

**Lower-Division Courses**

1. **Introductory Sociology.** (5) Lecture, four hours; discussion, one hour. Survey of characteristics of social life, processes of social interaction, and tools of sociological investigation. P/NP or letter grading.

   **M5, Social Organization of Black Communities.** (5) Same as African American Studies M5.) Lecture, four hours; discussion, one hour; field trips. Analysis and interpretation of social organization of black communities, with focus on origins and development of black communities, competing theories and research findings, defining characteristics and contemporary issues. Letter grading.

   **10. Social Thought and Origins of Sociology.** (5) Lecture, three hours; discussion, two hours. Introduction to history of social thought, with special emphasis on theoretical precursors to development of discipline of sociology. Exposition and analysis of selected social theorists and concepts, especially from the 17th to 19th centuries. Letter grading.

   **19. Fiat Lux Freshman Seminars.** (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty mentors. Students who have been admitted to the honors program may be enrolled in this seminar with special permission from the department. Students who are not members of the honors program should discuss with the faculty mentor. Letter grading.

   **20. Introduction to Sociological Research Methods.** (5) Lecture, three hours; discussion, one hour. Introduction to methods used in contemporary sociological research, with focus on issues of research design, data collection, and analysis of data. Fieldwork may be required. Letter grading.

**Upper-Division Courses**

101. **Development of Sociological Theory.** (5) Lecture, four hours; discussion, one hour. Examination of long-standing history of American racism, beginning with institution of slavery, Jim Crow legislation, separate but equal doctrine, Brown versus Board of Education, Civil Rights legislation of 1960s, and Obama presidency. Focus on persistence over time of racist beliefs and mechanisms through which racism becomes internalized from one generation to next. Racism toward African Americans and harms it has inflicted on African American community, as well as on nation as whole. Examination of psychology and sociology of racism through video clips, social scientific texts, essays by prominent American historians, and American literature that deals centrally with racism. P/NP or letter grading.

51. **Sociology of Migration.** (5) Lecture, three hours; discussion, one hour. Introduction to fundamental theories, themes, and research methods used in sociological research through comparative study of international migration. Examination of theoretical debates and empirical analysis of causes and consequences of transnational migration in countries of origin and destination, with focus on issues of race, ethnicity, social networks, development, citizenship, and state in comparative context. Letter grading.


M72A-M72B. Lecture, three hours; discussion, two hours. Examination of many ways in which sex and sexual identity shape and are shaped by biological and social forces, approached from complementary perspectives of anthropology, biology, medicine, and sociology. Specific topics include the biological origins of sex differences, intersex, gender identity, gender inequality, homosexuality, sex differences, gender and law, and politics of sex research. M72CW. Special Topics. Seminar, three hours. Enforced requisite: course M72B. Topics may include politics of reproduction, sexuality, sexual identity, social construction of gender, and reproductive technologies. Satisfies Writing II requirement.

89. Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to lower-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

89HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to lower-division lecture course. Individually study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

97. Variable Topics Research Seminars: Sociology. (1) Seminar, one hour. Special topics. Offered as 97. Designed for freshmen/sophomores. Study of selected topics in sociology at introductory level. May be repeated for credit. Letter grading.

99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

40. American Racism: Psychosocial Analysis. (5) Lecture, four hours; discussion, one hour. Examination of long-standing history of American racism, beginning with institution of slavery, Jim Crow legislation, separate but equal doctrine, Brown versus Board of Education, Civil Rights legislation of 1960s, and Obama presidency. Focus on persistence over time of racist beliefs and mechanisms through which racism becomes internalized from one generation to next. Racism toward African Americans and harms it has inflicted on African American community, as well as on nation as whole. Examination of psychology and sociology of racism through video clips, social scientific texts, essays by prominent American historians, and American literature that deals centrally with racism. P/NP or letter grading.

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110. Sociological Methods. (4) Lecture, three hours; discussion, one hour. Designed for juniors/seniors. General problems of scientific abstraction, generalization, inference, and verification and particular problems of sociological research design, data collection, and preliminary data analysis. Fieldwork and extensive field notes required. Letter grading.

116. Social DEMography. (4) Lecture, three hours; discussion, one hour. Examination of social behavior through computer simulations of behavior in artificial communities. P/NP or letter grading.

119. PRimate Societies. (4) Lecture, three hours; discussion, one hour. Limited to juniors/seniors. Selected topics on diverse behaviors and cultural patterns of pri- mate species, with special focus on baboons, chimpanzees, and gorillas. Examination of primate socio-ecology, sexual competition, demography and kin- ship, politics, communication, and interactions within and between troops for our lives as human primates. P/NP or letter grading.

120. Disability Rights Law. (4) Same as Disability Studies M149.) Lecture, four hours. Examination of disability-related issues impacting all of ages across wide spectrum of settings in both public and private sectors—from preschool to higher education, from military to workplace, and from intensely urban environments to online and virtual worlds. Topics range from persistent and recurring disputes to novel controversies fueled by new technologies and changing times. P/NP or letter grading.

121. Sociology of Religion. (4) Lecture, three hours; discussion, one hour. Examination of classic and current sociological approaches to study religion. Analysis of definition of religion, role of religion in modern life, and role of categories like Islam in con- temporary U.S. politics. Focus on complicated ques- tions of what it means to be religious or something religious: does that mean they are moral, believe in God, or are part of community of believers? Students gain better sense of how to think and talk about reli- gion. P/NP or letter grading.

122. Sociology of Violence. (4) Lecture, three hours; discussion, one hour. Exploration of macro-, meso-, and micro-level theories of violence, why states orga- nize violence, why civilizations participate in violence, and why physical, psychological, and symbolic violence. Dis- cussion of how various social categories such as race, ethnicity, religion, class, gender, and sex are implicated in violence and examination of cases of inter- state war, genocide, civil war, terrorism, and pogroms from around world.

123. Social Change. (4) Lecture, three hours; discus- sion, one hour. How does social change occur? This course linked to debates in sociology about structure (degree to which individual's actions are constrained by social forces) and agency (degree to which individuals can choose their own courses of action). Major theories (Weberian, demographi- cally, and strategic action) of social change take different views of structure and agency. Consideration of these theoretical issues in context of social change by considering empirical examples. P/NP or letter grading.

M124A-M124B. Conversational Structures I, II. (4-4) (Same as Communication M144A-M144B.) Lecture, three hours; discussion, one hour; P/NP or letter grading. M124A. Introduction to some structures that are employed in conversation of interpersonal interaction, such as turn-taking organization, organization of repair, and some of the sequence structures with limited expansions. M124B. Continuation of course M124A. Consideration of some more expanded sequence structures, story structures, topical sequences, and overall structural organization of single conversations. P/NP or letter grading.

M130. Self and Society. (4) Lecture, three hours; discussion, one hour. How do self and society influence one another? Major theories include: symbolic interaction, functionalism, structuralism, Marxism, and feminism. P/NP or letter grading.

M131. Environmental Sociology. (4) (Same as Envi- ronment M133 and Society and Genetics M133.) Lecture, three hours; discussion, one hour. Relationship between society and environment. Analysis of problem of inter-relation of social factors (such as class, race, gender, and religion) and environmental factors (such as pollution, waste disposal, sustainability, and global politics). P/NP or letter grading.

M132. Social Psychology: Sociological Approaches. (4) Lecture, three hours; discussion, one hour. Survey of contribution of sociologists to theory and research in social psychology, including theories of social control; conformity and deviation; reference groups; and interaction process. P/NP or letter grading.

M134. Culture and Personality. (4) Lecture, three hours; discussion, one hour. How does social change occur? This course linked to debates in sociology about structure (degree to which individual's actions are constrained by social forces) and agency (degree to which individuals can choose their own courses of action). Major theories (Weberian, demographic, and strategic action) of social change take different views of structure and agency. Consideration of these theoretical issues in context of social change by considering empirical examples. P/NP or letter grading.

M136. Study of Norms. (4) Lecture, three hours; discussion, one hour. Properties of norms, of normatively bounded conduct, of lay and professional methods for describing, producing, using, and validating norms in contrasting settings of socially organized activities; relevance of these studies to programmatic problems of analytic sociology. Fieldwork required. P/NP or letter grading.

127. Mind and Society. (4) Lecture, two and one half hours; discussion, one hour. Requisite: course 1. Study of social production of modes of thought and form of knowledge. Study how bodies of knowledge and cognitive styles are produced, used, and transformed in everyday, organizational, and extra-ordinary contexts. P/NP or letter grading.

130. Families and Social Change. (4) Lecture, three hours; discussion, one hour. Requisite: course 1. Designed for juniors/seniors. Sociology theories and explana- tions of social conditions shaping and producing emo- tional and cultural expression of emotions on social conditions; relations between thought, sensations, and emotions; self and emotions; social construction of emotions. P/NP or letter grading.

132. Migration and Labor in Mexico-U.S. Context. (5) Seminar. 20 hours. Mexico-U.S. migration is largest and oldest continuous population flow of contemporary world. In recent decades, prompted by swift economic transformations, rural and urban Mexi- canos from every corner of Mexico have joined this mi-
gratory flow, settling well beyond southwestern region and into far-reaching areas of U.S. interior. Migration is binding U.S. and Mexico stronger than ever, putting these communities in an environment for considering critical issues in juvenile justice, P/NP or letter grading.

M150. Sociology of Aging. (4) (Same as Gerontology M150.) Lecture, three hours; discussion, one hour. Study of sociological processes shaping definition, experience, adaptation, and contemporaneity in society. Topics include race, class, and gender in aging over life course; interpersonal relations and social worlds of aged; caregiving relations and institutions; professions concerned with aged and aging. Letter grading.

151. Comparative Immigration. (4) Lecture, three hours; discussion, one hour. Survey of immigration of Europeans, Asians, Mexicans, and Americans in the U.S. since the mid-19th century. Overview of immigration experience on ethno-racial groups that migrated voluntarily to this country, with emphasis on immediate postimmigration settlement. P/NP or letter grading.

152. Comparative Acculturation and Assimilation. (4) Lecture, three hours; discussion, one hour. Requisite: course 151. Comparison of acculturation and assimilation of Europeans, Africans, Mexicans, and Asians in the U.S. with emphasis on long-term cultural consequences of immigration. P/NP or letter grading.

153. Chinese Immigration. (4) (Same as Asian American Studies M130C.) Lecture, three hours; discussion, one hour. Designed for juniors/seniors. Exploration of history and social conditions of Latinos in Los Angeles as well as nationally, with particular emphasis on their location in larger social structure and on comparisons with other minority groups. Topics include immigration, family, education, and work issues. P/NP or letter grading.

154. Race and Ethnicity: International Perspectives. (4) Lecture, three hours; discussion, one hour. Not open to freshmen. Role of race and ethnicity in political, economic, and social lives of nations other than the U.S. P/NP or letter grading.

155. Latinos in U.S. (4) (Same as Chicana and Chicano Studies M160A.) Lecture, three hours; discussion, one hour. Designed for juniors/seniors. Exploration of history and social conditions of Latinos in Los Angeles as well as nationally, with particular emphasis on their location in larger social structure and on comparisons with other minority groups. Topics include immigration, family, education, and work issues. P/NP or letter grading.

156. Race and Ethnicity in American Life. (4) Lecture, three hours; discussion, one hour. Role of race and ethnicity in the U.S., including interplay between racial and ethnic categories. Special attention to comparison of African American and European American experiences and to transformation of Asian American and Latino communities and the nation. Focus is on the U.S.-Mexican mass migration in second half of the 20th century. P/NP or letter grading.

157. Social Stratification. (4) Lecture, three hours; discussion, one hour. Analysis of American social structure in terms of evaluational differentiation. Topics include criteria for differentiation, bases for evaluation, types of stratification, composition of strata and status systems, mobility, consequences of stratification, and problems of methodology. P/NP or letter grading.

158. Urban Sociology. (4) Lecture, three hours; discussion, one hour. Description and analysis of urbanization and urbanism in the U.S. and world. P/NP or letter grading.


M162. Sociology of Gender. (5) (Same as Gender Studies M162.) Lecture, three hours; discussion, one hour. Enforced requisite: course 1 or Gender Studies M10. Examination of processes by which gender is socially constructed. Topics include distinction between biological sex and sociological gender, causes and consequences of gender inequality, and recent changes in gender relations in modern industrial societies. P/NP or letter grading.

M163. Gender and Work. (4) (Same as Gender Studies M163.) Lecture, three hours. Requisite: course 1 or Gender Studies 10. Exploration of relationship of gender and labor, concentrating on the U.S. experience but also including some comparative material. Particular emphasis on analysis of causes and consequences of job segregation by gender and of wage inequality. P/NP or letter grading.

M164. Politics of Reproduction. (4) (Same as Gender Studies M164.) Lecture, three hours; discussion, one hour. Title refers to intersection between political economy and reproduction, reproductive issues, politicalization of mothers, motherhood, and mothering, surrogacy, and new reproductive technologies. Letter grading.

M165. Sociology of Race and Labor. (4) (Same as African American Studies M165 and Labor Studies M165.) Lecture, three hours; discussion, one hour. Limited to juniors/seniors. Exploration of relationship between race, ethnicity, employment, and U.S. labor movement. Analysis of underlying racial divisions in workforce and how they evolved historically. Consideration of circumstances under which workers and unions have excluded people of color and unions, as well as circumstances under which workers and unions have organized people of color into unions in efforts to improve their wages and working conditions. Impact of globalization on these dynamics. P/NP or letter grading.

166. Organizations and Society. (4) Lecture, three hours; discussion, one hour. Sociological analysis of organizations and their social environment. Introduction to basic theories, concepts, methods, and research on behavior of organizations in society, P/NP or letter grading.

167. Law and Society. (4) Lecture, three hours; discussion, one hour. Special attention to law in preindustrial and industrialized societies, legalistic perspectives on legal processes, legal behavior, perception of justice, social movements toward equal justice, roles of lawyers and judges, social impact of court decisions. P/NP or letter grading.

168. Medical Sociology. (4) Lecture, three hours; discussion, one hour. Requisite: course 1. Provides major themes in medical sociology and public health, as well as students preparing for health science careers, with understanding of health-seeking behavior and interpersonal and organizational relationships that are involved in the receipt and delivery of health services. P/NP or letter grading.

169. Law and Society. (4) Lecture, three hours; discussion, one hour. Requisite: course 1. Provides major themes in medical sociology and public health, as well as students preparing for health science careers, with understanding of health-seeking behavior and interpersonal and organizational relationships that are involved in the receipt and delivery of health services. P/NP or letter grading.

170. Occupations and Professions. (4) Lecture, three hours; discussion, one hour. Description and analysis of representative occupations and professions, with emphasis on contemporary U.S. P/NP or letter grading.

172. Entrepreneurship. (4) Lecture, three hours; discussion, one hour. Requisite: course 1. Analysis of economic opportunities and maintains socioeconomic inequalities: historical and theoretical perspectives on role of education in U.S. society; trends in educational attainment; ways in which family back-
ground, class, race, and gender affect educational achievement and attainment; stratification between and within schools; effects of education on socioeconomic attainment, family, health, attitudes, and social participation; educational policies to improve school quality and address socioeconomic inequalities. Letter grading.

M176. Sociology of Mass Communication. (4) (Same as Communication M147.) Lecture, four hours; discussion, one hour (when scheduled). Studies in the mass media: production, distribution, consumption, and the organization. Topics include history and organization of major media institutions, social forces that shape production and consumption of news and entertainment, selected studies in media content, and effects of media on society. P/NP or letter grading.

M178. Sociology of Caribbean. (4) (Same as African American Studies M178.) Lecture, three hours; discussion, one hour. Limited to juniors/seniors. Historical sociology of Caribbean, with emphasis on colonialism and decolonization, development and underdevelopment, race-making institutions and evolution of race relations, nationalism and migration. P/NP or letter grading.

180A-180Z. Special Topics in Sociology. (4 each) Lecture, three hours; discussion, one hour. Limited to juniors/seniors. Study of selected topics of sociological interest. Titles of classes to be announced. Topics may be repeated for credit and may be applied as elective units toward Sociology major. P/NP or letter grading.

181A-181B. Sociology of Contemporary China. (4–5) Lecture, three hours; discussion, one hour. Limited to seniors. Course may be taken independently for credit. P/NP or letter grading.

181A. Exploration of 20th-century changes in China, including end of dynasties, Republican era, Communist Revolution, and market reform. Topics include transformation in Chinese social structure and institutions and everyday practices. Survey of changes and analysis of impacts of contemporary China on global impact and current implications.

181B. Survey of changes in Chinese society from beginning of 20th century to present. Topics include social mobility, inequality, family and household, and population. Emphasis on changes post-Reform Era and in present. Focus on interaction of economic and political change plus family organization. Contrasts and similarities between China and West, China’s place in social sciences, and challenges due to social organization that originated from studying Western societies.


186. Latin American Societies. (4) Lecture, three hours; discussion, one hour. Requisite: course 160. Latin American society and social conflict in Latin America, with special attention to racial and class structures and dilemmas of economic and political development. Country and specific focus varies each semester. P/NP or letter grading.

188SA. Individual Studies for USIE Facilitators. (1) Tutorial, to be arranged. Enforced corequisite: Honors Collegium 101E. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to discuss selected USIE seminar topic, conduct preparatory research, and begin preparation of syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.


188SC. Individual Studies for USIE Facilitators. (2) Tutorial, to be arranged. Enforced requisite: course 188SB. Limited to junior/senior USIE facilitators. Individual contract with faculty mentor required. May not be repeated. Letter grading.

189. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be repeated for credit and may be applied as elective units toward Sociology major. P/NP or letter grading.

189HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed and arranged with course instructor. Inclusion of additional study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

191A. Undergraduate Seminar: Self and Identity. (3) Seminar, three hours. Limited to junior/senior Sociology majors. Examination of individual identity, organized around the three major themes: social mobility, family and household, and society-environment interface. Topics include life course, self-concept, self-esteem, and social identity. P/NP or letter grading.

191B. Undergraduate Seminar: Sociology of Honor and Laughter. (3) Seminar, three hours. Limited to junior/senior Sociology majors. Major topics include love, belonging, marriage, and other sociological topics. P/NP or letter grading.

191C. Undergraduate Seminar: Money and Emotions. (3) Seminar, three hours. Limited to junior/senior Sociology majors. Topics include love, belonging, marriage, and other sociological topics. P/NP or letter grading.


191E. Undergraduate Seminar: Population Growth Models. (3) Seminar, three hours. Limited to juniors/seniors. Topics include population growth models. P/NP or letter grading.

191F. Undergraduate Seminar: Sociology of Globalization. (3) Seminar, three hours. Limited to juniors/seniors. Great expansion of social relations across globe has occurred over last 50 years. What are causes and mechanisms of this process, how far has it spread? How do social relations change and develop in the future? Economic, cultural, political, and military aspects of globalization, with focus on extent to which global expansion of capitalism, nation-state system, and American imperialism reinforce or undercut each other, producing new lines of division and conflict across world. Reading, discussion, and development of culminating project. Letter grading.

191H. Honors Seminar: Sociology. (4) Seminar, three hours. In-depth introduction to process of producing scholarly sociological research for students who wish to write under the guidance of a professor. May be repeated for credit and may be applied as elective units toward Sociology major. P/NP or letter grading.

191J. Undergraduate Seminar: Health and Inequality. (3) Seminar, three hours. Limited to juniors/seniors. Focus on interaction of economic and political change plus family organization. Contrast and similarities between China and West, China’s place in social sciences, and challenges due to social organization that originated from studying Western societies.

191K. Undergraduate Seminar: Cigarettes and Western Civilization. (3) Seminar, three hours. Limited to juniors/seniors. Focus on interaction of economic and political change plus family organization. Contrast and similarities between China and West, China’s place in social sciences, and challenges due to social organization that originated from studying Western societies.


191M. Undergraduate Seminar: Social Ecology. (5) Seminar, three hours. Limited to juniors/seniors. Functions of sociological approach to social ecology, also known as human ecology. Study of adaptation of population to its environment. Topics include density, maintaining personal space, space and territoriality, and effects of environment on humans. Reading, discussion, and development of culminating project. Letter grading.

191N. Undergraduate Seminar: Urban and Suburban Sociology. (5) Seminar, three hours. Limited to juniors/seniors. History and present condition of cities and suburbs in American and global context. Focus on global cities such as New York and Los Angeles, and comparisons to London and Shanghai. Process of suburbanization as it began in early 19th century and still continues. Analysis of city politics, house and architectural styles, crime, urban terror, public housing and ghettoes, segregation and integration of neighborhoods, question of gentrification, alienation, urban poverty (especially art, museums, and movie and music industries), and environmentalism. Concurrently scheduled with course C297. Letter grading.

191NY. Undergraduate Seminar: Urban and Suburban Sociology in New York City. (5) Seminar, eight hours. Limited to students in summer UCLA Travel Study Program. Cutting-edge urban issues in country's largest city, including New York's attempt to position itself as one of 21st century's most cosmopolitan places, such as New York and Los Angeles, and comparisons to London and Shanghai. Process of suburbanization as it began in early 19th century and still continues. Analysis of city politics, house and architectural styles, crime, urban terror, public housing and ghettoes, segregation and integration of neighborhoods, question of gentrification, alienation, urban poverty (especially art, museums, and movie and music industries), and environmentalism. Concurrently scheduled with course C297. Letter grading.

191P. Undergraduate Seminar: Politics of Reproduction (S) Seminar, three hours. Limited to juniors/seniors. Social and human reproduction is global policy issue. Government efforts to influence reproduction are important feature of modern state: political intervention into private life, intimacy, and sexuality. Exploration of politics of reproduction—intersection between politics and life cycle or between public sphere and private lives—and coverage of broad range of issues in intervention and representation of reproduction from historical-comparative approach. Reading, discussion, and development of culminating project. Letter grading.

191Q. Undergraduate Seminar: Communication in Medical Care, (S) Seminar, three hours. Limited to juniors/seniors. Sociology dimensions of patient care in primary care context. Use of microsociological methods to examine main facets of American primary care medical visits, including detailed analysis of interactions. Emphasis on direct contact with medical personnel and development of observational and analytic skills. Reading, discussion, and development of culminating project. Letter grading.

191R. Undergraduate Seminar: Cultural Sociology. (S) Seminar, three hours. Limited to juniors/seniors. Cultural sociology, i.e., introduction to classic theoretical approaches and contemporary developments in study of social worlds dedicated to creating and handling cultural institutions such as literature, music, dance, and museums. Discussion of such issues as contemporary validity of distinction between high and popular/low culture, relationship of mainstream culture, history (e.g., how culture expresses and reinforces social inequality, organizational context of culture, and how people express and decipher meaning in cultural objects. Reading, discussion, and development of culminating project. Letter grading.

191S. Undergraduate Seminar: Sociology of Gender and Sexuality. (S) Seminar, three hours. Limited to juniors/seniors. Sexuality is important site for enactment of gender. Gender identity. Sexuality preferences and sexual behavior can also form basis for social identity, repression, discrimination, and privilege. Independent of gender. Social factors such as social class, ethnicity, generation, and networks shape our sexual practices and choice of partners. Reading and writing about variety of original sociological, historical, and anthropological texts and development of culminating project. Letter grading.

191T. Undergraduate Seminar: War and Society. (S) Seminar, three hours. Limited to juniors/seniors. Study of relationship between society’s military and its social organization. With particular attention to shock-based civic militarism characteristic of the West. Topics include honor, discipline, bureaucracy, conscription, logistics, total war, guerilla war, terrorism, and counterterrorism. Reading, discussion, and development of culminating project. Letter grading.

191V. Variable Topics Research Seminars: Sociological Research. (S) Seminar, three hours. Limited to juniors/seniors. Study of selected topics of sociological interest. Reading, discussion, and development of culminating project. Consult Schedule of Classes for topics and instructors. May be repeated for credit and may be applied as elective units toward Sociology major. Letter grading.

194. Research Group Seminars: Sociology. (2) Seminar, two hours. Designed for undergraduate students who are part of research group. Discussion of research activities of current literature in field. May be repeated for credit. P/NP grading.

M194DC. CAPPP Washington, DC, Research Seminars. (4) (Same as History M194DC and Political Science M194DC) Seminar, three hours. Limited to CAPPP Quarter in Washington students and other students enrolled in UC Washington Center programs. Seminars for undergraduate students in Center for American Policy’s program in Washington, DC. Focus on development and execution of original empirical research based on experiences from Washington, DC-based field placements.

205. Family and Social Change. (4) Lecture, three hours. Examination of sources of change in family and household organization, with major focus on relationships among economic institutions, family structure, and content of family life. Consideration of concepts, theories, and data about kinship, S/U or letter grading.

M206. Understanding Fertility: Theories and Methods. (4) (Same as Community Health Sciences M222.) Lecture, three hours. Preparation: one formal or social demography course. Requisite: Biostatistics 100A. Application of demographic theories and methods to describe fertility trends and differentials and social and proximate determinants of fertility, with emphasis on understanding fertility transitions in the future for advanced students interested in population, demography of health, and social demography. Letter grading.


208C. Machine Learning for Social Scientists. (4) Lecture, three hours. Requisites: courses 210A, 210B, or consent of instructor. Requisites: basic knowledge of machine learning and computational foundations of machine learning, with special focus on social science applications. Survey of supervised and unsupervised methods, including Naïve Bayes, k-means, logistic regression, decision trees (classification and regression), topic models, and neural networks. Practicalities of implementation on range of data types. S/U or letter grading.


210C. Intermediate Statistical Methods III. (4) Lecture, three hours; discussion, one hour. Requisite: course 210B. Survey of advanced statistical methods used in social research, with focus on problems for which statistical linear regression model is inappropriate, including categorical data, structural equations, longitudinal data, incomplete and erroneous data, and complex samples. S/U or letter grading.

211A-211B. Comparative and Historical Methods. (4) Lecture, three hours. Requisite: course 201A. Comparative and historical methods used in social research, with focus on problems for which statistical linear regression model is inappropriate, including Naïve Bayes, k-means, logistic regression, decision trees (classification and regression), topic models, and neural networks. Practicalities of implementation on range of data types. S/U or letter grading.

212A. Quantitative Data Analysis. (4) Lecture, three hours; discussion, one hour. Enforced requisites: courses 210A, 210B. Course 212A is enforced requi- site to 212B. Analysis and interpretation of primarily nonexperimental quantitative data, with focus on sample survey and census data. Extensive practice at utilizing statistical methods encountered in previous courses in analyzing text- and network-style data using the American Sociological Review or similar journal article. Topics include simple tabular analysis, correlation, log-linear analysis, ordinary least squares regression, interaction terms, multiple regression, diagnostic procedures, and methods for handling complex sample survey designs. In Progress grading (credit to be given only on completion of course 212B).
nonexperimental quantitative data, with focus on sample survey and census data. Extensive practice at utilizing statistical methods encountered in previous courses, culminating in term paper in style of American Sociological Review or similar journal article. Topics include missing data; binomial, multinomial, and ordinal logistic regression; factor analysis and scale construction; methods for causal inference, including fixed effects and propensity score matching; and problems in causal inference, including structural equation models and multilevel models. S/U or letter grading.

212C. Study Design and Other Issues in Quantitative Data Analysis. (4) Lecture, three hours. Preparation: one introductory statistics course. Introduction to methods of demographic analysis. Topics include missing data; binomial, multinomial, and ordinal logistic regression; factor analysis and scale construction; methods for causal inference, including fixed effects and propensity score matching; and problems in causal inference, including structural equation models and multilevel models. S/U or letter grading.

222. Foundations of Ethnomet hodological, Phenomenological, and Analytic Sociologies. (4) Lecture, three hours. Designed for graduate students. Basic issues, methods, and topics of ethnomet hodological, phenomenological, conversation-analytic, and ethnographic research, with special attention to how everyday life, problem of rationality, rules/norms and tacit knowledge, problem of social order, speaking and discourse, constitutive practices, and ontological assumptions. First, guest presentations by affiliated faculty in second part. S/U or letter grading.

223. Phenomenological and Interactionist Perspectives in Sociology. (4) Lecture, three hours. Comparison of phenomenological and symbolic perspectives by examining particular body of life or currently unresolved substantive issues. Topics include: concept of phenomenological and interactionist thought on topic of concern, with special concern for ambiguities and divergences both within and between two approaches. When relevant, attention to social and historical relations of phenomenological and interactionism of pragmatist, existentialist, and ordinary language philosophies. S/U or letter grading.

M213A. Introduction to Demographic Methods. (4) (Same as Biostatistics M208, Community Health Sciences M208, and Economics M208.) Lecture, four hours. Preparation: one introductory statistics course. Introduction to methods of demographic analysis. Topics include: logistic models for discrete-time event history models; piecewise exponential hazard models; proportional hazards; nonproportional hazards; poisson models; heterogeneity; multilevel survival models. S/U or letter grading.

M213C. Population Models and Dynamics. (4) Formerly numbered 213C. (Same as Community Health Sciences M209.) Lecture, three hours. Requisite: course M213A. Population models and their dynamics in population processes. How demographic models are used in estimation of population size, age structure, and associated dynamics. Computer simulations of demographic models to explore conclusions reached from demographic models. Estimation of demographic models in human population and broader relevance of demographic analysis to study of any population or system, including health and social systems. S/U or letter grading.

218A. Survey Research Design. (4) Lecture, three hours. Recommended requisite: course 210A. Past, present, and future of survey research; survey research; survey errors; survey sampling; response rates; questionnaire design; reliability and validity of survey items; survey administration and management; ethics and costs. Letter grading.

218B. Survey Research Design. (4) Lecture, three hours. Enforced requisite: course 218A. Practical application of survey design skills. Students design and implement individual survey data collection projects and complete comprehensive surveys and their projects' results and challenges. Letter grading.


217B-217C. Ethnographic Fieldwork. (4-4) Seminar, three hours. Recommended requisite: course 217A. Theories and techniques of ethnographic fieldwork. Kinds of problems amenable to ethnographic approach. Development of research questions, collection of data, and ethical problems involved in such research. In Progress (217B) and letter (217C) grading.

220. Self and Society. (4) Lecture, three hours. Examination of social and cultural processes shaping definition and role of the self, embedded interactional practices through which the self is constructed in everyday and institutional contexts, formation and transformation of self during life course, and construction of collective identity. Letter grading.

221A. Analyzing Ethnographies. (4) Seminar, three hours. Discussion of suitability of various design classes for specific analytic goals, as well as their comparative strengths and weaknesses. S/U or letter grading.

M225A. California Population Research Topical Seminar. (4) Seminar, three hours. Examination of issues such as demography, health, aging, labor, and broad array of topics concerned with effects of economic, social, and political transients both within and abroad. May be taken independently for credit. S/U or letter grading.

225A. California Population Research Topical Seminar. (4) Lecture, three hours. Examination of issues such as demography, health, aging, labor, and broad array of topics concerned with effects of economic, social, and political transients both within and abroad. May be taken independently for credit. S/U or letter grading.


227. Sociology of Knowledge. (4) Lecture, three hours. Designed for graduate students. Study of theories and research concerning social determinants of systems of knowledge and role of intellectual and artistic elites in Western societies. S/U or letter grading.

228. Critical Issues in Macrosociology. (4) Lecture, three hours. Conceptual introduction to area of macrosociology in which exemplary works are read, studied for substance and methods, and critiqued in seminar and in written papers. S/U or letter grading.

230A-230B. Comparative Ethnicity, Race, and Nationalism. (4-4) Seminar, four hours. Preparation for independent research in area of comparative ethnicity, race, and nationalism through close reading of key theoretical and empirical works. S/U or letter grading.

230C. Comparative Ethnicity, Race, and Nationalism. (4) Seminar, three hours. Introduction to comparative and historical sociology of race and ethnicity to demonstrate merits of double comparative approach to race, one that strives to be as comparative at level of theory (attending to relationship between race and other forms of social classification, including ethnicity and nationalism) as it does at level of research. Examination of cases from wide variety of countries, including Australia, Brazil, Colombia, Dominican Republic, Haiti, Mexico, modern China, modern Japan, Nazi Germany, Nicaragua, Rwanda, South Africa, Sudan, and U.S. S/U or letter grading.

M231. Race, Class, and Gender: Constructing Black Womanhood and Black Manhood in America. (4) (Same as African American Studies M220G.) Seminar, four hours. Race, class, gender, and sexual identities and experiences for African Americans. Examination of themes and issues of gender and racial identities, with attention to the ways in which these identities are constructed and negotiated through daily social interactions. S/U or letter grading.

232. Class, Politics, and Society. (4) Lecture, four hours. Nature of class structure and how it affects relation of class structure to politics and political power. Issue of salience of class versus other identities such as age, sex, race, and ethnicity. Exploration of contemporary “globalization” tendencies of capitalism. Letter grading.


234. Sociology of Development. (4) Seminar, three hours. Discussion, one hour. Readings and discussion of theoretical, historical, and specific issues in sociological study of development (e.g., structural assimilation or socioeconomic mobility), and to examine theoretical approaches to understanding race and ethnicity in contemporary society. Preparation for field examination in race and ethnicity. S/U or letter grading.


236A. (4) Lecture, three hours. Comprehensive overview of key current theoretical debates in study of international migration, with focus on exploration of possibilities of comparative (historical and cross-national) research program in field, linking North American, European, and other global experiences of immigration. S/U or letter grading.

M236B. (4) Same as Geography M224.) Lecture, three hours. Further exploration of key current theoretical debates in study of international migration, with emphasis on exploring both theoretical debates of field. Empirical data, study of which those debates hinge, to encourage students to undertake research in field. S/U or letter grading.

238C. (4) Lecture, three hours. Designed for students beginning or continuing original research in field of international migration. Outside lectures, oral presentations of student projects, circulation of completed or draft student papers. S/U or letter grading.

237. Seminar: Theory and Research in Comparative Social Analysis. (2) Seminar, two hours. Designed for graduate students. Emphasis on one issue of particular importance for comparative analysis of capitalism and socialism, North America and Western Europe; developed capitalist and socialist countries and Third World, and implications for theory construction and social research. S/U grading.

M238. Feminist Theory. (4) Same as Gender Studies M238.) Seminar, three hours. Designed for graduate students. Analysis of current feminist theory relevant to sociologists. Exploration of critiques of second wave feminism by working class feminists and/or feminists of color, feminist scholars from other cultural backgrounds, and recent "antifeminist" feminists. Discussion of directions for future feminist sociology. Letter grading.

239A-239B. Social Stratification, Mobility, and Inequality. (4) Lecture, three hours. Enforced requisites: courses 210A, 210B. Course 239A is enforced requisite to 239B. Introduction to literature on social stratification, mobility, and inequality in U.S. and society.
abroad, with focus on concepts, data, methods, and facts about occupational and class structure, intergenerational transmission of socioeconomic status; effects of family, school, and labor market on socioeconomic achievement, careers, and inequality; earnings, income, wealth, and wealth distribution; poverty; social mobility; socioeconomic factors and marriage; gender and ethnic stratification; and health disparities. In Progress (239A) and letter (239B) grading.

240. Sociology of Education. (4) Lecture, three hours. Overview of social scientific study of education, with special focus on sociology (along with history and philosophy). Examination of contemporary sociology of education with consideration at two levels: exploration of how scholars have studied schools’ role in maintaining or altering stratification and inequality by looking at quantitative and qualitative approaches to race, class, gender, and sex. Abridgment of how focus on stratification can exist alongside, provide foundation for, or obfuscate other longstanding commitments in study of schooling including macro, micro, distributional, individualization, rationalism, and maintenance of particular economic, racial, and sexual order. Examination of classic sociological texts and recent sociological and historical work on how broader social structures, culture, and social institutions affect what schools do and what actors believe they are supposed to do. S/U or letter grading.

241. Theories of Gender in Society. (4) Lecture, one hour; discussion, two hours. Gender stratification in society and sociology; extent of gender diversity in human societies past and present; why gender is absent in classical macrosociology; can masculinist paradigms make space for gender; does feminized society need fresh approach? S/U or letter grading.

244A-244B-244C. Conversation Analysis I, II, III. (6-6-6) Lecture, three hours; discussion, two hours. Focus on some structures basic to organization of conversational interaction: organization of repair, and practices of word selection and reference to persons, places, time, and action. 244C. Requisites: courses 244A, 244B. Continuation of introduction to some structures basic to organization of conversational interaction: organization of repair, and practices of word selection and reference to persons, places, time, and action. Letter grading.

245. Cultural Sociology: Classical and Contemporary Approaches. (4) Lecture, one hour; discussion, two hours. Exploration of classical approaches to cultural dimensions of Weberian, Durkheimian, Parsonsian, and critical—and living traditions they have spawned. Examination of contemporary efforts at constructing new cultural sociology. Theoretical focus, with consideration of case studies. S/U or letter grading.

246. Sociology of Culture. (4) Seminar, three hours. Theoretical and methodological issues in structural approaches to culture. Perspectives include cultural economics, political economy, and production of culture. S/U or letter grading.

247. Sociology of Emotions. (4) Lecture, two hours; discussion, one hour. Designed for graduate students. Sociological theories of emotional expression; experiential approaches to emotions: motivational, cognitive, psychophysiological, and behavioral; repression, social oppression, and emotions; creativity and expressed effect; thought, sensations, and emotions; specific emotions and experiences in emotional expression; measurement of emotions. Letter grading.

248. Selected Topics in Culture and Society. (4) Seminar, three hours. Designed for graduate students. Seminar on selected topics on culture and society. Consult Schedule of Classes for topics and instructors. May be repeated for credit. S/U or letter grading.

M249. Culture, Brain, and Development. (4) (Same as Psychology M247) Seminar, three hours. General introduction to interactions of culture, brain, and development, including both social and cognitive development. Special attention to effects of social change on culture and human development. S/U or letter grading.

250. Sociology of Health. (4) Seminar, three hours. Exploration of literature of human health as product of society. Macro focus and micro focus used to examine relationship of nature of macromarkets of national society (culture, economy, politics) while maintaining awareness of micro pathways that link these wider influences to personal experience (mind, body, emotion). Main text: on modern industrial societies and organized around many leading issues in sociology of health. S/U or letter grading.

251. Social Movements. (4) Seminar, three hours. In-depth exploration of major debates and empirical research on social movements, collective action, and contentious politics, examining case studies, comparative analyses, and large-N investigations, with focus on developing student expertise in understanding social movement research and conceptualizing research projects. S/U or letter grading.

M252. Selected Topics in Sociology of Gender. (4) (Same as Gender Studies M252G) Lecture, two hours; discussion, two hours. Designed for graduate students. Seminar on selected topics in sociology of gender. May be repeated for credit. Letter grading.

253. Politics of Reproduction, Gender, and Family. (4) Seminar, three hours. Human reproduction and its regulation have long occupied attention throughout the world and remain topical today. Reproduction refers both to biological and social reproduction; their interdependence shapes policies and practices permitting or prohibiting them. fascinating theoretical debates on influence of fertility behavior and the role of migration in interesting modern global contexts. Letter grading.

254. Human Capital, Social Capital, and Cultural Capital. (4) Lecture, three hours. Designed for graduate students. Intellectual history of these concepts. Points of difference among the concepts, current exemplars of research that utilize these concepts, and critical reflection on research traditions. Letter grading.

M255. Cross-Cultural Perspectives on Gender. (4) (Same as Gender Studies M255S) Seminar, three hours. How does gender manifest itself in the lives of different women in U.S. and abroad? Are universal analytical categories or unified feminist movements possible or is gender too different cross-cultural? S/U or letter grading.


257. Demography of Marriage Formation and Dissolution. (4) Discussion, three hours. Requisite: course 210A. Extensive and intensive critical examination of major approaches to analysis of marriage formation and dissolution, with focus primarily on demographic literature. Letter grading.

C258. Talk and Social Institutions. (4) Lecture, four hours; discussion, one hour. Practices of communicative interaction and social interaction in the major social institutions and sites in contemporary society. Setting varies but may include emergency services, police and courts, medicine, news interviews, and political oratory. Currently scheduled with course CM125. S/U or letter grading.


M262. Black Families and Relationships. (4) (Same as Anthropology M262A) Seminar, three hours. Evaluation of social, cultural, and historical forces that affect socialization, stability, and interaction in black intimate relationships, beginning with the theoretical framework from black feminism to analysis of economic and other expectations for partners in cohabiting and other types of unions. Examination of family life for both middle-class and low-income populations. Exploration of notions of black sexuality, including issues of gender, intimacy and femininity within black body and critical interrogation of notions of blackness and authenticity in racial identification. Contribution to greater understanding of black intermarriage and the role of sexuality in shaping racial identity, considering images of hyper-masculinity and femininity in black bodies, their cultural and ethnic significance. Letter grading.

M274. Culture, Brain, and Development. (4) (Same as Psychology M247) Seminar, three hours. Designed for graduate students. Use of three-hour seminars to explore major social and demographic factors that characterize cities in the U.S. Examination of role of these factors in affecting health outcomes. Letter grading.


276. Selected Problems in Analysis of Conversational Interaction. (4) Lecture, one hour. Requisites: courses 244A, 244B, 244C. Variable topics/final exam. Consult instructor for topics and formats to be offered in specific term. May be repeated for credit with topic change. S/U or letter grading.

278. Sociology of Latin America. (4) (Same as American Studies M278S) Lecture, three hours. Introduction to central themes in the sociology of Latin America. Topics are determined by the instructor and reflect current trends in Latin American research. Letter grading.

279. Sociology of Education. (4) Lecture, three hours. Discussion, two hours. Topics are determined by the instructor and reflect current trends in Latin American research. Letter grading.

M280. Trafficking, Gender, Health, and Human Rights. (4) (Same as Law M280) Seminar, three hours. Introduction to some of the most important issues facing American Indians as individuals, communities, tribes, and organizations in contemporary world, building on historical background presented in American Indian Studies M290A. Letter grading.

281. Selected Problems in Mathematical Sociol- ogy. (4) Lecture, three hours. Examination of some mathematical models of sociological processes. Possible topics include models of small groups, social mobility, kinship relations, organizations, social interaction. S/U or letter grading.

282. Sociology of Medicine. (4) Seminar, three hours. Review of major concepts and issues in sociology of medicine. Topics include medicine, culture, and capital. Socialization, professions and power, healthcare as a modern institution, health as a social problem, and health care, sick role and social control, interactionism and negotiation of sickness, sickness and self, debates over medicalization and demedicalization. Designed for students interested in field experience of sociology of health and medicine and specifically for themes traditionally included in medical sociology/sociology of medicine. S/U or letter grading.
283. Communication in Medical Care. (4) Seminar, three hours. Review and development of empirical knowledge about doctor-patient relationship. Analysis of nature and dynamics of routine office visits, with focus on nature and role of norms in regulating doctor-patient conduct, role of expertise and power in doctor-patient relationship, and methodological questions concerning how doctor-patient relationship can be analyzed. S/U or letter grading.


287. Topics in Chinese Society. (4) Seminar, three hours. Preparation: at least two upper-division courses on China in any social sciences discipline. Introduction to current research questions in Chinese sociology, as well as major themes in study of Chinese society, both historical and contemporary, including demographic, economic, political, and social change before and after 1949. S/U or letter grading.

289A-289B. Practicum in Conversation Analysis. (2-4) Requisites: courses 244A, 244B. S/U grading. 289A. Data Analysis, Laboratory, two hours. Practice in analysis of conversational data. May be repeated for credit. 289B. Developing Work in Progress. Seminar, three hours. Opportunity to advance research projects in progress and to develop skills of constructive criticism in discussing work of others.

295. Working Group in Sociology. (1 to 4) Discussion, two hours. Variable topics, including sociology of gender; ethnography; social networks; race, ethnicity; immigration; and social demography and stratification. Advanced study and analysis of current topics in specialized areas of sociology. Discussion of current research and literature in research specialty of faculty member teaching course. May be repeated for credit. S/U grading.

C297. Urban and Suburban Sociology. (5) Seminar, three hours. History and present condition of cities and suburbs in America, with stress on global cities such as New York and Los Angeles, and comparisons to London and Shanghai. Process of suburbanization as it began in early 19th century and still continues. Analysis of city politics, house and architectural styles, crime, urban terror, public housing and ghettoes, segregation and integration of neighborhoods, question of gentrification, immigration, urban culture (especially art, music, and movie industries), and environmentalism. Concurrently scheduled with course C191N. Letter grading.

298. Workshop in Culture and Society. (4) Seminar, two hours every other week. Interdisciplinary workshop for graduate students and faculty pursuing theory and research in topics related to interplay of culture and society, whether social, literary, or philosophical in nature. S/U grading.

375. Teaching Apprentice Practicum. (1 to 4) Seminar, to be arranged. Preparation: apprentice personnel employment as teaching assistant, associate, or fellow. Teaching apprenticeship under active guidance and supervision of regular faculty member responsible for curriculum and instruction at UCLA. May be repeated for credit. S/U grading.


495. Supervised Teaching of Sociology. (2) Seminar, two hours. Preparation: appointment as teaching assistant in Sociology Department. Special course for teaching assistants designed to deal with problems and techniques of teaching introductory sociology. S/U grading.

501. Cooperative Program. (2 to 8) Tutorial, to be arranged. Preparation: consent of UCLA graduate advisor and graduate dean, and host campus instructor, department chair, and graduate dean. Used to record enrollment of UCLA students in courses taken under cooperative arrangements with USC. S/U grading.


SPANISH AND PORTUGESE

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Scope and Objectives
The Department of Spanish and Portuguese is dedicated to the study and teaching of the languages, literatures, and cultures of the Hispanic heritage in all areas of the world, particularly on the continents of Europe and America. It maintains a strong commitment to the value of original research and professional instruction at all levels of its activities.

Whether studying for the BA, MA, or PhD degree, students are given careful guidance in the choice of courses and in the preparation of a study program. The richness of Hispanic culture is amply represented in the extensive range of courses in language, linguistics, and literature. Although the literatures of Spain, Portugal, Brazil, and Spanish America predominate, courses are also offered in Chicano literature. The breadth of courses offered by the department allows undergraduate students to pursue many possible interests and enables graduate students to concentrate in depth in several areas of specialization.

Department courses are primarily designed to serve the five BA programs: BA in Spanish and Portuguese, MA and PhD programs in Spanish and Portuguese, and BA in Portuguese and Brazilian Studies; as well as to prepare students for its three graduate programs: MA in Spanish, MA in Portuguese, and PhD in Hispanic Languages and Literatures. The courses are also functionally supportive of such interdepartmental programs as the BA, MA, and PhD programs in Chicano and Chicano Studies, BA and MA programs in Latin American Studies, and MA and PhD programs in Comparative Literature.

Undergraduate Study
Two of the majors in the Spanish and Portuguese Department are designated capstone majors: Spanish, and Spanish and Community Culture.

For the Spanish major, seniors complete a capstone seminar that provides unique opportunity to work closely with a faculty member on a focused topic of research. Through their capstone work students are expected to demonstrate mastery of the Spanish language, along with specific skills and expertise acquired in earlier coursework. Additionally, students acquire a working knowledge of scholarly discourse relative to a specialized topic, conceive and execute an associated project, and engage with a community of scholars, presenting their work to peers and helping to further peers’ work through discussion and critique.

For the Spanish and Community Culture major, undergraduate students participate in community-based experiential learning courses coupled with elective and adjunct courses. Reflective journals, final projects, and in-class presentations are required. Through their capstone work, students should have mastery of the Spanish language, ability to conduct and interpret research to determine the needs of specific communities, critical understanding and ability to apply theories within a service context, sensitivity to diversity and cultural differ-
ences, and ability to perform scholarly presentations that tie current issues to research and theory.

**Language Acquisition Courses**

Spanish 1 through 3 use Unidos. The method is inductive. Selected examples are given to enable students to inductively grasp the rules and develop their own grammar. This enables students to use language effectively and creatively. The courses are taught entirely in Spanish—students simultaneously learn to understand, speak, read, and write Spanish.

Students with one or more years of high school Spanish who plan to enroll in Spanish 1 through 25 should take the departmental online placement examination. Consult the Schedule of Classes or the department office for more information.

No credit is allowed for completing a less advanced course after successful completion of a more advanced course in Spanish and Portuguese grammar and/or composition.

**Spanish BA**

**Capstone Major**

**Learning Outcomes**

The Spanish major has the following learning outcomes:

- Demonstrated written and oral mastery of the Spanish language
- Demonstrated specific skills and expertise, including research, analysis, and writing
- Identification and analysis of appropriate primary sources
- Conception and execution of a project that identifies and engages with a specialized topic
- Working knowledge of scholarly discourse relative to a specialized topic
- Engagement with peers through presentation, discussion, and critique of student work

**Preparation for the Major**

*Required:* Spanish 25 or 27, or equivalent, and 42 and 44 or equivalent as determined by the undergraduate adviser. Each course must be passed with an average grade of C or better prior to beginning upper-division work in the major.

**Transfer Students**

Transfer applicants to the Spanish major with 90 or more units must complete the following introductory courses prior to admission to UCLA: two years of Spanish, one Spanish civilization course, and one Spanish or Spanish American civilization course.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

**The Major**

*Required:* (1) Spanish 100A, 119B, or 120B, (2) two elective Spanish literature, culture, linguistics, or media studies courses selected from 130, 135, 140, 150, 155C, 160, 170, 175, 195; (3) two interdisciplinary studies courses selected from Chicana and Chicano Studies 100SL, CM106, M119, M120, M121, M122, M131, M144, 149, 181, Sociology M155; (4) two capstone community-based and experiential learning courses (8 to 10 units) selected from Chicana and Chicano Studies 100SL, Spanish M165SL, M172SL.

A minimum of 46 units applied toward the major requirements must be in addition to units applied toward major or minor requirements in another department or program.

**Spanish and Portuguese BA**

**Learning Outcomes**

The Spanish and Portugese major has the following learning outcomes:

- Demonstrated oral, aural, and written mastery of the Spanish and Portuguese languages
- Demonstrated specific skills and expertise, including research, analysis, and writing
- Conception and execution of research projects that identify and engage with a specialized topic
- Identification and analysis of appropriate primary sources
- Working knowledge of scholarly discourse on a specialized topic
- Engagement with peers through presentation, discussion, and critique of student work

**Preparation for the Major**

*Required:* Spanish 25 or 27, 42 or 44, Portuguese 25 or 26 or 27 (27 recommended), and 408 or 46.
Transfer Students

Transfer applicants to the Spanish and Portuguese major with 90 or more units must complete the following introductory courses prior to admission to UCLA: two years of Spanish, one year of Portuguese, one Spanish civilization course or one Spanish American civilization course, and one Brazilian culture course.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

The Major

Required:

- Ten upper-division courses (45 units minimum), including Portuguese 100A or 100B, 130A or 130B, and seven elective courses selected from 100A through 199. Out of the seven elective courses, two courses from outside the department that focus on Brazil, Portugal, or Lusophone Africa may be applied toward the major with approval of the undergraduate adviser. A minimum of five out of the seven elective courses must be taken in Portuguese.

Double Majors

Through judicious use of electives, students may find it possible to secure the BA degree with two complete majors (e.g., Portuguese/Spanish, Portuguese/History, Portuguese/Sociology, etc.). Interested students should consult with the undergraduate adviser in Portuguese as early as possible in their BA program.

Study in a Portuguese-Speaking Country

Students are encouraged to spend up to one year in a Portuguese-speaking country to study in a university or conduct research. Appropriate credit may be granted in accordance with the individual program, arranged in consultation with the undergraduate faculty adviser in Portuguese. Proposals must be submitted in advance in writing and must be approved by the department.

Honors Program

The departmental honors program is open to majors who have completed a minimum of six upper-division major courses with a 3.7 grade-point average or better in those six courses. Eligibility is verified by the departmental counselor. On the basis of their coursework and special interests, students then consult with a faculty member in that field and formulate a research project that they pursue under the faculty member’s guidance through Portuguese 198A-198B or Spanish 198A-198B.

Portuguese 198A and Spanish 198A are 4-unit courses in which students research and prepare a draft of a thesis on a selected topic. Portuguese 198B and Spanish 198B are 2-unit courses in which students complete the final thesis draft of approximately 25 to 30 pages. Approval of the honors thesis by the faculty mentor is the final requirement for departmental honors. Portuguese 198A-198B and Spanish 198A-198B may not be applied toward the majors.

Mexican Studies Minor

The Mexican Studies minor allows students with an interest in Mexico to augment their major programs with courses that expose them to the history, literature, and culture of Mexico. Given Southern California’s proximity to Mexico, the demographics of Los Angeles, and the shared history of Mexico and the Southwest, the minor is a natural complement to many majors.

To enter the minor, students must have an overall grade-point average of 2.0 or better and must complete or show proficiency equivalent to two years of college-level Spanish. A petition to declare the minor should be filed with the undergraduate counselor in 5314 Rolfe Hall.

Required Lower-Division Courses (8 to 9 units):

- Spanish 25 or 27, and one course from History 8A, 8B, 8C, or Spanish 44.

Required Upper-Division Courses (20 to 22 units):

- Three Mexican culture and literature courses selected from Spanish 135 through 175 in consultation with the undergraduate adviser and two courses from Anthropology 114P, Chicana and Chicano Studies M102, M108A, 120, M125, M132, 142, 172, 184, Ethnomusicology M108A, History 157B, 160B.

By petition and after consultation with the undergraduate adviser, one 4-unit 197 or 199 course may be applied toward the minor.

A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor.

Each minor course must be taken for a letter grade, and students must have an overall grade-point average of 2.0 or better in the minor. Successful completion of the minor is indicated on the transcript and diploma.

Portuguese and Brazilian Studies Minor

To enter the Portuguese and Brazilian Studies minor, students must have an overall grade-point average of 2.0 or better and must complete Portuguese 27 or equivalent.

Required Lower-Division Courses (9 units):

- Portuguese 25 or 26 or 27 (27 recommended), and 408 or 46, or equivalent.

Required Upper-Division Courses (20 units):

- Three courses selected from Portuguese 100A through 199, and two upper-division courses on a Brazilian topic. Only one 4-unit Portuguese 197 or 199 course may be applied toward the minor. Courses may be taken in Portuguese or English but must be clearly related to an aspect of Brazilian studies. By petition, up to two upper-division courses on Portugal or Brazil may be taken in other departments and applied toward the minor.

A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor.

Each minor course must be taken for a letter grade, and students must have an overall grade-point average of 2.0 or better in the minor. Successful completion of the minor is indicated on the transcript and diploma.

Spanish Minor

To enter the Spanish minor, students must have an overall grade-point average of 2.0 or better and must complete or show proficiency equivalent to two years of college-level Spanish.

Required Lower-Division Courses (9 units):

- Spanish 25 or 27, and 42 or 44.

Required Upper-Division Courses (20 to 22 units):

- Spanish 119 or 120 and four Spanish literature, culture, linguistics, service learning, or media studies courses.

By petition and after consultation with the undergraduate adviser, one 4-unit 197 or 199 course may be applied toward the minor.

A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor.

Portuguese and Brazilian Studies BA

Learning Outcomes

The Portuguese and Brazilian Studies major has the following learning outcomes:

- Demonstrated oral, aural, and written mastery of the Portuguese language
- Demonstrated specific skills and expertise, including research, analysis, and writing
- Conception and execution of research projects that identify and engage with a specialized topic
- Identification and analysis of appropriate primary sources
- Working knowledge of scholarly discourse relative to a specialized topic
- Engagement with peers through presentation, discussion, and critique of student work

Preparation for the Major

Required: Portuguese 25 or 26 or 27 (27 recommended), and 408 or 46, or equivalent.

Transfer Students

Transfer applicants to the Portuguese major with 90 or more units must complete the following introductory courses prior to admission to UCLA: one year of Portuguese, one nature of language course, one Portuguese civilization course or one Brazilian civilization course, and one Brazilian culture course.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

The Major

Required:

- Ten upper-division courses (45 units minimum), including Portuguese 100A or 100B, 130A or 130B, and seven elective courses selected from 100A through 199. Out of the seven elective courses, two courses from outside the department that focus on Brazil, Portugal, or Lusophone Africa may be applied toward the major with approval of the undergraduate adviser. A minimum of five out of the seven elective courses must be taken in Portuguese.

Double Majors

Through judicious use of electives, students may find it possible to secure the BA degree with two complete majors (e.g., Portuguese/Spanish, Portuguese/History, Portuguese/Sociology, etc.). Interested students should consult with the undergraduate adviser in Portuguese as early as possible in their BA program.

Study in a Portuguese-Speaking Country

Students are encouraged to spend up to one year in a Portuguese-speaking country to study in a university or conduct research. Appropriate credit may be granted in accordance with the individual program, arranged in consultation with the undergraduate faculty adviser in Portuguese. Proposals must be submitted in advance in writing and must be approved by the department.

Honors Program

The departmental honors program is open to majors who have completed a minimum of six upper-division major courses with a 3.7 grade-point average or better in those six courses. Eligibility is verified by the departmental counselor. On the basis of their coursework and special interests, students then consult with a faculty member in that field and formulate a research project that they pursue under the faculty member’s guidance through Portuguese 198A-198B or Spanish 198A-198B.

Portuguese 198A and Spanish 198A are 4-unit courses in which students research and prepare a draft of a thesis on a selected topic. Portuguese 198B and Spanish 198B are 2-unit courses in which students complete the final thesis draft of approximately 25 to 30 pages. Approval of the honors thesis by the faculty mentor is the final requirement for departmental honors. Portuguese 198A-198B and Spanish 198A-198B may not be applied toward the majors.

Mexican Studies Minor

The Mexican Studies minor allows students with an interest in Mexico to augment their major programs with courses that expose them to the history, literature, and culture of Mexico. Given Southern California’s proximity to Mexico, the demographics of Los Angeles, and the shared history of Mexico and the Southwest, the minor is a natural complement to many majors.

To enter the minor, students must have an overall grade-point average of 2.0 or better and must complete or show proficiency equivalent to two years of college-level Spanish. A petition to declare the minor should be filed with the undergraduate counselor in 5314 Rolfe Hall.

Required Lower-Division Courses (8 to 9 units):

- Spanish 25 or 27, and one course from History 8A, 8B, 8C, or Spanish 44.

Required Upper-Division Courses (20 units):

- Three Mexican culture and literature courses selected from Spanish 135 through 175 in consultation with the undergraduate adviser and two courses from Anthropology 114P, Chicana and Chicano Studies M102, M108A, 120, M125, M132, 142, 172, 184, Ethnomusicology M108A, History 157B, 160B.

By petition and after consultation with the undergraduate adviser, one 4-unit 197 or 199 course may be applied toward the minor.

A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor.

Spanish Minor

To enter the Spanish minor, students must have an overall grade-point average of 2.0 or better and must complete or show proficiency equivalent to two years of college-level Spanish.

Required Lower-Division Courses (9 units):

- Spanish 25 or 27, and 42 or 44.

Required Upper-Division Courses (20 to 22 units):

- Spanish 119 or 120 and four Spanish literature, culture, linguistics, service learning, or media studies courses.

By petition and after consultation with the undergraduate adviser, one 4-unit 197 or 199 course may be applied toward the minor.

A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor.
Spanish Linguistics Minor
To enter the Spanish Linguistics minor, students must have an overall grade-point average of 2.0 or better and must complete or show proficiency equivalent to two years of college-level Spanish.

Lower-Division Courses
- **Spanish 100A, 100B, and 100C**
  - Upper-Division Courses (20 to 21 units): Spanish 100A, 100B, and three upper-division Spanish electives, two of which must be from Spanish 160.
  - By petition and after consultation with the undergraduate advisor, one 4-unit 197 or 199 course may be applied toward the minor.

Graduate Study
Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Division website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Graduate Degrees
The Department of Spanish and Portuguese offers the Master of Arts (MA) degree in Spanish, Master of Arts (MA) degree in Portuguese, and Candidate in Philosophy (CPhil) and Doctor of Philosophy (PhD) degrees in Hispanic Languages and Literatures.

Indigenous Languages of the Americas

Lower-Division Courses
1. **Elementary Zapotec**. (4) Lecture, five hours. Introduction to Zapotec language of Tlacolula Valley of Oaxaca. P/NP or letter grading.

Upper-Division Courses
1. **Elementary Quechua**. (12) Lecture, five hours; laboratory, five hours. Enforced requisite: courses M15A, M15B, M15C. Course M15A is an prerequisite to M15B, which is an prerequisite to M15C. Taught primarily in Quechua. Examination of Nahuatl (Aztec) language of central Mexico at intermediate level. Coverage of Nahuatl grammar, with equal emphasis on reading, writing, conversation, and comprehension. P/NP or letter grading.
2. **Intensive Elementary Quechua**. (12) Lecture, five hours; laboratory, five hours. Intensive course equivalent to courses 18A, 18B, 18C. Language of Inca and its present-day dialects, as spoken in Andean South America. Offered in summer only. Letter grading.

Graduate Course
596. Directed Studies in Quechua. (1 to 8) Tutorial, to be arranged. Requisites: courses 119A, 119B, 119C. Directed individual research in Quechua. Four units may be applied toward MA course requirements. May be repeated for credit. S/U or letter grading.

Portuguese

Lower-Division Courses
1. **Elementary Portuguese**. (4) Lecture, three hours; laboratory, two hours. Taught in Portuguese. Laboratory is online. Introductory Portuguese language and culture course that is proficiency-oriented, communicative, and task-based to help develop communication competence in four skill areas (listening, speaking, reading, and writing), as well as cultural competence. P/NP or letter grading.
2. **Elementary Portuguese**. (4) Lecture, three hours; laboratory, two hours. Taught in Portuguese. Laboratory is online. Introductory Portuguese language and culture course that is proficiency-oriented, communicative, and task-based to help develop communication competence in four skill areas (listening, speaking, reading, and writing), as well as cultural competence. P/NP or letter grading.

Intermediate Portuguese
3. **Intermediate Portuguese**. (4) Lecture, three hours; laboratory, two hours. Taught in Portuguese. Laboratory is online. Accelerated course designed only for students with proficiency in another Romance language. P/NP or letter grading.

Upper-Division Courses
1. **Advanced Portuguese**. (4) Lecture, three hours. Enforced requisite: course 3 with grade of B or better. P/NP or letter grading.

Vocabularies emphasizing questions of Brazilian cultural identity. Letter grading.

Language and Popular Culture
2. **Language and Popular Culture**. (4) Lecture, three hours. Requisite: course 3 or 11B. Development of speaking, reading, and writing skills. Structured in thematic units, with songs, videos, and specific vocabulary focusing on issues of Brazilian cultural identity. Letter grading.

Summer Courses
3. **Advanced Portuguese: Summer Course**. (4) Lecture, 20 hours. Enforced requisite: courses 3 or 11B. Advanced Portuguese course with cultural activities, field trips, and luncheons. Offered in summer only. P/NP or letter grading.

4. **Language and Popular Culture: Summer Course**. (4) Lecture, 20 hours. Enforced requisite: course 3 or 11B. Development of speaking, reading, and writing skills. Structured in thematic units, with songs, videos, and specific vocabulary focusing on issues of Brazilian cultural identity. Letter grading.
questions of Brazilian cultural identity; includes cultural activities, field trips, and luncheons. Offered in summer only. P/NP or letter grading.

27. Advanced Composition and Style. (4) Lecture, three hours. Requisite: course 3 or 11B. Practice in writing Portuguese with appropriate vocabulary, syntactical structures, and stylistic patterns. P/NP or letter grading.

27A. Advanced Composition and Style: Summer Course. (4) Lecture, 20 hours. Enforced requisite: course 3 or 11B. Practice in writing Portuguese with appropriate vocabulary, syntactical structures, and stylistic patterns. Includes cultural activities, field trips, and luncheons. Offered in summer only. P/NP or letter grading.

M35. Spanish, Portuguese, and Nature of Language. (5) Same as Spanish M35.) Lecture, three hours; discussion, one hour. Introduction to language study within context of Romance languages, focusing on Spanish and Portuguese. Nature of language: structure, diversity, evolution, social and cultural settings, literary uses. Study of language and its relation to other areas of human knowledge. P/NP or letter grading.


46. Brazil and Portuguese-Speaking World. (5) Lecture, for one unit. Enforced requisite: course 27. Taught in English. Topics in Brazilian literary and cultural life, emphasizing the contexts of Oscar Niemeyer's architecture, the Samba, and the nature of Brazilian social life.

89. Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to lower-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

98CH. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to lower-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be repeated for credit with topic change. P/NP or letter grading.

99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Courses


130A-130B. Introduction to Literature in Portuguese. (4–4) Lecture, four hours. Requisite: course 25 or 26 or 27. Introduction to principal themes, currents, and authors in the context of Portuguese-speaking world. P/NP or letter grading.

141A. Literature and Film in Portuguese. (4) Lecture, four hours. Taught in English. Study of intertextuality and genre, especially the relation of literary and cinematic fields, question of fidelity, and equivalents between literary and cinematic expression in Portuguese-speaking world. May be repeated for credit with topic change. P/NP or letter grading.

141B. Film, Television, and Society in Brazil. (4) Lecture, four hours. Taught in English. Study of development, evolution, and impact of film and television in Brazil through historical periods. Focus on social, Brazilian particular, and cultural contexts. May be repeated for credit. P/NP or letter grading.

141C. Documentary Film. (4) Lecture, four hours. Taught in English. Overview of documentary film production in Portuguese-speaking world, with special focus on period since 1985. May be repeated for credit with topic change. P/NP or letter grading.

142A. Brazil and Its Culture. (4) Lecture, four hours. Taught in English. Exploration of roots of contemporary Brazil through study of broad chronological periods from Portuguese colonization to present and how they shaped idea of Brazilian exceptionalism, racial mixture as source of national identity, and luso-tropicalism and its influence on Brazilian historiography. May be repeated for credit with topic change. P/NP or letter grading.

142B. Brazilian and Colonial in Comparative Perspective. (4) Lecture, four hours. Taught in English. Study of social and cultural links between Portugal and Brazil, with emphasis on issues of migration, dialogue, and contention in historical context. May be repeated for credit with topic change. P/NP or letter grading.

142C. Travel Narratives, Testimony, Autobiography. (4) Lecture, four hours. Taught in English. Exploration of travel, memory, and narrative in Portuguese-speaking world. Primary and secondary texts depict issues of displacement, cultural contact, and assimilation. Overview of connections among Portuguese-speaking cultures. May be repeated for credit with topic change. P/NP or letter grading.

143A. Colony, Intellectuals, and History. (4) Lecture, four hours. Enforced requisite: course 27. Investigation of way that Brazilian maritime expansion from 15th to early 19th century was represented and interpreted in writings from across empire. May be repeated for credit with topic change. P/NP or letter grading.

143B. Transatlantic Literature in Portuguese. (4) Lecture, four hours. Enforced requisite: course 27. Study of modern relations between Portugal and Portuguese-speaking world in literature and arts. May be repeated for credit with topic change. P/NP or letter grading.

143C. Modernism, Modernity, and Identity. (4) Lecture, four hours. Requisite: course 25 or 26 or 27. Examination of concepts and practice of modernism in Portuguese-speaking world, with primary focus on 1900s. Reading emphasis on socio-historical context, relations with European avant-garde, modernist poetics and polemics, and search for national identity as expressed in period's poetry and prose. May be repeated for credit with topic change. P/NP or letter grading.

143D. Contemporary Literature in Portuguese. (4) Lecture, four hours. Requisite: course 25 or 26 or 27. Exploration of connections between literatures of Angola, Brazil, and Portugal against background of globalization and Internet. May be repeated for credit with topic change. P/NP or letter grading.

175. Topics in Creative Writing and Literary Translation. (4) Seminar, three hours. Requisite: course 25 or 26 or 27. Exploration of art of translation and creative writing. Guest speakers or instructors include professional literary translators, poets, novelists, playwrights, and filmmakers who discuss theory, methodology, and practice of their art. May be repeated for credit with topic change. P/NP or letter grading.

187FL. Special Studies: Readings in Portuguese. (2) Seminar, two hours. Requisite: course 27. Students read literary texts in Portuguese in an affiliated main course. Additional work in Portuguese to augment work assigned in main course, including reading and writing assignments. May be repeated for credit. P/NP or letter grading.

189. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, and other activities and led by lecture course instructor. May be repeated for credit with topic change. Honors content noted on transcript. P/NP or letter grading.

189HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to upper-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

191. Undergraduate Variable Topics Seminars: Portuguese. (4) Seminar, three hours. Requisite: course 25 or 26 or 27. Research seminar on selected topics in Portuguese. Reading, discussion, and development of culminating project. Consult Schedule of Classes or department counselor for topic to be offered in specific term. May be repeated for credit. P/NP or letter grading.

197. Individual Studies in Portuguese. (2 to 4) Tutorial, to be arranged. Individual intensive study, with scheduled meetings to between faculty member and student. Assigned reading and tangible evidence of mastery of subject matter required. Eight units of courses 197 and/or 199 may be applied toward major requirements. Individual contract required. Letter grading.

198A-198B. Senior Honors Research in Portuguese I, II. (2 to 4) Tutorial, to be arranged. Preparation: completion of minimum of six upper-division major core courses with 3.7 grade-point average. Course 198A is enforced requisite to 198B. Limited to juniors/seniors. Development and completion of honors thesis under direction of faculty member. May be applied toward major requirements. Individual contract required. Letter grading.

199. Directed Research in Portuguese. (2 to 4) Tutorial, to be arranged. Requisite: course 27. Limited to juniors/seniors. Supervised individual research under guidance of faculty mentor. Culminating paper required. Eight units of courses 197 and/or 199 may be applied toward major requirements. Individual contract required. P/NP or letter grading.

Graduate Courses

M200. Research Resources. (4) (Same as Spanish M200.) Lecture, three hours. Identification and use of research resources for graduate students. (Same as Spanish M201A-M201B. Lecture, three hours. Definition, discussion, and application of main currents of contemporary literary theory and criticism. Letter grading.

M202. Synchronic Morphology and Phonology. (4) Lecture, three hours. Study of theoretical synchronic linguistics as applied to Portuguese. (204A-204B. Generative Grammar. (4–4) Lecture, three hours. Course 204A is requisite to 204B. Generative approach to the Portuguese language, with some consideration of bearing of syntax, semiology, and phonology on style, metaphor, and meter.

M205A-M205B. Development of Portuguese and Spanish Languages. (4) Lecture, three hours. Study of historical development of Portuguese and Spanish languages from their origin in spoken Latin.


228. Post-Romanticism and Naturalism in Portuguese Literature. (4) Lecture, three hours. Enforced requisite: course 27. Study of representative trends and authors. May be repeated for credit with topic change. S/U or letter grading.

231. Colonial Brazilian Literature and Culture. (4) Lecture, three hours. Enforced requisite: course 27. Study of most important authors to 1830. May be repeated for credit with topic change. S/U or letter grading.

232. 19th-Century Brazilian Literature and Culture. (4) Lecture, three hours. Study of representative trends and authors. May be repeated for credit with topic change. S/U or letter grading.


235. 20th-Century Brazilian Literature. (4) Lecture, three hours. Enforced requisite: course 27. Study of representative trends and authors. May be repeated for credit with topic change. S/U or letter grading.

M249. Folk Literature of Spanish and Portuguese Worlds. (4) Same as Spanish M249. Lecture, three hours. Intensive study of folk literature of Spanish and Portuguese cultures as represented in (1) ballad and poetry, (2) narrative and drama, (3) speech, S/U or letter grading.

M251A-M251B. Studies in Galegan-Portuguese and Old Spanish. (4–4) (Same as Spanish M251A-M251B.) Lecture, two hours. Study of problems related to historical development of Galegan-Portuguese and Old Spanish. Each course may be repeated once with topic change and consent of appropriate guidance committee.


255. Studies in Modern Brazilian Literature. (4) Discussion, two hours. S/U or letter grading.


290. Special Topics. (4) Discussion, two hours. Designed for graduate students. Consult Schedule of Classes or department counselor for topics to be offered in a specified term. S/U or letter grading.

296. Graduate Research Group. (2) Research group meeting, two hours. Limited to graduate students. Designed to bring together graduate students in seminar setting with one or more faculty members to discuss and critique individual research projects, especially dissertation research. S/U grading.


375. Teaching Apprentice Practicum. (1 to 4) Seminar, to be arranged. Preparation: apprentice personnel employment as teaching assistant, apprentice or fellow. Teaching apprentice ship under active guidance and supervision of regular faculty member responsible for curriculum and instruction at UCLA. May be repeated for credit. S/U grading.

596. Directed Individual Study or Research. (4 or 6) Tutorial, to be arranged. Study or research in areas or subjects not offered as regular courses. No more than 5 units may be applied toward MA course requirements. S/U or letter grading.

597. Preparation for Graduate Examinations. (4 to 12) Tutorial, to be arranged. Preparation: official acceptance of candidacy by department. Individual preparation for MA comprehensive examination or Ph.D. qualifying examinations. May be taken only once for each degree examination and only in term that comprehensive or qualifying examinations are to be taken. S/U grading.


Spanish Lower-Division Courses

1. Elementary Spanish. (4) Lecture, three hours; laboratory, two hours. Taught in Spanish. Laboratory is online. Introductory Spanish language and culture course that is proficiency-oriented, communicative, and task-based to help develop communicative competence in four skill areas (listening, speaking, reading, and writing), as well as cultural competence. P/NP or letter grading.

2. Elementary Spanish. (4) Lecture, three hours; laboratory, two hours. Taught in Spanish. Laboratory is online. Introductory Spanish language and culture course that is proficiency-oriented, communicative, and task-based to help develop communicative competence in four skill areas (listening, speaking, reading, and writing), as well as cultural competence. P/NP or letter grading.

2A. Intermediate Spanish. (4) Lecture, 20 hours; laboratory, five hours. Enforced requisite: course 1 or one year of high school basic course in Spanish, with active skills, field trips, and cultural activities. Offered in summer only. P/NP or letter grading.

2B. Intermediate Spanish for Heritage Speakers. (4) Lecture, 20 hours. Taught in Spanish. Designed for heritage speakers who are native speakers of Spanish who have some knowledge of Spanish. May be repeated for credit. S/U grading.

3. Intermediate Spanish. (4) Lecture, three hours; laboratory, two hours. Taught in Spanish. Laboratory is online. Introductory Spanish language and culture course that is proficiency-oriented, communicative, and task-based to help develop communicative competence in four skill areas (listening, speaking, reading, and writing), as well as cultural competence. P/NP or letter grading.

3A. Intermediate Spanish. (4) Lecture, 20 hours; laboratory, five hours. Enforced requisite: course 1 or one year of high school Spanish course in Spanish, with active field trips, and cultural activities. Offered in summer only. P/NP or letter grading.

3B. Intermediate Spanish. (4) Lecture, 20 hours; laboratory, two hours. Taught in Spanish. Laboratory is online. Introductory Spanish language and culture course that is proficiency-oriented, communicative, and task-based to help develop communicative competence in four skill areas (listening, speaking, reading, and writing), as well as cultural competence. P/NP or letter grading.

4. Intermediate Spanish. (4) Lecture, three hours; laboratory, two hours. Taught in Spanish. Laboratory is online. Intermediate Spanish language and culture course designed to increase communicative ability. Acquisition of cultural competence and introduction to study of literature. Comprehension of conversations and stretches of connected discourse, reading of texts with minimum use of dictionary, with increased grammatical accuracy and control of sentence structure, coherence, and text organization, talking about past, present, and future events, and expression of preferences, feelings, beliefs, and opinions. P/NP or letter grading.

5. Intermediate Spanish. (4) Lecture, three hours; laboratory, two hours. Taught in Spanish. Laboratory is online. Intermediate Spanish language and culture course designed to increase communicative ability. Acquisition of cultural competence and introduction to study of literature. Comprehension of conversations and stretches of connected discourse, reading of texts with minimum use of dictionary, with increased grammatical accuracy and control of sentence structure, coherence, and text organization, talking about past, present, and future events, and expression of preferences, feelings, beliefs, and opinions. P/NP or letter grading.

7A. Introductory Spanish for Heritage Speakers. (4) Lecture, three hours; laboratory, two hours. Laboratory is online. Designed for students who are from Spanish-speaking family background and have some knowledge of Spanish. Introductory course to further develop communicative abilities, both verbal and written, and to increase knowledge of grammatical structures and achieve communicative competence. P/NP or letter grading.

7B. Intermediate Spanish for Heritage Speakers. (4) Lecture, three hours; laboratory, two hours. Enforced requisite: course 3. Introduction to oral and written tests. Laboratory is online. Designed for students who are from Spanish-speaking family background and have some knowledge of Spanish. Intermediate course to further develop communicative abilities, both verbal and written, and to increase knowledge of grammatical structures and achieve communicative competence. P/NP or letter grading.

9A-9B. Spanish Conversation. (2–2) Discussion, three hours. Course 9A is open to students with credit for course 4. Students who have completed course 3 with grade of B or better may be admitted. P/NP or letter grading.

10. Intermediate Spanish. (12) Lecture, 20 hours. Intermediate elementary instruction in speaking, listening, and writing equivalent to courses 1, 2, and 3, with emphasis on Spanish grammar and Hispanic culture. Offered in summer only. P/NP or letter grading.

11A-11B. Catalan Language and Culture I, II. (4–4) Lecture, six hours. Introduction to oral and written Catalan language. Two-term accelerated language sequence equivalent to three terms of traditional pattern and designed for advanced undergraduate and graduate students. P/NP or letter grade. Enforced prerequisite: at least two years of college-level Spanish, Portuguese, or another Romance language other than Catalan. 11B. Requirement: course 11A. 12A-12B-12C. Basque Language and Culture I, II. (4–4–4) Lecture, five hours. Introduction to Basque language and culture. Three-term language sequence with emphasis on listening, speaking, reading, writing, and cultural competence. P/NP or letter grading. 12B. Requirement: course 12A, 12C. Requirement: course 12B.

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise, and designed to expose students with oral proficiency in Spanish (in lieu of course 25), P/NP or letter grading.

25. Advanced Spanish Composition. (4) Lecture, three hours. Enforced requisite: course 5. Emphasis on development of communicative abilities, both verbal and written, and on increasing comprehension of a variety of forms of cultural production in Spanish language and on preparation for more advanced courses. P/NP or letter grading.

Upper-Division Courses

100A-100B. Introduction to Study of Spanish Grammar. (4-4) Lecture, four hours. Requisite: course M35. P/NP or letter grading.

100A. Phonology and Morphology. Analysis of phonemic and morphological systems of Spanish. 100B. Syntax. Study of syntactical systems of Spanish.


120. Literature in Historical Context. (4) Lecture, four hours. Requisite: courses 25 or 27. Introduction to different ways of looking at literary works as historical phenomena. Presentation of major models for writing history—great narratives, cyclical, theological, sacred, and profane conceptions. Traditional concepts of literary history and problems of mixed categories (historical epochs versus epochs of style, national history, and world literature). P/NP or letter grading.

130. Topics in Medieval Studies. (4) Lecture, four hours. Requisites: courses 25 or 27, and 119. Exploration of medieval Iberian literatures: lyric poetry, prose, and history of the peninsula, with emphasis on its literary and linguistic diversity. Possible topics include Conquista (peaceful coexistence), Europe and Orient, beginnings of Inquisition, oral versus written traditions, origins of Hispanic-Christian expansion beyond peninsula, and flowerings of mixed cultures. May be repeated for credit with topic change. P/NP or letter grading.

135. Topics in Early Modern Studies. (4) Lecture, four hours; discussion, one hour (when scheduled). Enforced requisite: courses 25 or 27, and 119. Exploration of 16th and 17th centuries, with focus on early modern period of Spain and Spanish America. Possible topics include Spanish colonization and indigenous responses, transatlantic literature and visual ba-roque, race and religion in construction of early modern nation, transatlantic fictions, early modern identities and theatrical representations, literature and historiography, and development of poetic forms. May be repeated for credit with topic change. P/NP or letter grading.

140. Topics in Modern Studies. (4) Lecture, four hours. Requisites: courses 25 or 27, and 119. Exploration of 18th and 19th centuries in Spain and Spanish America. Possible topics include Enlightenment, Romanticism, nation-building literature, realism and naturalism, and works by Cadalso, Conocedorcorvo, Lizardi, Larra, Sarmiento, Bécquer, Isaacs, Mera, Villaverde, and Galdós. May be repeated for credit with topic change. P/NP or letter grading.

145A-Y. Introduction to Chicano Literary Literature: Literature to 1960. (4) (Same as Chicana and Chicano Studies M145A.) Lecture, three hours. Requisite: course 25 or 27. Introduction to texts representative of Chicana and Chicano literary traditions of general as well as historical and geographical settings and points of view characteristic of work written by Chicanos during 20th century. Most required reading in Spanish, Bilin-gual, and English. Emphasis on reading and critical analysis of literary texts. May be repeated for credit with critical analysis of different readings and analysis of number of important scholarly and critical statements pertaining to characteristics and development of Chicano literary corpus. Letter grading.

150. Topics in Contemporary Studies. (4) Lecture, four hours; discussion, one hour (when scheduled). Requisites: courses 25 or 27, and 119. Exploration of main trends that characterize contemporary Latin American and Spanish literatures and cultures and main concepts used to address them. Possible topics include transculturation and heterogeneity, race and ethnicity, vanguard movements, lettered and popular cultures, literary modernization in Latin American boom, literature and revolution, autobiogrophy, women’s writing, border literature, and postmodernist fiction. May be repeated for credit with topic change. P/NP or letter grading.

155A. Chicano Narrative. (4) (Same as Chicana and Chicano Studies M146.) Lecture, three hours. Enforced requisite: course 25 or 27. Introduction to major Chicano narrative genres—prison, autobiography, autobiogrophy, cronícón/semblanza, Chicana detective novel, and Chicana solidarity fiction. Texts examined within their own geographic, cultural, and historical contexts, as well as within history of narrative forms. P/NP or letter grading.

155B. Literature of Chicana/Chicano Movement. (4) (Same as Chicana and Chicano Studies M145B.) Lecture, three hours. Enforced requisite: course 25 or 27. Examination of literature of Chicana/Chicano movement covering period from first manifestations of Chicano artistic production in 1965 with el Teatro Campesino through rise of women’s writing, including work by Cherie Moraga (1983), Helena Maria Viramontes (1985), and Sandra Cisneros (1991). P/NP or letter grading.

155G. Topics in U.S. Latinx Studies. (4) Lecture, four hours. Enforced requisite: course 25 or 27. Exploration of spread of Spanish-American literature and culture throughout North America, including literatures that are outgrowth of civil rights movements of 1960s, recent demographic changes, new international identities, and mixed citizenships of U.S. Latinos and Latinxs. Chicano, Puerto Rican, Cuban American, Central American American, South American American, and Jewish Latino literatures may be included. May be repeated for credit with topic change. P/NP or letter grading.

160. Topics in Spanish Linguistics. (4) Lecture, four hours. Requisite: course 25. Exploration of origin of language, how Spanish is acquired, evolution of Spanish from Latin to early modern period, how Spanish varies in world, how to teach Spanish, Spanish in contact with other languages. Possible topics include Spanish in Los Angeles, history of Spanish language, first- and second-language acquisition, language and cognition. May be repeated for credit with topic change. P/NP or letter grading.

161. Performance Making It to Study Chicano Community. (5) (Same as Chicana and Chicano Studies M167SL.) Seminar, three hours; fieldwork, 10 hours. Enforced requisite: course 25 or 27. Service learning course to gain first-hand experience of Chicana and Chicano community. Study of knowledge acquired in Spanish classes in real-world settings. Students required to spend minimum of eight to 10 hours per week at agreed on site in Latino community. P/NP or letter grading.

170. Topics in Media, Interdisciplinary, and Trans-historical Studies. (4) Lecture, four hours; discussion, one hour (when scheduled). Requisite: course 25 or 27, 119. Interrelation between print, visual, and live arts, and how they exist in mass media, new technolo-gies, and different platforms. Possible topics include visual cultures in Latin America, Latin American and Spanish cinema, musical cultures and literature, live art, and performance in popular culture, transcultural and multi-dimen-sional modeling of material culture, and architecture of medieval Iberia. May be repeated for credit with topic change. P/NP or letter grading.

170A. Latino(a) Literatures, and Literacy. (5) (Same as Chicana and Chicano Studies M170SL.) Seminar, four hours; field project, four to six hours. Recommended requisite: course 100A. In-depth study of various topics including different definitions of literacy, programs for adult preliterates, literacy and gender, approaches to literacy (whole lan-guage, phonics, Freire’s liberation pedagogy), history of literacy programs, phonics-based literacy, writing, and national literacy campaigns. Required field project involving Spanish-speaking adults in adult literacy programs. P/NP or letter grading.
175. Topics in Creative Writing and Translation. (4) Seminar, three hours. Requisites: courses 25 or 27, and 119. Exploration of art of translation or creative writing. Guest speakers or instructors include professional literary translators, poets, novelists, playwrights, and discuss their methodology, and practice of their art. May be repeated for credit with topic change. P/NP or letter grading.

187A-187B. Advanced Tutorial in Community and Culture I, II. (1–2) Tutorial, one hour. Requisite: course 25 or 27. Limited as adjunct to upper-division course in Hispanic literature, language, and culture. Exploration of topics in greater depth through supplemental readings, papers, community service, or other activities. Course 187A may be repeated once for credit. P/NP or letter grading.

189. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

189HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to upper-division lecture course. Individual study with whose instructor explores topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

191A. Variable Topics in Spanish: Studies in Hispanic Literature and Linguistics. (4) Seminar, three hours. Limited to 15 junior/senior Spanish majors. Variable topics course with readings, discussions, and development of culminating paper. Consult Schedule of Classes or department counselor for topic to be offered in specific term. May be repeated for credit with topic change. P/NP or letter grading.

191B. Variable Topics in Spanish: Studies in Hispanic Culture and Civilization. (4) Seminar, three hours. Advanced variable topics course that studies diverse aspects of Hispanic culture, civilization, and history. Classroom discussions, development of culminating paper, and examinations in Spanish. May be repeated for credit with topic change. P/NP or letter grading.

191C. Senior Capstone Seminar. (4) Seminar, three hours. Enforced requisites: courses 119, 120, and at least three upper-division elective courses required for majors. Limited to senior Spanish majors. Knowledge from previous courses needed to address current trends in discipline; students work with one faculty member on one focused research topic. Culminating paper required. Letter grading.

195. Community Internships in Spanish. (4) Tutorial, one hour. Tutorial, three hours. Requisite: course 25 or 27. Limited to juniors/seniors. Internship in supervised setting in community agency or business. Students work with an instructor and provide journal of their experience. Final research paper required. May be repeated for credit. Individual contract with supervising faculty member required. P/NP or letter grading.

197. Individual Studies in Spanish. (2 to 4) Tutorial, to be arranged. Limited to juniors/seniors. Individual intensive study, with scheduled meetings to be arranged between faculty member and student. Assigned reading and tangible evidence of mastery of subject matter required. Eight units of courses 197 and/or 199 may be applied toward major requirements. May be repeated for maximum of 8 units. Individual contract required. P/NP or letter grading.

198A-198B. Senior Honors Research in Spanish I, II. (2 to 4) Tutorial, to be arranged. Preparation: completion of minimum of six upper-division major core courses with 3.7 grade-point average. Course 198A is enforced prerequisite to 198B. Limited to juniors/seniors. Development and completion of honors thesis under direct supervision of faculty member. May not be applied toward major requirements. Individual contract required. Letter grading.

199. Directed Research in Spanish. (2 to 4) Tutorial, to be arranged. Requisite: course 25. Limited to juniors/seniors. Supervised individual research under guidance of faculty mentor. Culminating paper required. Eight units of courses 199 and/or 198 may be applied toward major requirements. May be repeated for credit. Individual contract required. P/NP or letter grading.

Graduate Courses

M200. Research Resources. (4) Same as Portuguese M200. Lecture, three hours. Identification and use of research resources for graduate students.

M201A-M201B. Literary Theory and Criticism. (4–4) Same as Portuguese M201A-M201B. Lecture, three hours. Definition, discussion, and application of main currents of contemporary literary theory and criticism. Letter grading.

M202A. Phonology. (4) Lecture, three hours. Study of the sound structure of Spanish and main phonological processes that map underlying representations into surface representations. Bearing of phonological theory on study of meter.

M202B. Morphology. (4) Lecture, three hours. Study of derivational and inflectional word formation processes and their interaction with syntactic structure.


M205A-M205B. Development of Portuguese and Spanish Languages. (4–4) Same as Portuguese M205A-M205B. Lecture, three hours. Intensive study of historical development of Portuguese and Spanish languages from their origin in spoken Latin.

M209. Dialectology. (4) Lecture, three hours. Major dialect areas of peninsular and American Spanish, with distinguishing features of each. Influence and contribution of cultural and historical features, including indigenous languages, to their formation.

M221. Medieval Lyric Poetry. (4) Lecture, three hours. Readings of and lectures on Spanish lyric poetry from the beginning to 1500.

M222. Medieval Epic and Narrative Poetry. (4) Lecture, three hours. Readings of and lectures on Spanish epic and narrative poetry from the beginning to 1500.

M223. Medieval Prose. (4) Lecture, three hours. Readings of and lectures on Spanish prose from the beginning to 1500.

M224. Poetry of the Golden Age. (4) Lecture, three hours. Readings of and lectures on Spanish poetry from 1500 to 1700.


M228. The Enlightenment. (4) Lecture, three hours. Study of important short story writers from modernism to the present.

M241A-241B. Contemporary Spanish-American Short Story. (4–4) Lecture, three hours. Study of important short story writers from modernism to the present.

M243A-243B. Contemporary Spanish-American Poetry. (4–4) Lecture, three hours. Study of important poets of Spanish America from modernism to the present.

M244A-244B. Contemporary Spanish-American Novels. (4–4) Lecture, three hours. Study of important novelists from modernism to the present.


M249. Folk Literature of Spanish and Portuguese Worlds. (4) Same as Portuguese M249B. Lecture, three hours. Intensive study of folk literature of Spanish and Portuguese cultures as represented in (1) ballad and poetry, (2) narrative and drama, (3) speech. S/U or letter grading.

M251A-M251B. Studies in Galegan-Portuguese Literature. (4–4) Same as Portuguese M251A-M251B. Lecture, two hours. Study of problems related to historical development of Galegan-Portuguese and Old Spanish. Each course may be repeated once with topic change and consent of appropriate guidance committee.

M256A-256B. Studies in Spanish Linguistics. (4–4) Lecture, two hours. Study of problems in analysis and description of the contemporary Spanish language. Each course may be repeated once with topic change and consent of appropriate guidance committee.

M257. Studies in Dialectology. (4) Discussion, two hours. May be repeated once with topic change and consent of appropriate guidance committee.

M262A-262B. Studies in Medieval Spanish Literature. (4–4) Discussion, two hours. Each course may be repeated once with topic change and consent of appropriate guidance committee.

M264A-264B. Studies in Golden Age Spanish Literature. (4–4) Discussion, two hours. Each course may be repeated once with topic change and consent of appropriate guidance committee.

M270A-270B. Studies in 18th-Century Spanish Literature. (4–4) Discussion, two hours. Each course may be repeated once with topic change and consent of appropriate guidance committee.
Directed Individual Study or Research. (4 or 8) Tutorial, to be arranged. Study or research in areas or subjects not offered as regular courses. No more than 4 units may be applied toward MA course requirements. S/U or letter grading.

Preparation for Graduate Examinations. (4 to 12) Tutorial, to be arranged. Preparation: official acceptance of candidacy by department. Individual preparation for MA comprehensive examination or PhD qualifying examinations. May be taken only once for each degree examination and only in term that comprehensive or qualifying examinations are to be taken. S/U grading.


Research for PhD Dissertation. (4 to 12) Tutorial, to be arranged. Limited to students who have passed PhD qualifying examinations. Research for and preparation of PhD dissertation. S/U grading.

Statistics

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Scope and Objectives

With the advent of fast computing and the subsequent flood of data detailing almost every aspect of our daily lives comes an urgent need for scientists trained in modern statistical methodologies. Both the undergraduate and graduate programs in the Department of Statistics are structured around three core course sequences that introduce students to the science of data: theoretical statistics, data analysis, and statistical computing. This balance reflects the scale and complexity of problems that statisticians are now routinely called to address. Additional course offerings reflect the work of faculty members in bioinformatics, social networks, environmental studies, and computer vision.

Courses and workshops for secondary school teachers of statistics are also offered in order to promote sound statistics pedagogy throughout the curriculum. Reflecting diverse research interests, the department is organized around several centers that collectively offer undergraduate and graduate students rich opportunities for specialized study. These include the Center for Environmental Statistics; Center for Social Statistics; Center for Vision, Cognition, Learning, and Autonomy; Center for Statistical Research in Computational Biology; and Center for the Teaching of Statistics.

Undergraduate Study

The Statistics major is a designated capstone major. Students are prepared for future academic studies, as well as for careers in which understanding, analyzing, communicating, and organizing data are of central importance. The capstone gives students an opportunity to put into practice concepts and ideas that otherwise might remain theoretical and/or abstract, and to synthesize the many topics they have studied. Students should demonstrate ability to restate investigative questions in terms of statistical models or algorithms, find appropriate research literature to support their work, relate theoretical concepts to real-world problems, and clearly communicate their results to nontechnical audiences.
The Data Theory major is a designated capstone major. Students work in small teams to solve large, open-ended data science problems for community- or campus-based clients. Emphasis is placed on the development and theoretical support of a statistical model or algorithmic approach. Alternatively, students may undertake research on the foundations of data science, studying advanced topics and writing a senior thesis.

Students interested in either the major or minor in Statistics should meet with the student affairs officer early in their careers. Students who have completed Mathematics 33A, Statistics 20, and at least one course from Statistics 10 through 13 may declare a premajor.

Statistics BS

Capstone Major

The Statistics major is designed to provide a general introduction to the practice of statistics for students who intend to pursue study at the graduate level or seek employment in industry or government. Courses are selected to provide sufficient theoretical background for future graduate-level research work, exposure to modern techniques and practices, and experience in fields of application. It is strongly recommended that students, in conjunction with the BS degree, pursue a minor in a substantive discipline that applies statistics. Students must consult with the undergraduate faculty adviser to ensure that the minor selected is one in which statistics is applied.

Learning Outcomes

The Statistics major has the following learning outcomes:

- Ability to restate an investigative question in terms of a statistical model or algorithm
- Verbally communicate statistical results clearly to a non-technical audience
- Successfully relate theoretical concepts to a real-world problem in a written report
- Demonstrated ability to find research literature appropriate to the investigative task
- Deliver reproducible statistical analyses using accepted practices of the research community
- Demonstrated ability to verbally and orally communicate statistical results to both technical and non-technical audiences

Premajor

Incoming freshman and transfer students may be admitted as Statistics premajors on acceptance to UCLA. Premajor students must apply for the major after completing Statistics 20, and one course from Statistics 10 through 13, with grades of C or better, and an overall grade-point average of 2.5. Any student who meets the premajor requirements may declare the major with the undergraduate adviser in the Department of Mathematics.

Data Theory BS

Capstone Major

Learning Outcomes

The Data Theory major has the following learning outcomes:

- Development, comparison, and testing of data-driven models to solve problems
- Understanding and explanation of variability when fitting and interpreting models of real-world systems
- Carrying out of reproducible data analysis using accepted practices of research community
- Written and verbal communication of findings of analyses
- Identification of areas of active research in data science
- Insightfully address problems concerning ethics of data use and storage, including data privacy and security
- Demonstrated mastery of concepts and skills of machine learning, modeling and supervised learning, dimension reduction and unsupervised learning, and deep learning
- Demonstrated familiarity with numerous software tools used in statistical and data science work and research
- Demonstrated knowledge of mathematical foundations, including pure and applied linear algebra, basic analysis, probability, and optimization theory
- Study and evaluation of proofs of mathematical and statistical results employed in data theory
- Work effectively in a team on a data science problem
- Demonstrated eligibility for graduate study in applied mathematical science or statistical science

Preparation for the Major

Required: Mathematics 31A, 31B, 32A, 32B, 33A, 42, 115A; Program in Computing 10A; one course selected from Statistics 10, 12, 13, 15; Statistics 20, 21. Each course must be completed with a grade of C or better and an overall grade-point average of at least 2.7. All students must take Mathematics 42 at UCLA. The major is limited in size according to available resources.

Repertition of more than two mathematics or statistics sequenced courses or of any mathematics or statistics sequenced course more than once results in automatic dismissal from the major.

Freshman Students

To enter the major, students must petition after they have completed the preparation for the major courses. Students who have an overall grade-point average (GPA) of at least 3.3 in the preparation for the major courses, and have completed all preparation for the major courses before the fall quarter of
their third year at UCLA, will be admitted to the major.

Students whose overall GPA is between 2.7 and 3.3, or who fail to complete the preparation courses before the fall quarter of their third year, are admitted only if space is available. All students must petition before they have earned 160 units, or by the winter quarter of their junior year, whichever comes first. Only grades for courses that are taken at the University of California, including UC summer schools, are counted for this GPA computation.

Transfer Students

Transfer applicants to the Data Theory major are admitted to the premajor. Applicants with 90 or more units must have completed the following by the end of the spring term prior to entry to UCLA: two years of calculus for physical science and/or engineering majors, one linear algebra course, one C++ programming course, one statistics course.

Transfer students must have completed all preparation for the major coursework, and must have passed Mathematics 42, 115A, and at least 4 units of upper-division coursework required for this major with at least a 3.3 GPA, in order to be eligible to petition to enter the major. Transfer students will be admitted to the major if they satisfy these requirements. Transfer students who fail to meet these criteria for automatic admission will be admitted only if resources allow. Transfer students must petition to enter the major no later than the spring quarter of their first year at UCLA.

Refer to the UCLA transfer admission guide for up-to-date information regarding transfer selection for admission.

After satisfying the preparation for the major requirements, students must visit the student services office of either the Mathematics Department or Statistics Department in order to petition to enter the major.

The Major

Required: Mathematics 118, 131A, 156, Statistics 101A, 102A, 102B, 101C, 147, 184; one two-quarter sequence: Mathematics 170E and 170S, or Statistics 100A and 100B; one elective selected from Mathematics 151A, 151B, 164, 168, 171, 174E, 178A, 178B, 178C, 179 or 182; one elective selected from Statistics 100C, 101B, 102C, or C151 through 199 (except Statistics 182, 186, and 189); two additional electives from either of the above lists; a capstone course (Mathematics M148 or Statistics M148), to be taken during the final year.

Only 4 units of course 199 may be applied toward the major. Courses 189 and 189HC may not be applied toward any of the major requirements.

Each major course must be taken for a letter grade, and students must have an overall grade-point average of 2.0 or better.

Statistics Minor

The Statistics minor is designed to provide a solid background in statistics for students majoring in other disciplines.

To enter the minor, students (1) must have taken Mathematics 33A, Statistics 20, and one course from Statistics 10 through 13 for letter grades with a minimum C grade or better in each, and a grade-point average of 2.5, and (2) file a petition with the department undergraduate adviser.

Required Upper-Division Courses (24 units): Six upper-division courses selected from one of the following options: (1) any two sequences from Statistics 100A, 100B, and 100C, or 101A, 101B, and 101C, or 102A, 102B, and 102C, or (2) two courses from each of the above sequences.

A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor.

Each minor course must be taken for a letter grade, and students must have an overall grade-point average of 2.0 or better in the minor. Successful completion of the minor is indicated on the transcript and diploma.

Graduate Study

Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Division website.

In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Graduate Degrees

The Department of Statistics offers Master of Science (MS), Candidate in Philosophy (CPhil), and Doctor of Philosophy (PhD) degrees in Statistics; and a self-supporting Master of Applied Statistics (MAS) degree.

Statistics

Lower-Division Courses

10. Introduction to Statistical Reasoning. (5) Lecture, three hours; discussion, one hour; computer laboratory, two hours. Preparation: three years of high school mathematics. Not open for credit to students with credit for course 11, 12, 13, 14, or former course 10H. Introduction to statistical thinking and understanding, including strengths and limitations of basic experimental designs, graphical and numerical summaries of data, inference, regression as descriptive tool. P/NP or letter grading.

12. Introduction to Statistical Methods for Geogra-phy and Environmental Studies. (5) Lecture, four hours; discussion, one hour; laboratory, one hour. Not open for credit to students with credit for course 10, 11, or 13. Introduction to statistical thinking and understanding, with emphasis on techniques used in geography and environmental science. Underlying logic and other technologies for data analysis and data science. Letter grading.

13. Introduction to Statistical Methods for Life and Health Sciences. (6) Lecture, three hours; discussion, one hour; laboratory, one hour. Not open for credit to students with credit for course 10, 10H, 11, 12, or 14. Presentation and interpretation of data, descriptive statistics, introduction to correlation and regression and to basic statistical inference (estimation, testing of

means and proportions, ANOVA) using both bootstrap methods and parametric models. P/NP or letter grading.

15. Introduction to Data Science. (5) Lecture, three hours; discussion, one hour; computer laboratory, one hour. Preparation: three years of high school mathematics. Not open to students with credit for course 10, 12, 13, or former course 10H, 11, or 14. Introduction to data science, including data management, data modeling, data visualization, communication of find-ings, and reproducible work. P/NP or letter grading.

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.


21. Python and Other Technologies for Data Sci-ence. (4) Lecture, three hours; discussion, one hour. Enforced requisite: course 10. Covers use of Python and other technologies for data analysis and data science. Focus on programming with Python and selection of its libraries. Numerical methods, machine learning, and scikit-learn, for purpose of data processing, data cleaning, data analysis, and machine learning. Other technologies covered include Jupyter notebook and Git. Intended for Data Theory majors as introduction to Python language and libraries most frequently used in data science. Letter grading.

35. Introduction to Probability with Applications to Poker. (4) Lecture, three hours; discussion, one hour. Exploration of some main topics in introductory prob-ability theory, especially discrete probability problems, that are useful in wide variety of scientific applications. Topics include conditional probability and conditional expectation, combinatorics, laws of large numbers, central limit theorem, Bayes theorem, univariate distri-butions, Markov processes, and Brownian motion. Ex-amination of computer simulation in depth and dis-cussion of computational approximations of solutions to complex problems using R, with examples of situa-tions and concepts that arise naturally when playing Texas Hold’em and other games. P/NP or letter grading.

88. Sophomore Seminars: Statistics. (2) Seminar, two hours. Required: one course from 10, 11, 12, 13, or 14. Limited to 20 lower-division students. Readings and discussions designed to introduce students to current statistical consulting research and fieldwork disciplines. Culminating project may be required. P/ NP or letter grading.

89. Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to lower-divi-sion lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by less than a full instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

89HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. De-signed as adjunct to lower-division lecture course. In-dividual study with lecture course instructor to explore topics in greater depth through supplemental read-ings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract re-quired. Honors content noted on transcript. Letter grading.

99. Student Research Program. (0 to 2) Tutorial (su-premised research or other scholarly work), three hours per week per unit. Entry-level research for lower-divi-sion students under guidance of faculty mentor. Stu-dents must be in good academic standing and enro-led in a minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.
Upper-Division Courses

100A. Introduction to Probability. (4) Lecture, three hours; discussion, one hour. Requisites: Mathematics 32B, 33A. Not open to students with credit for Electrical Engineering 131A or Mathematics 170A; open to graduate students only. Students receiving credit for this course must complete only two of the following: course 100A, former course 110A, Biostatistics 100A. Probability distributions, random variables, vectors, and expectation. P/NP or letter grading.

100B. Introduction to Mathematical Statistics. (4) Lecture, three hours; discussion, one hour. Requisite: course 100A or Mathematics 170A or 170E. Survey sampling, estimation, testing, data summary, one- and two-sample problems, letter grading.

100C. Linear Models. (4) Lecture, three hours; discussion, one hour. Requisite: course 100B. Theory of linear models, with emphasis on matrix approach to linear regression. Topics include model fitting, extra sums of squares principle, testing general linear hypothesis in regression, inference procedures, Gauss- Markov theorem, examination of residuals, principal component regression, stepwise procedures. P/NP or letter grading.

101A. Introduction to Data Analysis and Regression. (4) Lecture, three hours; discussion, one hour. Requisites: courses 10 or 12 or 13, and 20. Recommended: course 101A. Applied regression analysis, with emphasis on general linear model (e.g., multiple regression) and generalized linear model (e.g., logistic regression). Special attention to modern extensions of regression, including regression diagnostics, graphical procedures, and bootstrapping for statistical influence. P/NP or letter grading.

101B. Introduction to Design and Analysis of Experiment. (4) Lecture, three hours; discussion, one hour. Enforced requisite: course 101A. Fundamentals of collecting data, including components of experiments, randomization and blocking, completely randomized design and ANOVA, multiple comparisons, power and sample size, and block designs. P/NP or letter grading.

101C. Introduction to Statistical Models and Data Mining. (4) Lecture, three hours; discussion, one hour. Enforced requisite: course 101B. Designed for juniors/seniors. Applied regression analysis, with emphasis on general linear model (e.g., multiple regression) and generalized linear model (e.g., logistic regression). Special attention to modern extensions of regression, including regression diagnostics, graphical procedures, and bootstrapping for statistical influence. P/NP or letter grading.

102A. Introduction to Computational Statistics with R. (4) Lecture, three hours; discussion, one hour. Requisites: course 10 or Economics 41 or score of 4 on or higher on Advanced Placement Statistics Examination, course 20, Mathematics 33A. Introduction to computational statistics through numerical methods and computationally intensive methods for statistical problems. Topics include statistical graphics, root finding, simulation, randomization testing, and bootstrapping. Covers intermediate to advanced programming with R. P/NP or letter grading.

102B. Introduction to Computation and Optimization for Statistics. (4) Lecture, three hours; discussion, one hour. Requisites: courses 100B, 102A, Mathematics 5. Introduction to computational methods and optimization useful for statisticians. Use of computer programming to solve statistical problems. Topics include vector/matrix computation, multivariate normal distribution, principal component analysis, clustering analysis, gradient-based optimization, EM algorithm for missing data, and dynamic programming. P/NP or letter grading.

102C. Introduction to Monte Carlo Methods. (4) Lecture, three hours; discussion, one hour. Requisites: courses 100B, 102A. Introduction to Markov chain Monte Carlo (MCMC) algorithms for scientific computing, generating random numbers from simple distributions. Rejection sampling and importance sampling and their roles in MCMC. Markov chain theory and convergence properties. Metropolis and Gibbs sampling algorithms. Extensions as simulated tem-
104. Societal Impacts of Data, (2) Lecture, two hours. Requisites: courses 100B or Mathematics 170S, 101A, 101C or Mathematics 156. Considered of impacts that data collected today have upon individuals and society. Rapid increase in scale and type of data has created a need for statistical techniques to analyze and draw meaningful insights from the data in new ways. Consideration of economic, social and ethical, and legal and political impacts of data, especially that collected on human behavior. Topics include privacy and data protection, intellectual property, data confidentiality, sample selection and algorithms, equality and anti-discrimination. Letter grading.

186. Careers in Statistics, (1) Seminar, one hour. Discussion of applications by web guest speakers. How statistics is applied to legal questions, economic decisions, arts, environment, and other fields, with some emphasis on career paths in statistics. P/N or letter grading.

188SA. Individual Studies for USIE Facilitators. (1) Tutorial, to be arranged. Enforced corequisite: Honors College 101E. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to discuss selected USIE seminar topic, conduct preparatory research, and begin preparation of syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.

188SB. Individual Studies for USIE Facilitators. (1) Tutorial, to be arranged. Enforced corequisite: Honors College 101E. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to finalize course syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.

188SC. Individual Studies for USIE Facilitators. (2) Tutorial, to be arranged. Enforced corequisite: course 188SA. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor while facilitating USIE 88S course. Individual contract with faculty mentor required. May not be repeated. Letter grading.

189C. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/N or letter grading.

189HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to upper-division lecture course. Individual study with lecture course instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

195. Community or Corporate Internships in Statistics, (4) Tutorial, four hours. Limited to juniors/seniors. Internship in supervised setting in community agency or business. Students meet on regular basis with instructor and provide periodic reports of their experience. May be repeated for credit. Individual contract with supervising faculty member required. P/N or letter grading.

199. Directed Research in Statistics, (1 to 4) Tutorial, one hour. Limited to juniors/seniors. Supervised individual research or investigation under guidance of faculty mentor. Culminating paper or project required. May be repeated for credit. Individual contract required. P/N or letter grading.

Graduate Courses

200A. Applied Probability, (4) Lecture, three hours; discussion, one hour. Requisite: course 100A or Mathematics 170A. Limited to graduate statistics students. Introduction to probability, including some historical and selected topics from queuing, reliability, speech recognition, computational biology, mathematical finance, epidemiology, S/U or letter grading.


200C. High Dimensional Statistics, (4) Lecture, three hours; discussion, one hour. Survey of modern techniques in analyzing high-dimensional and nonparametric estimation problems. Emphasis on non-asymptotic techniques via concentration inequalities. S/U or letter grading.

201A. Research Design, Sampling, and Analysis, (4) Lecture, three hours; discussion, one hour. Designed for graduate students. Basic principles, ANOVA block designs, factorial designs, unbalanced probability sampling, regression estimation, stratified sampling, and cluster sampling. S/U or letter grading.

201B. Statistical Modeling and Learning, (4) Lecture, three hours; discussion, one hour. Requisites: courses 200A, 201A. Methods of modeling and parameter estimation, with emphasis on regression and classification techniques, including those from machine learning. Interest in either obtaining suitable confidence intervals or expectations through mean-field approximations. Analysis of statistical models for make inferences or predictions from data. Focus on what is to be done when linear models are not appropriate and may produce misleading estimates. Coverage of classical must know model fitting and parameter estimation techniques such as maximum likelihood fitting of generalized linear models. Exploration of broader regression/classification techniques that have been ubiquitous in machine learning literature, with special attention to regularization and kernelized methods. S/U or letter grading.

201C. Advanced Modeling and Inference, (4) Lecture, three hours; discussion, one hour. Strongly recommended requisites: courses 200B, 201B. Designed for graduate students. Introduction to advanced topics in statistical modeling and inference, including Bayesian hierarchical models, missing data problems, mixture modeling, additive modeling, hidden Markov models, and Bayesian networks. Coverage of computational methods used and developed for these models, such as EM algorithm, data augmentation, dynamic programming, and belief propagation. S/U or letter grading.

202A. Statistics Programming, (4) Lecture, three hours; discussion, one hour. Requisite: course 202B. Methods of computing in statistical models and stochastic processes. Programming environments/languages such as UNIX, UNIX shell, Python, R, and Processing and data technologies/formats such as relational databases/SQL and XML. Emphasis on complex data types, including large collections of textual data, GPS traces, network logs, and various online sources. S/U or letter grading.

202B. Matrix Algebra and Optimization, (4) Lecture, three hours; discussion, one hour. Recommended requisite: course 202A. Survey of computational methods that are especially useful for statistical analysis, with implementations in statistical package R. Topics include matrix analysis, multivariate regression, principal component analysis, statistical inference, and deterministic optimization methods. S/U or letter grading.


205. Hierarchical Linear Models. (4) Lecture, three hours. Designed for students in statistics and other disciplines who want to perform data analysis using linear and nonlinear regression and multilevel models. Introduction to and demonstration of wide variety of models and how to fit these models using freely available software packages. Topics include regression, poststratification, matching, regression discontinuity, and instrumental variables, as well as multilevel logistic regression and missing-data imputation. Practical tips regarding building, fitting, and understanding models provided. S/U or letter grading.


207. Statistical Learning with Sparsity. (4) Lecture, three hours. Study of methods that exploit sparsity to help recover underlying signal in data. S/U or letter grading.


C216. Social Statistics. (4) Lecture, three hours. Preparation: some knowledge of basic calculus and linear algebra. Requisites: courses 100A and 100B, or 101B and 101C, or one course from 10, 11, 12, 13 and one upper-division statistics course using regression. Designed for social sciences graduate students and advanced undergraduate students seeking training in data issues and methods employed in social sciences. Concurrently scheduled with course C116. S/U or letter grading.

218. Statistical Analysis of Networks. (4) Lecture, three hours. Limited to graduate students. Introduction to and analysis of social structure, conceived in terms of social networks. Concepts of social work theory and mathematical representation of social concepts such as role and position. Use of graphical representations of network information. S/U or letter grading.


M222. Spatial Statistics. (4) (Same as Geography M225A and M225B.) Lecture, three hours. Limited to graduate students. Survey of modern methods used in analysis of spatial data. Implementation of various techniques using real data sets from diverse fields, including neuroimaging, geography, seismology, demography, and environmental sciences. S/U or letter grading.


M231A. Pattern Recognition and Machine Learning. (4) (Formerly numbered M231.) (Same as Computer Science M236 or M232.) Lecture, three discussion, one hour. Designed for graduate students. Fundamentals concepts, theories, and algorithms for pattern recognition and machine learning that are used in computer vision, language processing, handwriting recognition, data mining, statistics, and computational biology. Topics include Bayesian decision theory, parametric and nonparametric methods such as mixture models, stochastic, convexity (VC-dimension, MDL, AIC), PCA/ICA/ICA/MDS, SVM, boosting. S/U or letter grading.

231B. Methods of Machine Learning. (4) (Formerly numbered 270.) Lecture, three hours; discussion, one hour. Recommended requisites: courses 208, M231A. Introduction of mathematical tools for analysis of learning with neural networks and graphical models with latent variables. S/U or letter grading.

231C. Theories of Machine Learning. (4) (Formerly numbered 270A.) Lecture, three hours. Requisites: courses 200A, 231B. Introduction to many useful non-parametric techniques such as nonparametric density estimation, nonparametric regression, and high-dimensional statistical modeling. Some semiparametric techniques and functional data analysis. Letter grading.


M232B. Statistical Computing and Inference in Vision and Cognition. (4) (Same as Computer Science M236B.) Lecture, three hours. Preparation: basic statistics, linear algebra (matrix analysis), computer vision. Introduction to broad range of algorithms for statistical inference and learning that could be used in vision, pattern recognition, speech, bioinformatics, data mining. Topics include Markov chain Monte Carlo computing, sequential Monte Carlo methods, belief propagation, partial differential equations. S/U or letter grading.

232C. Cognitive Artificial Intelligence. (4) Lecture, three hours. Recommended requisites: courses M232A, M232B. Demonstration of how to build artificial intelligence by following principles of human intelligence and how to make progress by learning from small data, expressing causality of physical world, and inferring mental states of others for intuitive social interactions. Draws from statistical modeling, cognitive science, artificial intelligence, computer vision, and robotics. S/U or letter grading.

M235. Modern Environmental Statistics. (4) (Formerly numbered 235A.) (Same as Environment M235.) Seminar, three hours; discussion, one hour. Recommended requisite: calculus, linear algebra. Focus on practical understanding and application of statistical tools for environmental datasets. Topics include brief overview of catalytic, probabilistic, decision theory, hypothesis testing, development and assessing regression models, multidimensional data exploration, time series analysis, and spatial modeling. Draws upon relevant example literature. Performance of analyses of real-world datasets. Small groups complete and present project analyzing relevant dataset of choice. S/U or letter grading.

235. Modern Environmental Statistics. (4) (Formerly numbered 235A.) (Same as Environment M235.) Seminar, three hours; discussion, one hour. Recommended requisite: calculus, linear algebra. Focus on practical understanding and application of statistical tools for environmental datasets. Topics include brief overview of catalytic, probabilistic, decision theory, hypothesis testing, development and assessing regression models, multidimensional data exploration, time series analysis, and spatial modeling. Draws upon relevant example literature. Performance of analyses of real-world datasets. Small groups complete and present project analyzing relevant dataset of choice. S/U or letter grading.

236. Introduction to Bayesian Statistics. (4) Lecture, three hours; discussion, three hours. Recommended requisite: course 200A or 200B. Designed for graduate students. Introduction to statistical inference based on use of Bayes theorem, covering foundational aspects, computational and conditional issues. Topics include Stan paradox, nonparametric Bayes, and statistical learning. Examples of applications vary according to interests of students. Concurrently scheduled with course C180. S/U or letter grading.

238. Vision as Bayesian Inference. (4) Lecture, three hours. Requisite: course 100A or 200A. Formulation of various Bayesian inference algorithms developed for designing artificial vision systems. Applied to statistics, they define ideal observer models that can be used to model human performance and serve as benchmarks. S/U or letter grading.


CM248. Applied Sampling. (4) (Same as Epidemiology M216.) Lecture, three hours; discussion, one hour. Designed for upper-division and graduate stu-
dents in social or life sciences and those who plan to major in Statistics. Topics include methods of sampling from finite populations, sources of sampling and estimation bias, and methods of generating efficient and precise estimates of population characteristics. Practical applications of sampling methods via lectures and hands-on laboratory exercises. Concurrently scheduled with course C155. S/U or letter grading.

M250. Statistical Methods for Epidemiology. (4) (Same as Epidemiology M211.) Lecture, four hours. Preparation: two terms of statistics (such as Biostatistics 100A, 100B). Enforced requisites: Epidemiology 200B, 200C. Concepts and methods tailored for analysis of epidemiologic data, with emphasis on tabular and graphical techniques. Expansion of topics introduced in Epidemiology 200B and 200C and introduction of new topics, including principles of epidemiologic analysis, recent developments in machine learning. S/U or letter grading.

M254. Statistical Methods in Computational Biology. (4) (Same as Bioinformatics M252 and Biomatematics M271.) Lecture, three hours; discussion, one hour. Preparation: elementary probability concepts. Requisites: course 100A or 200A or Bioinformatics M221. Introduction to statistical methods developed and widely applied in several branches of computational biology, such as gene expression, sequence alignment, motif discovery, comparative genomics, and biological networks, with emphasis on understanding of basic statistical concepts and use of statistical inference to solve biological problems. Letter grading.


C261. Introduction to Pattern Recognition and Machine Learning. (4) Lecture, three hours. Requisites: course 100B or Mathematics 33A. Introduction to pattern analysis and machine intelligence designed for advanced undergraduate and graduate students. Concurrently scheduled with course C161. S/U or letter grading.

271. Probabilistic Models of Visual Cortex. (4) Seminar, three hours. Requisite: course 100B or Mathematics 33A. Recommended: Computer Science 180. Introduction to computational models of mammalian visual cortex, with topics in low-, mid-, and high-level vision. Discussion of relevant evidence from anatomy, electrophysiology, imaging (e.g., fMRI), and psychophysics. Concentration on mathematical modeling of these phenomena, taking into account recent progress in probabilistic models of computer vision and developments in machine learning. S/U or letter grading.

C273. Applied Geostatistics. (4) Lecture, three hours; discussion, one hour. Geostatistics can be applied to many problems in other disciplines such as hydrology, traffic, air and water pollution, epidemiology, economics, geography, waste management, forestry, oceanography, meteorology, and agronomy and, in general, to every problem where data are observed at geographic locations. Acquisition of knowledge that can be used to analyze real spatial data problems and to connect geostatistics with geographic information systems (GIS). Concurrently scheduled with course C173. S/U or letter grading.


285. Seminar: Computing for Statistics. (2 to 4) Seminar, one to three hours. Topics in various statistical areas, by means of lectures and informal conferences with staff members. S/U or letter grading.

M286. Seminar: Statistical Problem Solving for Population Biology. (2) [Same as Ecology and Evolutionary Biology M286] Seminar, two hours. Designed for graduate students. Statistical solutions to complex data analysis and/or experimental design problems encountered by biology graduate students in their own research. S/U or letter grading.

287. Seminar: Gene Expression and Systems Biology. (2) Seminar, two hours. Designed for graduate students. Students (open to undergraduate students with consent of instructor) high-throughput technologies such as genomic sequencing, microarray gene expressions, Chroatin-ImmunoPrecipitation DNA chip (ChIP-chip), and Arrays of Microarrays (250K). Students learn how genomic data can be analyzed and interpreted using machine learning methods. S/U or letter grading.

290. Current Literature in Statistics. (2) Seminar, one hour. Topics in various statistical areas by means of lectures and informal conferences with staff members. S/U grading.

291L. Service Learning for Graduate Statistical Consulting. (4) Seminar, three hours; fieldwork, two hours. Exposure to realistic statistical and scientific problems that appear in typical interactions between statisticians and researchers, with lectures centered around demonstrated real problems and discussions with faculty members and invited speakers from business and academic fields. Applied regression analysis and design of experiments, together with basic statistical programs. Presentations and written reports required. S/U or letter grading.

292. Graduate Student Statistical Packages Seminar. (1 to 2) Seminar, two hours. Introduction to various statistical packages. How to handle data in different formats, how to read and write data on different platforms, treatment of missing data, general syntax of different programming languages, and good practice for writing own statistical functions. S/U grading.

294. Scientific Writing. (2) Seminar, two hours. Development of oral and written presentations of statistical data. Objectives and techniques of scientific writing and practice with different forms of professional writing, such as presentations of student work. S/U or letter grading.


297L. Service Learning and Community Learning for Statistics. (2 to 4) Seminar, three hours; fieldwork, 10 hours. To further knowledge by applying what students have learned in class to an actual service work setting under guidance of faculty mentor. Interaction with nonprofit organizations can be either on location or over the Internet. May be used for MS thesis; research paper/project required. S/U or letter grading.

375. Teaching Apprentice Practicum. (1 to 4) Seminar, to be arranged. Preparation: apprentice personnel employment as teaching assistant, associate, or fellow. Teaching apprenticeunder active guidance and supervision of regular faculty member responsible for course instruction at UCLA. May be repeated for credit. S/U grading.

400. Introduction to Probability Modeling. (4) Lecture, three hours; discussion, one hour. Preparation: calculus and linear algebra. Limited to Master of Applied Statistics students. Introduction to probability theory, probability models, and stochastic processes, with emphasis on concepts, intuitions, calculations, and real applications. S/U or letter grading.

401. Survey of Methods in Modern Statistics. (4) Lecture, three hours; discussion, one hour. Limited to Master of Applied Statistics students. Overview of fundamental concepts of data analysis and statistical inference and how these are applied in a wide variety of settings. Analysis of datasets, data collection, data exploration, formal inference, and model checking, S/U or letter grading.

402. Applied Regression. (4) Lecture, three hours; discussion, one hour. Limited to Master of Applied Statistics students. Introduction to state-of-art applications of linear model for understanding systems and predicting outcomes. Topics include review of statistical inference, properties of least-squares estimates, interpreting linear model, prediction and confidence intervals, model building, diagnostics, and bootstrapping. S/U or letter grading.

403. Mathematical Statistics. (4) Lecture, three hours; discussion, one hour. Limited to Master of Applied Statistics students. Basic concepts of mathematical statistics and their applications. Mathematical statistics using mathematical rigor and with emphasis on real-world applications. Estimation and statistical inference. Random variables and their distributions; random vectors, their means, variances, variance covariance matrix; and important limit theorems such as central limit theorem. S/U or letter grading.


405. Data Management. (4) Lecture, three hours; discussion, one hour. Limited to Master of Applied Statistics students. Basic principles of data management, including data cleaning and formatting of data, working with databases, data cleaning, validation, transformation, exploratory data analysis, and introductory data visualization and data mining techniques. Exploration of related issues of data security, ethics, and scalability. Introduction to and use of variety of software and languages, such as Python, SQL, Stata, SAS, R. S/U or letter grading.

411. Multivariate Statistical Analysis. (4) Lecture, three hours; discussion, one hour. Requisites: courses 10, 20, and 101A, or equivalent level of discipline. Limited to Master of Applied Statistics students. Offers students working knowledge of statistical methods underlying most important multivariate techniques, with overview of actual applications in various fields, and with experience in using such techniques on problem of their own choosing. Addresses underlying mathematical and problems of applications. Reasonable level of competence in both statistics and mathematics is required. Letter grading.

412. Advanced Regression and Predictive Modeling. (4) Lecture, three hours; discussion, one hour. Limited to Master of Applied Statistics students. Often we are interested in making inferences and predictions from data, either by (1) estimating particular meaningful parameters of models or (2) finding best fitting model that we can then manipulate to produce useful outputs such as predictions or counterfactual estimates. Focus on what is done when linear models are not appropriate and when least-squares estimates do not make sense. Generalized linear model and maximum likelihood methods as essential tools all statistics students should understand. Examination of shift gears to explore regression and classification, and to find out characteristic nuances that have been ubiquitous in machine learning literature in recent years, with special attention to regularization and kernelized methods. S/U or letter grading.

413. Machine Learning. (4) Lecture, three hours; discussion, one hour. Limited to Master of Applied Statistics students. Recommended preparation: linear algebra, calculus, basic computer programming knowledge. Introduction to machine learning and data
mining methods. To gain in-depth understanding of these methods, implementation of them in R, Python, and C++, S/U or letter grading.


415. Introduction to Forecasting. (4) Lecture, three hours; discussion, one hour. Limited to Master of Applied Statistics students. Designed for physical and social sciences students who are interested in using statistics and its applications for forecasting and data-driven decisions and for life sciences and medical school students who are interested in modeling of historical data to predict outcomes. Introduction to state-of-art statistical methods that rely on historical data collected in past to forecast future outcomes. Coverage of models used for forecasting only one measurement type and models used to forecast several types of measurements simultaneously. S/U or letter grading.

416. Applied Geostatistics. (4) Lecture, three hours; discussion, one hour. Requisites: courses 401, 402, 403. Limited to Master of Applied Statistics students. Introduction to fundamentals of analysis of types of spatial and spatial-temporal datasets frequently arising in geostatistical problems. Geostatistical data arise commonly in nearly every scientific domain. Spatial and spatial-temporal data are obtained. Examples include geology, hydrology, traffic, air and water pollution, epidemiology, economics, geography, waste management, forestry, biogeography, meteorology, and agriculture. Theory and modern methods for analyzing both lattice and point process data using R, and student performances of their own analysis of geostatistical datasets involving variogram modeling, kriging, model fitting, and estimation using maximum likelihood and nonparametric methods. S/U or letter grading.


419. Experimental Design. (4) Lecture, three hours; discussion, one hour. Requisites: courses 402, 403, Limited to Master of Applied Statistics students. Fundamentals of designing experiments to gain maximal information while minimizing costs. Topics include role of randomization and blocking, comparing two or more groups, statistical analysis, Neyman design, Latin square designs, fractional factorial designs, response surface designs. S/U or letter grading.


421A. Introductory Statistical Communication. (4) Lecture, three hours; discussion, one hour. Designed to improve verbal and written communication skills relevant to most ways in which statistics is used in workplace. Directed toward students who are not experts in English communication or for whom English is not their language. Letter grading.

421B. Advanced Statistical Communication. (4) Lecture, three hours; discussion, one hour. Designed to improve verbal and written communication skills related to various ways in which statistics is used in workplace. Directed toward students who are fluent in English and are already proficient in verbal and written communication of scientific results. Letter grading.


423. Longitudinal Data Analysis. (4) Lecture, three hours; discussion, one hour. Requisites: courses 10, 20, 101A, or equivalent level of discipline. Limited to Master of Applied Statistics students. Fundamental methods in longitudinal data analysis, with examples of actual applications in various disciplines. Students gain experience in using such techniques on problems of choice. Reasonable level of competence in both statistics and mathematics required. Letter grading.

424. Teamwork and Leadership in Data Science. (4) Lecture, three hours; discussion, one hour. Requisites: courses 10, 20, 101A, or equivalent level of discipline. Limited to Master of Applied Statistics students. Students learn how to lead, manage, negotiate, and participate in teams of data scientists. Students present statistical results for audiences ranging from business leaders to media outlets to academic statisticians. Letter grading.


495A. Teaching College Statistics. (2 Seminar, two hours, intensive training at beginning of Fall Quarter. Requisite: of all potential departmental teaching assistants and new PhD students. Practical and theoretical issues in teaching of statistics. S/U grading.

495B. Teaching College Statistics. (2 Seminar, two hours. Weekly discussion and intensive training for all first-year teaching assistants that addresses practical and theoretical issues in using technology to teach statistics, including use of statistical software as education tool. S/U grading.

496. Statistics Internship. (2 to 4) Tutorial, four hours; field work, two hours. Under faculty supervision, production of substantial work related to career--arising from internship. S/U or letter grading.

497. Directed Individual Study or Research. (2 to 8) Tutorial, to be arranged. Supervised individual reading and study on project approved by a faculty sponsor. May be repeated for credit. Letter grading.

498. MAS Thesis Research. (2 to 8) Tutorial, four hours. Research on thesis project for MAS students. Project should be original analysis of data that solves pressing problem and is done typically in conjunction with an industry partner. May be repeated for credit with permission from program chair or instructor. S/U grading.

596. Directed Individual Study or Research. (2 to 6) Tutorial, to be arranged. Supervised individual reading and study on project approved by a faculty member. May be repeated for credit. Letter grading.
Additional in-depth elective courses are offered in collaboration with other departments.

For more details on the Department of Surgery and courses offered, see the department website.

Surgery

Lower-Division Courses

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating paths of discovery at UCLA. P/NP grading.

99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Courses

188SA. Individual Studies for USIE Facilitators. (1) Tutorial, to be arranged. Enforced corequisite: Honors Collegium 101E. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to discuss selected USIE seminar topic, conduct preparatory research, and begin preparation of syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.


188SC. Individual Studies for USIE Facilitators. (2) Tutorial, to be arranged. Enforced prerequisite: course 188SB. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor while facilitating USIE 88S course. Individual contract with faculty mentor required. May not be repeated. Letter grading.

199. Directed Research in Surgery. (2 to 6) Tutorial, two hours. Limited to juniors/seniors. Supervised individual research or investigation under guidance of faculty mentor. Culminating paper required. May be repeated for credit. Individual contract required. P/NP or letter grading.

THEATER

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Sue-Ellen Case, PhD
Patricia M. Harter, PhD
Robert H. Hethmon, PhD
Neil P. Jampolis, BFA
Anna Krajewska-Wieczorek, PhD
Michael S. McLain, PhD
Joanne T. Mchmaster, MFA
Rich S. Rose, MFA
Mel Shapiro, MFA
Carol J. Sorgenfrei, PhD
José Luis Valenzuela, BA
William D. Ward, MFA
William T. Wheatley, PhD
Margaret L. Wilbur, MFA

Associate Professors

Thomas K. O’Connor, MFA
Joseph M. Olivieri, MFA

Assistant Professors

Michelle L. Carringer, PhD
Sylvian M. Oswald, MFA
Marke A. Splint, MFA

Senior Lecturer SOE

Thomas J. Orth, Emeritus

Lecturers

Silvia Baker
Cheryl Baxter-Ratiff
Mark Bennett
Scott W. Brick
Elizabeth A. Brohm
Emily H. Chase
Ross A. Chitwood
Lap-Chi Chu
Robert Clare
Sara R. Clement, MFA
Daniel P. Corrigan, MFA
Francois-Pierre Couture, MFA
Toni L. Dager, MFA
Andrew S. Daizell, MFA
Perry M. Daniel, MFA
James E. Darrah
Michael F. Donovan, BA
Kitty Doris-Bates
Joshua Epstein
Anthony T. Fanning
Thomas H. Fitzgerald
Gina A. Fiananag
Anna P. Fox, MFA
Brian L. Gale
John A. Garofolo
Alexis C. Girbes
Jill M. Goldat
David M. Gorsheim, PhD
Evelyn J. Halus
Denise J. Hudson
Patrick M. Hurley, MFA
Yuki Izhumihara, MFA
Alexis S. Jacknow
Jon V. Jory
Colleen M. Kleppinger
Hana S. Kim, MFA
Jessica R. Kubransky, MFA
Andrew H. Leung, BFA
Israel Lopez, MFA
Sara A. Lyons
Lea M. Madda
Melanie J. Mahoney
Leonaor Martino, MA
Jeffrey Maynard, BA
Mark D. Measures
Roderick B. Mensies, MFA
Crockett S. Myers

Natsuo Oguri
Jonas H. Oppenheim
Aaron M. Rhyn
Mark E. Rosman
Leon Rothenberg
Jane Ruhn, BFA
Aaron M. Ryne
Hilario X. Saavedra
Pablo Santiago-Brandwein
Robin A. Schneider
Nathan M. Schroeder, BA
Angela R. Scott, MFA
Peter J. Shushtari, MFA
Eleanor K. Skimin
Jonathan Snipes
Dana M. Solimando
Roxanne Steinberg-Oguri
Philip J. Storrs
William Thomas, Jr.
Natsuo Tomita
Jonathan Wang, BS, MSOM
Mary Lynn B. Wisner
Mark Worthington, MFA
Alexandra R. Wright, MFA
Steven A. Young

Adjunct Professors

Dan T. Belzer, MFA
F. Nicholas Gunn, Retired
Peggy Hickey-Perez
Laine Kazan
Linda Kerns
Jeremy L. Mann
Jean-Louis Rodrigue
Paul M. Wag

Adjunct Associate Professors

Marilyn E. Fox
Ed J. Monaghan, MFA
Judith E. Moreland, MFA
April Shawhan

Adjunct Assistant Professor

Raquel M. Barreto, MFA

Visiting Professors

Mk Haley, MFA
Adam Pascall, BFA

Visiting Associate Professor

Tim Robbins

Academic Administrator

Jonathan Burke, MFA

Scope and Objectives

The Department of Theater offers comprehensive training for the profession, including study of the theater’s long history and rich literature. Drawing on this vibrant heritage, the curriculum promotes an awareness of theater as a global practice embodying the contributions of diverse cultures and explores theater and performance as a form for reflecting the human experience. Students engage in theatrical performance in a community where creativity and critical thought combine in the exploration of the artistic and intellectual challenges inherent in theater making.

Manifesting talent and promise as well as representing a wide range of backgrounds and interests, prospective students are selected by the faculty through auditions and interviews in cities throughout the U.S.

At the undergraduate level, students receive education in acting, design and production, directing, formal and textual analysis, musical theater, performance studies, and playwriting, all within the rigor-
uous liberal arts framework of the BA degree. The department also offers a Theater minor.

At the graduate level, students in the MFA program develop as artists and are given preprofessional training in the skills of theater, while PhD students engage in critical investigations of performance broadly understood. In conjunction with their theater studies, students also have the opportunity to pursue elective courses in the area of film, digital media, and television, and, schedules allowing, take graduate courses from across UCLA.

For current or specific information about the programs and faculty members, see the department website.

Undergraduate Study

The Theater major is a designated capstone major. Theater capstone courses represent independent student scholarship and/or a high degree of artistic achievement in each of the undergraduate areas. Capstone courses are intended to be the culmination of all the broad educational courses and core foundational courses that a student has taken. Group participation in the creation and production of student projects is core to the curriculum. Capstone courses vary by area and require individual projects or performances, a major artistic contribution to a theater production, or an individual course of study resulting in a research paper. Through their capstone work, students demonstrate general knowledge and specialized skills, successfully relate their experience in a studio, production, or fieldwork setting, communicate effectively orally and in writing, and engage with a community of artists and scholars presenting theatrical work.

Theater BA

Capstone Major

The Theater BA provides students with a liberal arts education by combining critical study of theater and performance with experiential practice in one or more of its component parts. Students explore acting, design, directing, formal and textual analysis, playwriting, and production to build a foundation for future creative work. Specialized and advanced training is available to prepare students for a variety of careers, further training, or graduate study. At the upper-division level, students may choose from an array of advanced elective courses including those in acting, design and production, directing, musical theater, playwriting, theater history, and dramatic literature. Internships in areas such as producing and casting are also available.

Learning Outcomes

The Theater major has the following learning outcomes:

- Demonstrated broad knowledge of fundamentals acquired through coursework, including general knowledge of the art form and skills in a specialized area of study
- Successful relation of experience in a studio, production, or fieldwork setting
- Engagement with a community of artists and scholars presenting theatrical work
- Effective oral and written communication

Admission

All applicants must meet the admission standards of UCLA and the departmental screening process. Applications are accepted only in November for admission to the following fall quarter. There are no mid-year admissions. Students must submit required supplemental materials directly to the Theater Department. If requested by the department, applicants must also sign up for an audition and/or interview online. There is a $90 fee for all interviews/auditions.

Applicants interested in one of the emphases in acting, design and production, integrated studies (including critical studies, directing, and playwriting) or musical theater may submit materials for consideration in that area.

Preparation for the Major

Required: Theater 11, 12, 13, 14A, 14B, 14C, 50 (must be taken for 4 units total).

The Major

The major consists of Theater 101A, 101B, one course from 102A through 113, 131C or 163C or 180 (capstone seminar), one course from 150, 173A, 173B, 174A, or 174C (4 units), and 34 upper-division theater elective units. Up to 8 units of upper-division credit in the Department of Film, Television, and Digital Media may be included in the 34-unit theater elective requirement.

Majors wishing to pursue one of the emphases in the areas of acting, design and production, directing, musical theater, or playwriting are expected to complete a number of regularly offered elective courses.

Students who do not select an emphasis or who wish to pursue an individualized plan are expected to meet with the undergraduate vice chair at the beginning of each year to plan their course of study.

Theater Minor

The Theater minor is designed for students who wish to augment their major program of study with a series of courses that promote the study of theater as a global phenomenon for reflecting the human experience. The minor consists of a selection of lower-division courses that expose students to the fundamentals of theatrical production, as well as acting, writing, and directing. Upper-division courses offer more focused study of those areas, as well as theater design, history, education, and theater of non-Western cultures.

To enter the minor students must be in good academic standing (minimum 2.0 grade-point average), have completed at least one approved UCLA theater minor course with a grade of C or better, and file a petition at the Student Services Office, 103 East Melnitz Building, 310-206-8441. All degree requirements, including the specific requirements for this minor, must be fulfilled within the unit maximum set forth by each student’s school or College.

Required Lower-Division Courses (6 to 10 units): Theater 10 and one course from 15, 20, 28A, 28B, 28C, 30.

Required Upper-Division Courses (22 to 27 units): Theater 150, one course from 102A through 113, and four courses selected from 117, 118A, 118B, 118D, 120A, 120B, 120C, 121, 123, 128A, 130, 134, 138, 139, C146A, C146B, 149, 193.

A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor, and at least 16 units applied toward the minor must be taken in residence at UCLA. Transfer credit for any of the above is subject to department approval.

Each minor course must be taken for a letter grade, and students must have an overall grade-point average of 2.0 or better in the minor. Successful completion of the minor is indicated on the transcript and diploma.

Graduate Study

Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Division website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Graduate Degrees

The Department of Theater offers a Master of Fine Arts (MFA) degree in Theater, and Candidate in Philosophy (CPhil) and Doctor of Philosophy (PhD) degrees in Theater and Performance Studies.

Theater

Lower-Division Courses

1A-1B-1C. Introduction to Dance for Music Theater. (1–1–1) Studio, four hours. Designed for Theater majors. Introduction to basic music theater dance technique. Each course may be repeated once for credit. Letter grading.

2A. Tai Chi. (1) Studio, two to four hours. Emphasizes proper form, etiquette as coextensive with training, and other values that sustain physical practice over lifetime. Actors increase focus, enhance discipline, cultivate internal energy, and relax mind and body. Demonstration of how each tai chi movement works in self-defense situation. Letter grading.

2B. Tai Chi II. (1) Studio, two to four hours. Requisite: course 2A. Designed for Theater majors. Reviews, refines, and advances work of course 2A, introducing new forms, and delving more deeply into practice of Yang-style tai chi. Courses in performance practice continuum emphasize proper form, etiquette, and other values that sustain practice over lifetime. May be repeated once for credit. Letter grading.

3. Aikido. (1) Studio, two to four hours. Designed for Theater majors. Introduction to basic stance, falls, throws, and pins of 20th-century martial art, Aikido. Courses in performance practice continuum emphasize proper form, etiquette, and other values that sustain practice over lifetime. May be repeated once for credit. Letter grading.

4. Aikido. (1) Studio, two to four hours. Designed for Theater majors. Introduction to basic stance, falls, throws, and pins of 20th-century martial art, Aikido. Courses in performance practice continuum emphasize proper form, etiquette, and other values that sustain practice over lifetime. May be repeated once for credit. Letter grading.

10. Introduction to Theater. (3) Lecture, three hours: discussion, one hour (when scheduled). Exploration of theater in production, with emphasis on collaborative role of theater artists and active role of audience. Understanding of and access to live theatrical event and enhanced appreciation of value of theater to society; development of critical skills through consideration of representative examples of theatrical production from Europe, America, Asia, and Africa. P/NP or Letter grading.
11. Approaches to Interpretation of Theater and Performance: Global Perspective. (5) Seminar, four hours. Introduction to basic methods of interpretation in theater and performance throughout world. Topics illustrated by faculty members and guest speakers, visits to off-campus theaters, and reading from contemporary plays. Letter grading.

12. Introduction to Performance. (4) Lecture, two hours; studio, four hours. Investigation of phenomenon of performance and role of performer in theatrical event, including interpretation of drama through performance. Examination of various forms of theatrical performance and styles of expression, and development of acting, voice, and movement skills. Letter grading.

13. Play Reading and Analysis. (5) Lecture, three hours. Provides base for subsequent study in theater. Development of techniques of play reading and habits of scholarship useful to further study in each of theater’s subdisciplines, including acting, directing, design, playwriting, and critical study. Letter grading.

14A-14B. Introduction to Design. (5-5-5) Lecture, three hours; studio, six hours. Exploration of visual design. Study of styles and techniques of design, collaborative role of designer, principles of design for scenery, lighting, costumes, and sound. Both technical and aesthetic groundwork for further study. Letter grading.

15. Introduction to Directing. (4) Lecture, two hours; studio, four hours. Investigation of role of director in theatrical production and theories of play direction, with emphasis on analysis and interpretation of dramatic work and its realization in production. Letter grading.

16. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

17. Acting Fundamentals. (4) Studio, four hours. Introduction to interpretation of drama through actor of actor. Development of individual insights, skills, and disciplines in presentation of dramatic material to audiences. P/NP or letter grading.


23A. Introduction to Musical Literacy for Singing Actors. (2) Formerly numbered 23B. Studio, three hours. Requisite: course 23A. Exploration of music notation and/or musical styles and development of musical appreciation skills. Letter grading.

23B. Advanced Musical Literacy for Singing Actors. (5) Requisite: course 23A. More advanced sight-singing, incorporating minor keys, chromatic scales, internal key changes, and bass clef; exploration of song form, musical theater score formats, and harmonic/contrapuntal singing. Letter grading.

24A. Actor’s Voice. (2) Studio, three to four hours. Study of basic vocal technique for actor, with emphasis on resonance, range, power, and development of physiological foundation for subsequent training. Letter grading.

24B. Voice in Performance. (2) Studio, three to four hours. Requisite: course 24A. Continuation of course 24A, with greater emphasis on group and/or solo performance projects that present targeted vocal and textual challenges. Letter grading.

24C. Voice and Speech I. (1) Studio, three to four hours. Development of voice and speech techniques for stage and voice production. Letter grading.

25. Articulation and Body. (2) Formerly numbered 25A) Studio, three to four hours. Study of basic kinesiology principles of body in performance. Includes strategies of movement initiation and organization, as well as emphasis on aural and development of performance form, and coordination of body and mind. Exploration of use of rhythm to expand movement potential of actors and relevant use of visual arts and animal studies to character development and to expansion of movement potential. P/NP or letter grading.

27. Preparation to Standup Comedy. (4) Studio, three to four hours. Exploration of many aspects of comedy using American vaudeville traditions, acts, and performers as historical base to experience importance of rhythm, timing, delivery, speech, and body language. Aim is to find value of improvisation/imagination as well as innovative writing skills in all comic forms, to discover how comedy draws from so many forms of art, including music/song, clowning/trottoirs, comic book, magic, design, and tumbling/stunts, and to build overall confidence/ease in comic performance skills. P/NP or letter grading.

28A-28F. Acting, Voice, and Movement Workshops I. (2 each) Studio, three to six hours (28A-28D) and six hours (28E-F). Study of beginning acting technique, scene study, and development of voice and movement skills. Each course may be repeated for maximum of 12 units. Letter grading.

30. Dramatic Writing. (4) Studio, three hours. Intended for theater minors and other nonmajors. Exploration and development of creative writing skills for one or more of various forms of entertainment media. May be repeated once. Letter grading.

35A. Group Singing Techniques. (1) Studio, three hours. Requisite: course 23A. Introduction to singing techniques, with emphasis on bel canto training. Exploration of how singing voice works and how to achieve optimal vocal sound and musicality while preserving vocal health. Letter grading.

35B. Advanced Group Singing Techniques. (1) Studio, three hours. Requisite: course 35A. Advanced singing techniques, focusing on strategies for producing consistently dynamic, efficient, and musical vocal sound, and how to build stamina and range while preserving vocal health. Letter grading.

50. Theater Production. (1 to 2) Laboratory, three to six hours. Laboratory experience in various aspects of theater production, including stage management or production crew. May be repeated for maximum of 8 units. Letter grading.

72. Production Practice in Theater, Film, Video, and Digital Media. (1 to 8) Studio, three hours. Exploration of various aspects of production and postproduction practice for entertainment media, including theater, film, video, and digital media. May be taken for maximum of 8 units. Letter grading.

95. Introduction to Community or Corporate Internships in Theater, Film, and Television. (2 to 4) Tutorial, six to 12 hours. Limited to freshmen/sophomores. Internship at various theaters, studios, or entertainment organizations accentuating creative contributions, organization, and work of professionals in various specialties. Students meet on regular basis with faculty member and provide periodic reports of experiences. May be repeated for a maximum of 4 units. Individual contract with supervising faculty member required. P/NP grading.

89. Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to lower-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week for up to four hours. Concurrent enrollment for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course), indelibly individual contract with Undergraduate Research Center may be repeated. P/NP grading.

Upper-Division Courses

101A. Global Histories of Theater and Performance I. (5) Lecture, three hours; discussion, one hour. Introduction to histories of theater and performance from across world, with emphasis on ancient world through 19th century. Introduction to theories and historiographical research methods. Letter grading.

101B. Global Histories of Theater and Performance II. (5) Lecture, three hours; discussion, one hour. Introduction to histories and historiographies of theater and performance from across world, with emphasis from 18th century through 21st century. Introduction to representational modalities from melodrama to performances and art and performances from Marxism to poststructuralism. Letter grading.

102A. Theater of Japan. (5) Lecture, three hours. Exploration of major theater traditions of Japan from emergence of earliest theatrical activity to present, including investigation of Noh, Bunraku, and Kabuki performance traditions. Letter grading.

102C. Cross-Cultural Currents in Theater. (5) Lecture, three hours. Exploration of interculturalism in the arts, focus on 20th century world culture to nationalism. Analysis of historical materials and dramatic texts to investigate cultural, aesthetic, ethical, and social implications of borrowing from other cultures. Letter grading.

M103A. African American Theater History: Slavery to Mid-1900s. (4) (Same as African American Studies M103A.) Lecture, three hours. Designed for juniors/seniors. Exploration of extant materials on history and literature of African American theater as developed and performed by African American artists in America from slavery to mid-1900s. Letter grading.

M103B. African American Theater History: Minstrel Stage to Rise of American Musical. (4) (Same as African American Studies M103B.) Lecture, three hours. Designed for juniors/seniors. Exploration of extant materials on history and literature of theater as developed and performed by African American artists in America from minstrel stage to rise of American musical. Letter grading.


M103D. Contemporary Chicano Theater: Beginnings of Chicano Theater Movement. (5) (Same as Chicana and Chicano Studies M103D.) Lecture, three hours. Analysis and discussion of historical and political theories from 1965 to 1990 and as well as theatrical trajectories that led to development of Chicano theater. Letter grading.

M103E. Modern African American Drama: Harlem Renaissance to Black Arts Movement. (4) (Same as African American Studies M103E.) Lecture, three hours. Survey and examination of African American plays from 1920s until birth of modern civil rights era. Examination of sociocultural context out of which plays were created and critical essays that illustrate development of African American playwrights and their significant involvement in creation of diversified American theatrical traditions that led to emergence of Chicano theater. Letter grading.

M103F. Native American Theater. (5) Lecture, three hours. Study of American Indian theater as evolving art form. P/NP or letter grading.


103J. Israel and Palestine: Communities, Conflicts, Cultures, and Arts in Middle East. (4) Lecture, three hours. No background on or prior interest in history or region or arts required. Land variously known by names of Zion, Holy Land, Palestine, and Israel is not
just one place. It is a realm of imagination, envisioned and re-envisioned throughout history. It is at once real and surreal, study and fragile, all-eroding and ephemeral. Examination of selected works of literature, performance, visual arts, film, and media by Israeli and Palestinian artists as well as Western artists with interest in region. Looking beyond headlines and facile cultural clichés for deeper insights arts can offer into cultural conflict and community at large, to emerge with new visions. Letter grading. 

104J. Main Currents in Theater. (4) Lecture, three hours. Exploration of specific physical performance techniques, and/or material from physical theater repertory. P/NP or letter grading.


107. Design of Drama. (4) Lecture, three hours; discussion, one hour (when scheduled). Investigation of diversity in American society as manifested in dramatic works and theatrical presentations. P/NP or Letter grading.

108. Undergraduate Seminar: History and Criticism. (5) Seminar, four hours. Limited to 15 students. Selected topics in history and criticism of theater and performance. Study of how experimental theaters originate, how they harass, gender, or subvert, and other issues that divide members of campus community, as well as issues that divide campus from Los Angeles community. Selected to increase social and political awareness of problems and ideas fundamental to intertextual development, exercises and games nurture skills and attitudes useful in facilitating discussions between actors and audience participants. Use of techniques of sensory awareness, pantomime, improvisation, and characterization. Letter grading.

109. Art and Performance: Interdisciplinary Approach to Collections of Getty Center. (4) (Same as Honors College M120.) Lecture, four hours; discussion, one hour. Drawing from objects in five major collections at Getty Museum, focus on five parallel historical periods in which political, social, and aesthetic philosophical age is examined in musical and dramatic performance. Letter grading.


111. Special Topics in Theater and Performance Studies. (5) Lecture, three or four hours. Consult Schedule of Class for particular period, genre, or subject to be studied in specific term. May be repeated for credit. P/NP or letter grading.


113. Acting Workshop. (3) Studio, three to four hours. Exploration of specific physical performance techniques, and/or material from physical theater repertory. P/NP or letter grading.

114A. Creative Dramatics. (4) Lecture/laboratory, four hours. Studies of principles and procedures of improvisational approach to drama as done from nursery school to junior high. P/NP or letter grading.

114B. Advancing Creative Dramatics. (2 to 4) Lecture, four hours; other, to be arranged. Practical application of creative drama process. Exploration of relationships of arts to traditional disciplines of learning. May be repeated once for credit. P/NP or letter grading.

118. Interactive Theater. (4) Laboratory, four hours. Active, problem-solving process of theater exercises and games designed to examine racial stereotypes, homophobia, harassment, gender discrimination, and other issues that divide members of campus community, as well as issues that divide campus from Los Angeles community. Selected to increase social and political awareness of problems and ideas fundamental to intertextual development, exercises and games nurture skills and attitudes useful in facilitating discussions between actors and audience participants. Use of techniques of sensory awareness, pantomime, improvisation, and characterization. Letter grading.

119D. ArtsBridge Teaching Practicum. (4) Lecture, four hours. Requisites: courses 118A, 118B. Development of K-12 teaching materials in theater with specific core curricula. Collaboration with classroom teacher to identify core subject to be taught. Language arts, science, history, mathematics, and sociology/philosophy, the practical application of evaluation of education tools to measure effectiveness of incorporating theater materials into curriculum. Weekly meetings to discuss teaching strategies and prepare written lesson plans that incorporate California Teaching Content Standards, objectives, motivation, detailed implementation of lesson plan, and ideas for assessment. Classroom work culminates in thorough and documented final project by ArtsBridge student, classroom teacher, and UCLA faculty members. P/NP or letter grading.

120A-120B. Acting and Performance in Film. (5-5) Lecture, six hours. Exploration of specific physical performance in film. Through screenings of performance-driven films, class discussion, and actor exercises, examination of methods, styles, and performances of some of world’s most highly regarded actors and their work. P/NP or letter grading.

120C. Acting and Performance in Film. (5) Lecture, six hours. Exploration of acting and performance in film. Through screenings of performance-driven films, class discussion, and actor exercises, examination of methods, styles, and performances of some of world’s most highly regarded actors and their work. Letter grading.

121. Acting Workshop. (3) Studio, to be arranged. Requisites: course 20. Courses 160, 163A, 163B, and 163C may be taken concurrently. Workshop offers students with opportunity to rehearse, perform, and criticize scenes. May be repeated once for credit. P/NP or letter grading.

122. Character Development through Makeup and Hair Design. (2) Studio, four hours. Examination of importance of makeup and hair design in film. Exploration of specific physical performance techniques, and/or material from physical theater repertory. Examination of character exercises and their application to contemporary scenes. Letter grading.

Examination of diaphragmatic connection and breath control to work on classical text and verse, including Shakespearean sonnet. Letter grading.

124B. Intermediate Voice and Speech II: Creating Complete Warm-Up for Theatrical Productions. (2) Studio, three to four hours. Requisites: courses 24A, 24B, 24C, and 124A, or 28A, 28B, and 124A. Working with contemporary texts to learn all simple vowels (lip, tongue, open, neutral) and to communicate sound consistently forward and connected through whole body. Development of complete warm-up for theatrical production using these methods. Letter grading.

124C. Dialects. (2) Studio, three to four hours. Requisite: course 124B. Development of techniques in appropriate dialects. Letter grading.


125A. Alexander Technique. (2) Studio, three to four hours. Requisite: course 25 or 28C. Study and practice in Alexander technique as method of developing balance, poise, and control of body, and to understand processes of tension and relaxation. Exploration of use of rhythm to expand movement potential of actors and use of visual arts and animal studies for character development. Letter grading.

125B. Physical Awareness and Combat for Theater, Film, and Television. (2) Studio, three to four hours. Requisite: course 25 or 28C. Combat training for actors in theater, film, and television. Concentration on warm-up, relaxation, control, stunts, gymnastics, martial arts, and use of weapons. Letter grading.

125C. Physical Awareness and Combat for Theater, Film, and Television. I. (2) Studio, three to four hours. Requisite: course 125B. Combat training for actors in theater, film, and television. Concentration on warm-up, relaxation, control, stunts, gymnastics, martial arts, and use of weapons. Letter grading.

125D-125E-125F. Movement and Combat III. (2–3) Studio, three to four hours. Physical awareness for actors, concentrating on warming up body, relaxation, control, stunts, gymnastics, martial arts, and use of weapons. Letter grading.


128A. Acting, Voice, and Movement Workshops II. (2) Studio, four to six hours. Study of advanced acting technique, scene study, and development of voice and movement skills. May be repeated for maximum of 12 units. Letter grading.

128B. Acting, Voice, and Movement Workshops III. (2) Studio, four to six hours. Study of advanced acting technique, scene study, and development of voice and movement skills. May be repeated for maximum of 12 units. Letter grading.


133A. Script Development Workshops. (4 to 8) Lecture, three hours; studio, four to 24 hours. Guided process of script development with emphasis on communication, artistic growth, and professional process. May be taken for maximum of 8 units. Concurrently scheduled with course C423A. Letter grading.


134G. Dance for Musical Theater: Ballet. (1) Studio, three to four hours. Designed for Theater majors. Intermediate level course. Development of skills and furthering of concepts of ballet technique. Emphasis on development of proper placement, building strength and flexibility, higher level of techniques, and awareness of musicality and artistic expression. May be repeated five times for credit. Letter grading.

135A. Musical Theater Vocal Styles: Gospel. (2) Studio, three hours. Designed for Theater majors. Part of five-course series of musical theater performance techniques in which students explore and master variety of vocal styles and/or acting approaches necessary to be competitive in field of professional musical theater. Exploration of singing techniques for singing gospel and rhythm and blues music, with solo and group improvisation as foundation. Letter grading.


135C. Musical Theater Vocal Styles: Legitimate/Opera. (2) Studio, three hours. Designed for Theater majors. Part of five-course series of musical theater performance techniques in which students explore and master variety of vocal styles and/or acting approaches necessary to be competitive in field of professional musical theater. Exploration of strategies and techniques for performing legitimate/operetta music, with emphasis on vocal and body strengthening exercises and solo song coaching. Letter grading.

135D. Musical Theater Vocal Styles: Rock (2) Studio, three hours. Designed for Theater majors. Part of five-course series of musical theater performance techniques in which students explore and master variety of vocal styles and/or acting approaches necessary to be competitive in field of professional musical theater. Exploration of strategies and techniques for performing rock music, with emphasis on vocal and body strengthening exercises and solo song coaching. Letter grading.

135E. Musical Theater: Creating and Playing Character from Musical Text. (2) Studio, two to three hours. Designed for Theater majors. Exploration of text and lyrics of musical theater piece, song cycle, or specific composer’s work from actors’ point of view. Study develops character, character observation, and improvisation. Emphasis on creating and sustaining character through singing. Letter grading.

135F. Singing: Individual Instruction. (1) Studio, one hour. Requisite: course 35B. Designed to advance proper vocal technique, focusing on breath support, vowel shape, range expression, and overall mastery of vocal instrument. May be repeated four times for credit. Letter grading.

136. Advanced Acting for Stage. (4) Studio, four hours. Requisite: course 123. Study and practice of art of acting through progression to more advanced acting problems. May be repeated twice for credit. Consecutive enrollment with same instructor not permitted. Total units for courses 136, 137A, 137B, and 137C may not exceed 12 units. Letter grading.

C137. Emerging Technologies and Their Uses in Live Performance. (4) Seminar, four hours. Survey of media emerging and current technologies and their potential uses in and impact on live performance, from augmented and virtual reality to electronic textiles, Internet of Things, and Modern approaches to artificial intelligence. Offered for engaging with future collaborations with technologists, for self-study of new technologies, and, for those already more familiar with digital technologies, theoretical background for engaging with social and technological environments. Concurrently scheduled with course C437. P/NP or letter grading.

138. Special Problems in Performance Techniques. (4) Studio, four hours. Study of complex problems in voice, movement, and acting. May be repeated twice for credit. P/NP or letter grading.

139. Play Reading and Analysis. (5) Lecture, three hours. Investigation of dramatic texts, with focus on plot structure, plot, characters, motivation, and various other elements essential to effective theatrical interpretation and realization. Letter grading.

C140A. Sound Mixing. (4) Studio, four hours. Focus on mixing musical. Covers paper work needed to complete show. Tuning space, equalization, and some advanced projects involving programming and mixing on various consoles. May be repeated twice for credit. Concurrently scheduled with course C440A. Letter grading.

C140B. Advanced Programming for Entertainment Design. (4) Studio, three hours. Study and practice in object-based programming using MAX/MSP programming language to control sound and video. May be repeated once for credit. Concurrently scheduled with course C440B. Letter grading.

C140C. Advanced Projects in Programming for Entertainment Design. (4) Studio, three hours. Advanced projects using object-based programming to control sound and video. May be repeated once for credit. Concurrently scheduled with course C440C. Letter grading.

C144A. Advanced Sound Design. (4) Lecture, four hours; laboratory, four hours. Study of sound and acoustics as they relate to performance environments, techniques associated with recording, mixing, processing, automation, and reproduction of dialogue, effects, and music tracks. Offered for advanced design. May be repeated once for credit. Concurrently scheduled with course C444A. Letter grading.

C144B. Advanced Sound Design. (4) Lecture, four hours; laboratory, four hours. Advanced study and practice in preparation and recording of theater sound designs, with emphasis on analysis of script and score, conceptual development of design, and multi-track recording techniques to realize design. May be repeated once for credit. Concurrently scheduled with course C444B. Letter grading.

C144C. Script Analysis for Sound Designers. (4) Lecture, four hours; laboratory, four hours. Advanced study and practice in preparation of the theater sound design with emphasis on analysis of script and score,

C152D. Lighting Design for Special Events. (4) Lecture/studio, four hours. Study of professional lighting design practices in television for special events. Concurrently scheduled with course C452D. Letter grading.

C152E. Lighting Design for Dance. (4) Lecture, four hours. Requisites: courses C152A, C152B, C152C. Advanced topics in lighting design, concentrating live, dance, and concert design. May be repeated once for credit. Concurrently scheduled with course C452E. Letter grading.


C153D. Projects in Costume Design Management. (4) Lecture, three hours. Examination of professional duties of costume designers, set designers, and supervisors, especially management of production logistics, including but not limited to costume breakdowns, creating budgets, adhering to and overseeing them, as well as set costumer training for film and television, practicing on-set protocol, breakdown of daily responsibilities, and assisting set costumer kits ready for production. Practice with professional resourcefulness to move from abstract problem solving, maintaining creative and collaborative environment while adhering to logistical obstacles and tasks. Concurrently scheduled with course C453D. Letter grading.

C153E. History of Costume Design in Movies. (4) Lecture, three hours; screenings, two to six hours. History of costume design within context of 20th-century fashion and film history, including evolution of role of costume designer since early days of film industry. Role of costume designer and contribution of costume design to cinematic storytelling. Concurrently scheduled with course C453E. Letter grading.

C153F. Practice of Costume Design for Film Productions. (4) Lecture, three hours. Introduction to costume design as tool for storytelling, exploring integration of costume design and filmmaking process and what it takes to bring characters to life. Skills needed to effectively costume short narrative films, including script breakdown, collaboration with directors and actors, and how to manage production challenges. Concurrently scheduled with course C453F. Letter grading.

C154A. Sound Design. (4) Lecture/studio, four hours. Requisites: courses 14A, 14B, 14C. Introduction to sound and audio in acoustic, audio, and digital domain. Study and practice for recording, editing, and creating soundscapes. May be repeated once for credit. Concurrently scheduled with course C454A. Letter grading.

C154B. Sound Design for Theater. (4) Lecture/studio, four hours. Requisites: courses 14A, 14B, 14C. Exploration of sound design for theater and techniques for mixing, reinforcement, and signal processing. Topics include use of delay, equalization, and microphone placement for theater sound reinforcement. Study of creation of sound effects, control of MIDI data, and design techniques for musical theater. May be repeated once for credit. Concurrently scheduled with course C454B. Letter grading.

C154C. Sound for Film and Television. (4) Lecture/studio, four hours. Study of current professional sound recording, re-recording, mixing, and synchronization practices for film and television. Concurrently scheduled with course C454C. Letter grading.

C155A. Graphic Representation of Design: Perspective Drawing. (2) Studio, four hours. Requisite: course 147A or 147B. Use of pencil and pen to communicate scenic designs, including one- and two-point perspective, and textures. Concurrently scheduled with course C455A. Letter grading.

C155B. Graphic Representation of Design: Multi-media Rendering. (2) Studio, four hours. Study and practice of multimedia rendering techniques as they relate to interpretation of scenic, lighting, and costume rendering, with focus on human form in space. Weekly demonstrations of wide variety of art media, including watercolor, markers, pastel, and collage rendering. May be repeated twice for credit. Concurrently scheduled with courses C455B. Letter grading.

C155C. Graphic Representation of Design: Digital Rendering. (2) Studio, four hours. Study and practice with scenic and costume rendering techniques for combining live and digital rendering techniques. Coverage of rendering from life, enhancing final rendering with variety of computer-assisted formats to create polished sophisticated representations for theater, film, and television productions. May be repeated twice for credit. Concurrently scheduled with courses C455C. Letter grading.

C155D. Graphic Representation of Design: Model Making. (2) Studio, four hours. Requisite: course 147A or 147B. Study of model for representation of scenic designs from initial working prototypes to finished color models. Use of wide variety of materials and techniques for execution of model. Concurrently scheduled with courses C455D. Letter grading.

C155E. Graphic Representation of Design: Life Painting Techniques. (2) Studio, four hours. Requisite: course 147A or 147B. Study of painting techniques and materials and their realization of color design and elevations. May be repeated once for credit. Concurrently scheduled with courses C455E. Letter grading.

C155F. Graphic Representation of Design: Costume Rendering. (2) Studio, four hours. Requisite: course 147A or 147B. Study of rendering theatrical costumes, with emphasis on figure, clothing, and fabrics. Concurrently scheduled with courses C455F. Letter grading.

C155G. Graphic Representation of Design: Scene Painting Techniques. (2) Studio, four hours. Requisite: course 147A or 147B. Study of scenic painting techniques and materials and their realization of color design and elevations. May be repeated once for credit. Concurrently scheduled with courses C455G. Letter grading.

C155H. Selected Topics in Graphic Representation of Design. (2) Studio, six hours. Group study of selected topics in graphic representation of design for theater. May be repeated once for credit. Concurrently scheduled with courses C455H. Letter grading.


C156C. Computer-Assisted Rendering. (4) Studio, four hours. Investigation of three-dimensional lighting and scenic design previsualization: wire-frame perspective drawing and photo-realistic computer ren-


160. Fundamentals of Play Direction. (5) Lecture, two hours; laboratory, four hours. Requisite: course 15 with grade of C or better. Course 121 may be taken concurrently. Basic theories of play direction and their application through preparation of scenes under rehearsal conditions. P/NP or letter grading.


C163D. Directing Project for Stage. (5) Discussion, three hours; laboratory, four to eight hours. Requisites: courses 163A, 163B, 163C. Application of stage direction skills in production of short play or project. Students direct one-act play or project. May be repeated once for credit. Concurrently scheduled with course C263D. Letter grading.

167A. Career Preparation for Acting. (2) Lecture/studio, three to four hours. Requisite: course 116. Preparation for professional career as actor in film, television, theater, and commercials. Topics include audition preparation, résumés, agents, managers, casting directors, producers, unions, survival skills, professional development. Letter grading.

167B. Audition Preparation for Singing Actor. (2) Lecture/studio, three hours. Requisite: one course from C163A through C163F. Audition preparation for singing actor, providing various techniques to prepare for and successfully execute professional musical theater auditions. Letter grading.

170. Design and Production Project. (4) Laboratory, eight hours; lecture, two hours. Requisites: courses 14A, 14B, 14C. Experience as stage manager or designer, including participation in preparation and realization of scenic, lighting, costume, or sound designs, or stage management in production. May be repeated once for credit. Letter grading.

171A. Advanced Theater Laboratory. (1 to 4) Laboratory, to be arranged. Creative participation as actor or stage manager in public presentation of departmental productions. May be taken for maximum of 4 units. P/NP or letter grading.

171B. Advanced Theater Laboratory. (1 to 4) Laboratory, to be arranged. Creative participation in realization of production elements related to public presentation of departmental productions. May be taken for maximum of 4 units. P/NP or letter grading.

172. Production Practice in Theater, Film, Video, and Digital Media. (1 to 8) Studio, three to eight hours. Exploration and laboratory experience in one or more various aspects of production and postproduction practice for entertainment media, including theater, film, video, and digital media. May be repeated for maximum of 24 units. Letter grading.

173A. Design Assignment: Assistant Designer. (2) Studio, six hours. Requisites: courses 14A, 14B, 14C. Laboratory experience as assistant designer, including participation in preparation and realization of scenic, lighting, costume, or sound designs. May be repeated twice. Letter grading.

173B. Production Design Assignment: Designer. (2) Studio, six hours. Requisites: courses 14A, 14B, 14C. Laboratory experience as designer, including participation in preparation and realization of scenic, lighting, costume, or sound designs. May be repeated twice. Letter grading.


174B. Project in Stage Management. (3) Studio, nine hours. Requisite: course 174A. Laboratory experience in professional duties of assistant stage manager, including preparation, control, and performance phases of productions. May be repeated once for credit. Letter grading.

174C. Project in Stage Management. (4) Studio, 12 hours. Requisites: course 174B, laboratory experience in professional duties of stage manager, including participation as stage manager in preparation, rehearsal, and performance phases of productions. Problems of unions, organization, scheduling, and responsibilities of lengthy run. May be repeated three times for credit. Letter grading.

174D. Advanced Stage Management Techniques. (2) Lecture, two hours; studio, two hours. Requisites: courses 147A, 174A. Professional duties of stage management. Practical training, including paper techniques, dry techniques, cue 2 cue, preshow setup, performance reports, and quick change rehearsals. Letter grading.

175A-175C-175D. Summer Theater Workshops. (4 or 8 each) Laboratory, 12 to 24 hours. Participation in various aspects of theater production and performance. Offered in summer only. Letter grading.

175B. Summer Theater Workshop. (1 to 4) Laboratory, three hours. Participation in various aspects of theater production and performance. Offered in summer only. Letter grading.

C176A-C176B-C176C. Production Practice in Theater with Emerging Technologies I, II, III. (4–4–4) Studio/laboratory, four to six hours. Collaborative creative and technical development of all aspects of theatrical production incorporating emerging and advanced technologies, culminating in rehearsal and public presentation. Offered as series of up to three courses in cases where multiple quarters are needed to complete production. Concurrently scheduled with course C476A-C476B-C476C. Letter grading.

177. Computer-Assisted Design Techniques. (4) Studio, six hours. Hands-on exploration of use of computers for design of scenery and lighting in the theater, film, and television. Topics include design and execution of set, light, and costume using vector graphic systems, including automated fixtures, projection equipment, and computer systems for lighting. Concurrently scheduled with course C477A. Letter grading.

M178. Film and Television Acting Workshop. (2) (Same as Film and Television M117.) Laboratory, four hours. Workshop providing opportunities for students to rehearse, perform, and evaluate scenes. Three different production styles to which performers may need to adjust are (1) preproduction rehearsals with director, (2) single-camera experience for television, and (3) multiple-camera experience. May be repeated twice for credit. Letter grading.

180. Senior Project. (4) Lecture or studio, three hours. Requisites: courses 101A, 101B, 101C. Preparation of conceptual or creative project to provide culminating experience in production of creative or research work. May be repeated twice for credit. Letter grading.

181. Career Development for Actors. (2) Lecture, three hours; fieldwork, three hours. Limited to seniors. Study of business practices, career entry, and development for actors. P/NP or letter grading.

185A. Role of Producer in Professional Theater. (2) Lecture, three hours. Requisites: courses 101A, 101B, 101C. Preparation of conceptual or creative project to provide culminating experience in production of creative or research work. May be repeated twice for credit. Letter grading.

185B. Role of Management in Educational and Community Theater. (2) Lecture, three hours. Studies of artistic, social, and economic criteria in administration of educational and community theater. Concurrently scheduled with course C285B. P/NP or letter grading.

M187. Art Alive: Art and Improvisation in Museums. (4) (Same as Honors Collegium M116.) Seminar, four hours. Offered in collaboration with Los Angeles County Museum of Art (LACMA). Interpretation of art in collaboration through live movement and music. Research into history and art history and production of creative performance piece required. P/NP or letter grading.


188SB. Individual Studies for USIE Facilitators. (1) Tutorial, to be arranged. Enforced corequisite: Honors Collegium 101E. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor required. May not be repeated. Letter grading.

188T. Art Alive: Art and Improvisation in Museums. (4) (Same as Honors Collegium M116.) Seminar, four hours. Offered in collaboration with Los Angeles County Museum of Art (LACMA). Interpretation of art in collaboration through live movement and music. Research into history and art history and production of creative performance piece required. P/NP or letter grading.

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ment to finalize course syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.

188SC. Individual Studies for USIE Facilitators. (2) Tutorial, to be arranged. Enrolled requisite: course 188SB. Limited to junior/senior USIE facilitators. Individual study in required and/or scheduled meetings with faculty mentor while facilitating USIE 88B course. Individual contract with faculty mentor required. May not be repeated. Letter grading.

189. Advanced Division Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and projects in student-initiated independent study. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

195. Community or Corporate Internships in Theater, Film, and Television. (2, 4, or 8) Tutorial, eight, 16, or 24 hours. Limited to juniors/seniors. Internship at various theaters, studios, or entertainment organizations accentuating creative contributions, organization, and work of professional in their various specialties. Students meet on regular basis with instructor and provide periodic reports of their experience. May be taken for maximum of 8 units. Individual contract with supervising faculty member required. Letter grading.

199. Directed Research or Senior Project in Theater. (2 to 8) Tutorial, to be arranged. Limited to juniors/seniors. Research under guidance of faculty mentor. Supervised individual research or investigation. Culminating paper or project required. May be repeated for credit. Individual contract required. P/NP or letter grading.

Graduate Courses


206. Themes in World Theater and Drama. (5) Seminar, four hours. Designed for graduate students. Selection of topics in history, drama, production, and/or architecture organized on thematic basis. May be repeated for maximum of 8 units. S/U or letter grading.

208C. Practicum in Dramaturgy. (2 to 12) Laboratory, to be arranged. Requisites: courses 208A, 208B. Demonstration of competence in practice of dramaturgy through completion of approved dramaturgical assignment. May be taken for maximum of 12 units. Letter grading.

210. Topics in World Theater and Drama. (5) Seminar, three hours. Designed for graduate students. Investigation of selected topics in world theater, drama, production, and architecture. May be repeated four times for credit. S/U or letter grading.

216A. Approaches to Representation. (5) Lecture, three hours; laboratory, one hour. Overview of strategies of representation from classical aesthetic theories to postmodern deconstructions of them. May be repeated once for credit. Letter grading.

216B. Approaches to History. (5) Lecture, three hours; laboratory, one hour. Overview of key methodologies, theories, and debates in historiography of theater and performance linked to plays and performances appropriate to approach. Letter grading.

216C. Approaches to Identification. (5) Lecture, three hours; laboratory, one hour. Overview of key theories, methods, debates, and performance texts of identification structures between audience member or scholar and theatrical or performance object. Letter grading.

220. Graduate Forum. (1 to 4) Seminar, one to four hours. Limited to graduate students. Presentation and discussion of issues informing and affecting contemporary theater. May be repeated four times for credit. S/U grading.

221. Introduction to Performance Studies. (5) Seminar, three hours. Investigation of performance as sustained practice in traditional disciplines such as theater, music, and dance and as lens to focus thinking about human experience in fields such as philosophy, literature, cultural anthropology, linguistics, education, and law. Emphasis on establishing interdisciplinary dialogue across many fields. Letter grading.

222. Character Development through Makeup and Hair Design. (2) Studio, four hours. Examination of historical and avant-garde techniques in design and history of makeup and hair in contemporary media such as film and theater. Students learn to design and execute makeup and hair for contemporary actors. Letter grading.

223. Contemporary Topics in Theater, Film, and Television. (2) Lecture, four hours. Examination of contemporary theatrical, cinematic, and digital media work. Letter grading.

224. History of Costume Design. (4) Lecture, four hours. Study of history of costume as manifestation of cultural, social, economic, and political influences to the present. Exploration of costumes for theater, film, and television. Historical survey and in-depth exploration of selected periods, with study of influences of diverse cultures. Letter grading.

264. History of Costume Design. (4) Lecture, four hours. Study of history of costume as manifestation of cultural, social, economic, and political influences to the present. Exploration of costumes for theater, film, and television. Historical survey and in-depth exploration of selected periods, with study of influences of diverse cultures. Letter grading.

265. Modern Theories of Production. (4) Lecture, four hours. Examination of modern theories of production from emergence of director in 19th century to present. Investigation of different responses to problems of creating vital theatrical event in context of ongoing evolution of theater as art form. Examination of contemporary directors and directors; relation between theater and other forms of representation. Letter grading.

266. Theatrical Conceptualization. (4) Lecture, four hours. Examination of process of conceptualization in dramatic production; centrality of theatrical conceptualization in interpretation of dramatic text; exploration of range of possibilities inherent in different theatrical spaces and options in design components. Consideration of visual arts and music as sources of stimuli for theatrical conceptualization, with focus on collaborative aspect of theatrical production. Letter grading.

271. Production Practice in Theater, Film, Video, and Digital Media. (1 to 8) Studio, three to eight hours. Exploration of single or composite project. May be repeated once for credit. S/U or letter grading.

272. Production Practice in Theater, Film, Video, and Digital Media. (1 to 8) Studio, three to eight hours. Exploration of single or composite project. May be repeated once for credit. S/U or letter grading.

285A. Role of Producer in Professional Theater. (2) Lecture, three hours. Designed for graduate students. Study of structure governing economic and artistic decisions-making process at professional theater. Letter grading.

285B. Role of Manager in Educational and Community Theater. (2) Lecture, three hours. Designed for graduate students. Study of management structures and law in the educational and community theater. Letter grading.

421B. Advanced Acting: Classical and Historical Drama. (4) Studio/laboratory, six to eight hours. Concepts related to Greek choruses and historical plays. Addresses group concentration and communication, choral breathing, awareness of knees or fir; function of performer’s body in space, and relationship of emotion to movement, and voice. Letter grading.

421C. Advanced Acting and Craft for Actor. (4) Studio/laboratory, six to eight hours. Building on focus on craft, inclusiveness of voice, movement, and memory. References to historical costume for the theater, film, and television and an understanding of the costume’s meaning within the context of the period. Letter grading.

422. Advanced Acting for Theater, Film, and Television. (8 to 12) Studio/laboratory, eight to 12 hours. Intensive performance experience. May be repeated for credit. Letter grading.

423. Advanced Acting for Virtual Environments. (4) Studio, six to 20 hours. Focusing on acting, gesture, action, and characterization into scene work for virtual reality, motion capture, and other emerging performance capture techniques. May be repeated twice for credit. Letter grading.

424A. Advanced Voice and Text. (2) Studio, three to six hours. Development of voice for stage, including exercises for relaxation, breathing, bodily alignment, diaphragmatic breath, head and chest resonance, and warm-up. Application of vocal techniques on contemporary and classical texts, including U.S. dialects and scansion of verse in Shakespeare. Letter grading.

424B. Vowels and Voice Placement. (1) Studio, three hours. Requirements: course 424A. Builds on course 424A. Introduction of vowel diphthongs and triphthongs; development of forward sound, including consistent thought energy. Exercises to develop and test the development of voice. Text and warm-up exercises also covered. Letter grading.

424C. Voice in Action. (1) Studio, three hours. Requires: course 424A. Physical explorations and techniques for breath sourcing and increasing awareness of voice in action. Sensory awareness work, Linklater and Barry techniques, and Knight-Thompson model may also be explored. Letter grading.


424F. Advanced Vocal Range and Flexibility. (1) Studio, three hours. Dynamic use of vocal range, including tempo, volume, pitch, resonance, actions, and physical presence. Text work focuses on developing vocal and physical presence. Voice work designed to keep one’s instrument safe while effectively communicating character. Letter grading.

424G. Advanced Vocal Dynamics. (1) Studio, three hours. Extended range, resonance, and voice work in support of clear, forward speech. Further fluency with vocal resonance in relation to acoustic properties of performance spaces. Using vivid vocal engagement to support narrative. Requiring attention to varieties of tempo, volume, pitch, resonance, range, etc. Letter grading.


424I. Phonetics, Dialects, and Accents. (1) Studio, three hours. Use of phonetics to enhance actor’s ability to create characteristic accents. Culminating dialect presentation project required. Letter grading.

424J. Acting for Microphone. (2) Studio, four to six hours. Techniques including textual analysis and character work in art and craft of recording for microphone. Letter grading.

425A. Advanced Movement I. (2 or 4) Studio/laboratory, three to six hours. Discovery of body’s unique language through exercises designed to explore and free total instrument. Development of flexible actor with range, expression, and confidence physically. May be repeated for maximum of 12 units. Letter grading.

425B–425C. Advanced Movement I. (2 or 4 each) Studio/laboratory, three to six hours. Discovery of body’s unique language through exercises designed to explore and free total instrument. Development of flexible actor with range, expression, and confidence physically. May be repeated for maximum of 12 units. Letter grading.

425D. Advanced Movement II. (2 or 4) Studio/laboratory, three to six hours. Exploration of selected periods and subcategories of performance spaces. Using vivid vocal engagement to support narrative. Requiring attention to varieties of tempo, volume, pitch, resonance, range, etc. Letter grading.

425E. Advanced Conditioning and Combat for Theater, Film, and Television. (2) Studio, six hours. Body conditioning, basic striking skills, tumbling, breathwork, redirection of energy, stunts, gymnastics, martial arts, use of weapons, and integration of skills in performance contexts. Letter grading.

425F. Advanced Movement III. (2 or 4) Studio/laboratory, three to six hours. Presentation of more complete picture of stage movement and its relationship to theater, music, and dance. Advancement of physical training of individual actors to their maximum potential. Experience in techniques and discovery of origins of variety of acrobatic and dance disciplines, including ballet, ballroom, period dance, and circus techniques. Letter grading.

426–426B. Alexander Techniques. (2 or 4 each) Studio, three to six hours. Study and practice in Alexander techniques as method of developing balance, poise, and coordination of body and mind. Exploration of use of rhythm to expand movement potential of actors and relevant use of visual arts and animal studies to character development and to expansion of movement potential. Letter grading.

426B–426C. Advanced Studies in Playwriting. (4 to 8 each) Lecture and/or Studio, six to 12 units. Designed for MFA playwriting program students. Guided completion of full-length scripts for stage, S/U or letter grading.

431. Special Topics in Playwriting. (4) Discussion, three hours. Designed for MFA playwriting program students. Analysis and practice of varied aspects of playwright’s art. Variable content selected from topics such as comedy writing, docudrama, writing for alternative media, idiosyncracies from stage to screen, children’s theater, or improvisational techniques. May be repeated twice for credit. S/U or letter grading.

427. Theatrical Adaptation. (4) Lecture, three hours. Designed for MFA playwriting program students. Students prepare and present readings of playwriting adaptation techniques, and outline and development of adaptation for stage. Letter grading.
C433A. Script Development Workshops. (4 to 8) Lecture, three hours; studio, four to 24 hours. Designed for graduate students. Guided process of script development, with emphasis on communication, artistic growth, and professional process. May be taken for maximum of 8 units. Concurrently scheduled with course C133A. Letter grading.

343B. Script Development Workshop. (4 to 8) Formerly numbered C433B. Lecture, three hours; studio, four to 24 hours. Designed for graduate students. Guided process of script development, with emphasis on communication, artistic growth, and professional process. May be taken for maximum of 8 units. Letter grading.

C433AF-C433AW-C435AS. Problems in Advanced Writing for Stage. (0–0–2) Lecture, two hours. Limited to MFA candidates. Review discussion and critique of playwriting projects. Each course may be repeated for maximum 8 units. In Progress (C433AF, C433AW) and S/U (C435AS) grading.

C437. Emerging Technologies and Their Uses in Live Performance. (4) Seminar, four hours. Survey of major emerging and contemporary technologies and their potential uses and impact on live performance, from augmented and virtual reality to electronic textiles, internet of Things, and Modern approaches to artificial intelligence. Offers solid basis for engaging in future collaborations with technologists, for self-study of new technologies, and, for those already more familiar with digital technologies, theoretical background for engaging with social context of these technologies. Concurrently scheduled with course C137. S/U or letter grading.

C440A. Sound Mixing. (4) Studio, four hours. Focus on mixing musical. Covers paperwork needed to complete show; Tuning, space, equalization, and some advanced projects involving programming and mixing on various consoles. May be repeated twice for credit. Concurrently scheduled with course C140A. Letter grading.

C440B. Advanced Programming for Entertainment Design. (4) Studio, three hours. Study and practice in object-based programming using MAX/MSP programming language to control sound and video. May be repeated once for credit. Concurrently scheduled with course C140B. Letter grading.

C440C. Advanced Projects in Programming for Entertainment Design. (4) Studio, three hours. Advanced projects using object-based programming to control sound and video. May be repeated once for credit. Concurrently scheduled with course C140C. Letter grading.

441A. Lighting Design. (4) Lecture/studio, four hours. Study and practice in lighting actors, emphasizing textual and visual interaction from lighting designer's perspective, conceptual development with director, effect of light on dynamics of staging, use of color in light, and relationship of lighting designer to actor. May be repeated twice for credit. Letter grading.

441B. Lighting Design. (4) Lecture/studio, four hours. Study of use of light and color to define space, effect of light on scenery and costumes, lighting for arena/thrust theaters, multiscreen productions, lighting patterns, and moving scenery. May be repeated once for credit. Letter grading.

441C. Lighting Design. (4) Lecture/studio, four hours. Investigation of lighting design in production, musical theater, opera, television, and other scenic and theatrical situations. Study of analysis of script and score for lighting designer. May be repeated once for credit. Letter grading.

441D. Scenic Projection and Media Techniques. (4) Lecture/laboratory, four hours. Designed for graduate students. Study and practice in projection and media techniques, with emphasis on analysis, design, and execution of theatrical projection and photographic technique for stage. S/U or letter grading.

442A-442B-442C. Costume Design. (4–4–4) Lecture/studio, four hours. Advanced study and practice in costume design for theater. Emphasis on visual presentation of design, costume design and wardrobe practices in film and television, special effects, set design, and the role of costume designer. May be repeated twice for credit. Concurrently scheduled with course C153A. Letter grading.

443A-443D. Advanced Scenic Design. (4 each) Studio, four hours. Advanced study and practice of scenic design for theater, with emphasis on cultivating imagination as it relates to concept, analysis, metaphor, and conceptualization. Investigation of design research process, composition, and style leading to visual presentation of design, as well as the presentation of character and stylistic process leading to visual refinement of techniques. Each course may be repeated twice for credit. S/U or letter grading.

444A. Advanced Sound Design. (4) Lecture, four hours; laboratory, four hours. Advanced study and practice in preparation and recording of theater sound designs, with emphasis on analysis of script and score, conceptual development of design, and multi-track recording techniques to realize design. May be repeated once for credit. Concurrently scheduled with course C144B. Letter grading.

444B. Advanced Sound Design. (4) Lecture, four hours; laboratory, four hours. Advanced study and practice in preparation and recording of theater sound designs, with emphasis on analysis of script and score, conceptual development of design, and multi-track recording techniques to realize design. May be repeated once for credit. Concurrently scheduled with course C144C. Lecture grading.

445A-445B-445C. Production Design for Film, Television, and Entertainment Media. (4–4–4) Lecture/studio, four hours. Study and practice in design of scenic environment for film, video, and entertainment media, including design of on-screen elements, roles of production designers and art directors, and design for single- and multiple-camera production. Each course may be repeated once for credit. Letter grading.

446A-446B-446C. Art and Process of Entertainment Design. (4–4–4) Lecture, three hours. Conceptualization, design, and prototyping of interactive theatrical events. Concurrently scheduled with courses C146A-C146B-C146C. Letter grading. Open to original forms of media-rich entertainment experience through lectures, presentations, and seminar participation. Students form collaborative teams to conceive and propose interactive entertainment events. C446B. Prototype development; two to five proposals to be more completely defined and developed. Students form collaborative teams for further conceptual development of their project proposals. May be repeated once for credit.

448A-448B-448C. Costume Design for Film, Television, and Entertainment Media. (4–4–4) Lecture/studio, four hours. Study and practice in design of costume for live and virtual characters in film, television, and entertainment media, including effect of differing media on design choices. Courses 448A and 448B may be repeated once for credit. Courses 448B and 448C may be repeated twice for credit. Letter grading.

448D. Deconstructing Glamour. (4) Lecture, three hours; screenings, two hours. Exploration of integration of costume design into filmmaking process and illumination of work required to bring characters from written page to life. Letter grading.

449A. Design Thesis Preparation. (2) Lecture/studio, four hours. Series of group design projects that prepare design students for thesis examination. In Progress grading (credit to be given only on completion of courses 449B and 449C).

449B. Design Thesis Preparation. (2) Lecture/studio, four hours. Series of group design projects that prepare design students for thesis examination. In Progress grading (credit to be given only on completion of course 449C).

449C. Design Thesis Project. (4) Formerly numbered 449D. Lecture/studio, four hours. Series of group design projects that serve as comprehensive examination for MFA degree in entertainment design. Review and evaluation of projects by design faculty drawn from all areas of curriculum. Letter grading.

C451A. Scenic Design. (4) Lecture/studio, four hours. Emphasis on impetus for design, text analysis, metaphor, and conceptualization. Investigation of design process composition, and style leading to visual presentation of design. May be repeated once for credit. Concurrently scheduled with course C151A. Letter grading.

C451B. Scenic Design for Theater. (4) Lecture/studio, four hours. Study of scenic design for proscenium, thrust, and arena configurations, multiscreen productions, and music theater. May be repeated once for credit. Concurrently scheduled with course C151B. Letter grading.

C451C. Production Design for Film, Television, and Video. (4) Lecture/studio, four hours. Study of role of director, scenic design for single-camera and multiscreen production, and set decoration. May be repeated once for credit. Concurrently scheduled with course C151C. Letter grading.

C452A. Lighting Design. (4) Lecture/studio, four hours. Study of lighting, with emphasis on imagination, text analysis, metaphor, and conceptualization. Investigation of compositional and control of light and color in relation to actor. May be repeated once for credit. Concurrently scheduled with course C152A. Letter grading.

C452B. Lighting Design for Special Events. (4) Lecture/studio, four hours. Study of professional lighting design practices in television for single- and multiscreen production. Concurrently scheduled with course C152B. Letter grading.

C452C. Lighting Design for Television. (4) Lecture/studio, four hours. Study of lighting design for televisions, including live performances for concerts, exhibitions, and events. Concurrently scheduled with course C152D. Letter grading.


C453A. Costume Design. (4) Lecture/studio, four hours. Emphasis on costume design on film and television, with analysis, metaphor, and conceptualization. Investigation of design research process, composition, and style leading to visual presentation of design. May be repeated twice for credit. Concurrently scheduled with course C153A. Letter grading.

C453B. Costume Design for Theater. (4) Lecture/studio, four hours. Study of costume design for proscenium, thrust, and arena configurations, multiscreen productions, and music theater. May be repeated twice for credit. Concurrently scheduled with course C153B. Letter grading.


C453D. Projects in Costume Design Management. (4) Lecture, three hours. Examination of professional duties of costume designers, set costumers, and supervisors, especially management of production logistics, including but not limited to costuming breakdowns, creating budgets, adhering to and overseeing them, as well as set costumer training for film and television, practicing on-set protocol, breakdown of daily responsibilities, and assembling set costumer kits ready for...
C453E. History of Costume Design in Movies. (4) Lecture, three hours; screenings, two to six hours. History of costume design within context of 20th-century fashion and film history, including evolution of role of costume in visual storytelling. Concurrently scheduled with courses C155E, Letter grading.

C455E. Graphic Representation of Design: Life Drawing. (2) Studio, four hours. Requisite: course 147A or 147B. Study and practice in drawing of human form. Concurrently scheduled with courses C155E, Letter grading.

C455F. Graphic Representation of Design: Costume Rendering. (2) Studio, four hours. Requisite: course 147A or 147B. Study of techniques for rendering theatrical costumes, with emphasis on figure, clothing, and fabrics. Concurrently scheduled with courses C155F, Letter grading.

C455G. Graphic Representation of Design: Scene Painting Techniques. (2) Studio, four hours. Requisite: course 147A or 147B. Study of scenic painting techniques, including color, illusion, stage design and elevations. May be repeated once for credit. Concurrently scheduled with courses C155G, Letter grading.

C455H. Advanced Costume Rendering. (4) Studio, four hours. Requisite: course 147A. Investigation of drawing of costumes, clothing, and undergarments to achieve authentic-appearing designs, with emphasis on figure, clothing, and fabrics. Concurrently scheduled with courses C155H, Letter grading.


C456G. Sound Design for Theater. (4) Lecture/studio, four hours. Exploration of sound design for theater and techniques for mixing, reinforcement, and signal processing. Topics include use of delay, equalization, and microphone placement for theater sound reinforcement. Study of creation of sound effects, control of MIDI data, and design techniques for musical theater. May be repeated once for credit. Concurrently scheduled with course C154B, Letter grading.

C457A. Introduction to Costume Design. (2) Studio, four hours. Study of design of theatrical costumes, with emphasis on figure, clothing, and fabrics. Concurrently scheduled with courses C155A, Letter grading.

C457B. Designing Theatrical Environments. (4) Studio, four hours. Study of design of theatrical environments, with emphasis on figure, clothing, and fabrics. Concurrently scheduled with courses C155B, Letter grading.

C457C. Designing Theatrical Environments for Period. (2) Studio, four hours. Study of design of theatrical environments, with emphasis on figure, clothing, and fabrics. Concurrently scheduled with courses C155C, Letter grading.

C457D. Designing Theatrical Environments for Contemporary. (2) Studio, four hours. Study of design of theatrical environments, with emphasis on figure, clothing, and fabrics. Concurrently scheduled with courses C155D, Letter grading.

C457E. Designing Theatrical Environments for Contemporary. (2) Studio, four hours. Study of design of theatrical environments, with emphasis on figure, clothing, and fabrics. Concurrently scheduled with courses C155E, Letter grading.


C458C. Elements of Stage Lighting. (4) Lecture/studio, four hours. Requisite: courses 14A, 14B, 14C. Investigation of advanced techniques and materials for construction, finishing, rigging, scenic property, and scenic and theatrical productions and assembling of design portfolio and résumé. Information about industry demands and protocols for portfolio presentation and review, with projects prepared under guidance of respective design faculty adviser. Letter grading.


C458E. History of Costume Design in Movies. (4) Lecture, three hours; screenings, two to six hours. History of costume design within context of 20th-century fashion and film history, including evolution of role of costume in visual storytelling. Concurrently scheduled with courses C155E, Letter grading.

C458F. Graphic Representation of Design: Costume Rendering. (2) Studio, four hours. Requisite: course 147A or 147B. Study of techniques for rendering theatrical costumes, with emphasis on figure, clothing, and fabrics. Concurrently scheduled with courses C155F, Letter grading.

C458G. Graphic Representation of Design: Scene Painting Techniques. (2) Studio, four hours. Requisite: course 147A or 147B. Study of scenic painting techniques, including color, illusion, stage design and elevations. May be repeated once for credit. Concurrently scheduled with courses C155G, Letter grading.

C458H. Advanced Costume Rendering. (4) Studio, four hours. Requisite: course 147A. Investigation of drawing of costumes, clothing, and undergarments to achieve authentic-appearing designs, with emphasis on figure, clothing, and fabrics. Concurrently scheduled with courses C155H, Letter grading.


C458L. Designing Theatrical Environments. (4) Studio, four hours. Study of design of theatrical environments, with emphasis on figure, clothing, and fabrics. Concurrently scheduled with courses C155B, Letter grading.

C458M. Designing Theatrical Environments for Period. (2) Studio, four hours. Study of design of theatrical environments, with emphasis on figure, clothing, and fabrics. Concurrently scheduled with courses C155C, Letter grading.

C458N. Designing Theatrical Environments for Contemporary. (2) Studio, four hours. Study of design of theatrical environments, with emphasis on figure, clothing, and fabrics. Concurrently scheduled with courses C155D, Letter grading.

C458O. Designing Theatrical Environments for Contemporary. (2) Studio, four hours. Study of design of theatrical environments, with emphasis on figure, clothing, and fabrics. Concurrently scheduled with courses C155E, Letter grading.


C458R. Designing Theatrical Environments. (4) Studio, four hours. Study of design of theatrical environments, with emphasis on figure, clothing, and fabrics. Concurrently scheduled with courses C155B, Letter grading.

C458S. Designing Theatrical Environments for Period. (2) Studio, four hours. Study of design of theatrical environments, with emphasis on figure, clothing, and fabrics. Concurrently scheduled with courses C155C, Letter grading.

C458T. Designing Theatrical Environments for Contemporary. (2) Studio, four hours. Study of design of theatrical environments, with emphasis on figure, clothing, and fabrics. Concurrently scheduled with courses C155D, Letter grading.
Tool for portfolio presentation and review, with projects prepared under guidance of respective design faculty adviser. Letter grading.

C476A-C476B-C476C. Production Practice in Theater with Emerging Technologies I, II, III. (4-4-4) Studio/laboratory, four to six hours. Collaborative creative and technical development of all aspects of the theatrical production incorporating emerging and/or advanced technologies, culminating in rehearsal and public presentation. Offered as series of up to three courses in cases where multiple quarters are needed to prepare production. Concurrently scheduled with course C176A-C176B-C176C. Letter grading.

495A-495B-495C. Practicum and Practice in Teaching. (2-2-2) Seminar, to be arranged; discussion, two hours. Limited to PhD students. Study and practice of teaching theater at university level. Orientation and preparation of graduate (PhD) students who have responsibility to assist in teaching undergraduate courses in department. Discussion of problems common to teaching experience. Letter grading.

498. Professional Internship in Theater, Film, and Television. (4, 8, or 12) Tutorial, to be arranged. Full- or part-time at studio or on professional project. Designed for advanced MFA students. Internship at various film, television, or theater facilities accentuating creative contribution, organization, and work of professionals in their various specialties. Given only when projects can be scheduled. S/U or letter grading.

501. Cooperative Program. (2 to 8) Tutorial, to be arranged. Preparation: consent of UCLA graduate adviser and graduate division director, host campus instructor, department chair, and graduate dean. Used to record enrollment of UCLA students in courses taken under cooperative arrangements with USC. S/U grading.

596A. Directed Individual Studies: Research. (2 to 12) Tutorial, to be arranged. Designed for graduate students. May be repeated with consent of instructor. S/U or letter grading.

596B. Directed Individual Studies: Writing. (2 to 12) Tutorial, to be arranged. Designed for graduate students. May be repeated with consent of instructor. S/U or letter grading.

596C. Directed Individual Studies: Directing. (2 to 12) Tutorial, to be arranged. Designed for graduate students. May be repeated with consent of instructor. S/U or letter grading.

596D. Directed Individual Studies: Design. (2 to 12) Tutorial, to be arranged. Designed for graduate students. May be repeated with consent of instructor. S/U or letter grading.

596E. Directed Individual Studies: Acting. (2 to 12) Tutorial, to be arranged. Designed for graduate students. May be repeated with consent of instructor. S/U or letter grading.

596F. Directed Individual Studies: Production. (2 to 12) Tutorial, to be arranged. Designed for graduate students. May be repeated with consent of instructor. S/U or letter grading.

597. Preparation for PhD Qualifying Examinations in Theater Arts. (2 to 12) Tutorial, to be arranged. Writing of prospectus and three reading lists. May be repeated for credit. S/U grading.


**Scope and Objectives**

Available to all undergraduate students, the University Studies curriculum seeks to promote academic success and facilitate the transition of new students as they enter UCLA. Courses are tailored to specific undergraduate populations and are designed to introduce students to the research university and academic culture of UCLA. Beyond addressing themes of academic success, the courses also introduce students to the unique opportunities and experiences available at a large research university. For more information, contact Marian Gabra.

**University Studies Lower-Division Courses**

10A. ACE UCLA | Critical Strategies to Achieve Undergraduate Excellence for Incoming Freshmen. (2) Seminar, two hours. Not open to students who have completed University Studies 10B, 10C, 10D, or former course 10. Designed to assist first-year students in making successful transition to UCLA by focusing on academic, social, and emotional aspects of transition. Study of research university’s history, mission, rigors, expectations of students, and pedagogical implications. Cultivation of formal space on campus where UCLA students learn to engage both diplomatically and collaboratively with diverse community of scholars; to comprehend and apply theoretical foundations of college student development; to navigate complex structure of UCLA; and to be fully aware of their value to intellectual fabric of institution as contributors to innovative research and scholarship. P/NP grading.

10B. ACE UCLA | Critical Strategies to Achieve Undergraduate Excellence for Humanities Students. (2) Seminar, two hours. Not open to students who have completed University Studies 10A, 10B, 10C, 10D, or former course 10. Designed to assist first-year students in making successful transition to UCLA by focusing on academic, social, and emotional aspects of transition. Study of research university’s history, mission, rigors, expectations of students, and pedagogical implications. Cultivation of formal space on campus where UCLA students learn to engage both diplomatically and collaboratively with diverse community of scholars; to comprehend and apply theoretical foundations of college student development; to navigate complex structure of UCLA; and to be fully aware of their value to intellectual fabric of institution as contributors to innovative research and scholarship. P/NP grading.

10C. ACE UCLA | Critical Strategies to Achieve Undergraduate Excellence for First-Generation Students. (2) Seminar, two hours. Open to students who have completed University Studies 10A, 10B, 10C, 10D, or former course 10. Designed to assist first-generation students in making successful transition to UCLA by focusing on academic, social, and emotional aspects of transition. Study of research university’s history, mission, rigors, expectations of students, and pedagogical implications. Cultivation of formal space on campus where UCLA students learn to engage collaboratively with diverse community of scholars; to comprehend and apply theoretical foundations of college student development; to navigate complex structure of UCLA; and to be fully aware of their value to intellectual fabric of institution as contributors to innovative research and scholarship. P/NP grading.

10D. ACE UCLA | Critical Strategies to Achieve Undergraduate Excellence for Transfer Students. (2) Seminar, two hours. Not open to students who have completed University Studies 10A, 10B, 10C, 10D, or former course 10. Designed to assist transfer students in making successful transition to UCLA by focusing on academic, social, and emotional aspects of transition. Study of research university’s history, mission, rigors, expectations of students, and pedagogical implications. Cultivation of formal space on campus where UCLA students learn to engage both diplomatically and collaboratively with diverse community of scholars; to comprehend and apply theoretical foundations of college student development; to navigate complex structure of UCLA; and to be fully aware of their value to intellectual fabric of institution as contributors to innovative research and scholarship. P/NP grading.

 Custodian: William I. Newman, PhD, Elizabeth A. Marchant, MA

**Faculty Committee**

Frank A. Laski, PhD (Molecular, Cell, and Developmental Biology)

David W. MacFadyen, PhD (Comparative Literature, Musicology)

Elizabeth A. Marchant, MA (Comparative Literature, Gender Studies)

Muriel C. McClendon, PhD (History)

William I. Newman, PhD (Earth, Planetary, and Space Sciences; Mathematics; Physics and Astronomy)

**University Studies**

**College of Letters and Science**

A316 Murphy Hall

Box 951430

Los Angeles, CA 90095-1430

University Studies

310-206-1697

Muriel C. McClendon, PhD, Chair

**10B. ACE UCLA | Critical Strategies to Achieve Undergraduate Excellence for International Students.** (2) Seminar, two hours. Not open to students who have completed University Studies 10A, 10B, 10C, 10D, or former course 10. Designed to assist international students in making successful transition to UCLA by focusing on academic, social, and emotional aspects of transition. Study of research university’s history, mission, rigors, expectations of students, and pedagogical implications. Cultivation of formal space on campus where UCLA students learn to engage both diplomatically and collaboratively with diverse community of scholars; to comprehend and apply theoretical foundations of college student development; to navigate complex structure of UCLA; and to be fully aware of their value to intellectual fabric of institution as contributors to innovative research and scholarship. P/NP grading.

**10C. ACE UCLA | Critical Strategies to Achieve Undergraduate Excellence for Humanities Students.** (2) Seminar, two hours. Not open to students who have completed University Studies 10A, 10B, 10C, 10D, or former course 10. Designed to assist first-year international students in making successful transition to UCLA and to U.S. by focusing on academic, social, and emotional aspects of transition. Study of research university’s history, mission, rigors, expectations of students, and pedagogical implications. Cultivation of formal space on campus where UCLA students learn to engage both diplomatically and collaboratively with diverse community of scholars; to comprehend and apply theoretical foundations of college student development; to navigate complex structure of UCLA; and to be fully aware of their value to intellectual fabric of institution as contributors to innovative research and scholarship. P/NP grading.

**10D. ACE UCLA | Critical Strategies to Achieve Undergraduate Excellence for First-Generation Students.** (2) Seminar, two hours. Not open to students who have completed University Studies 10A, 10B, 10C, 10D, or former course 10. Designed to assist first-generation students in making successful transition to UCLA by focusing on academic, social, and emotional aspects of transition. Study of research university’s history, mission, rigors, expectations of students, and pedagogical implications. Cultivation of formal space on campus where UCLA students learn to engage collaboratively with diverse community of scholars; to comprehend and apply theoretical foundations of college student development; to navigate complex structure of UCLA; and to be fully aware of their value to intellectual fabric of institution as contributors to innovative research and scholarship. P/NP grading.

**10E. ACE UCLA | Critical Strategies to Achieve Undergraduate Excellence for Transfer Students.** (2) Seminar, two hours. Not open to students who have completed University Studies 10A, 10B, 10C, 10D, or former course 10. Designed to assist transfer students in making successful transition to UCLA by focusing on academic, social, and emotional aspects of transition. Study of research university’s history, mission, rigors, expectations of students, and pedagogical implications. Cultivation of formal space on campus where UCLA students learn to engage both diplomatically and collaboratively with diverse community of scholars; to comprehend and apply theoretical foundations of college student development; to navigate complex structure of UCLA; and to be fully aware of their value to intellectual fabric of institution as contributors to innovative research and scholarship. P/NP grading.

**15A. Collaborative Learning Workshops for Humanities and Social Sciences Majors.** (2) Seminar, two hours. Designed for students in First Year Scholars Program (FYSP). Part I of three-part series of collaborative learning and community-building work sessions. Collaborative work spaces and participatory learning environments are integral component of student development. Creates specific and unique space for UC/California students to collaboratively learn and support, as well as develop critical strategies to achieve undergraduate excellence at top-tier institution. Engages students collaboratively with diverse community of scholars; supports their understanding and application of effective learning strategies; guides students in practice growth mindset, navigation of complex structure of UCLA, thinking critically about diversity and their identity, and being fully aware of their value to intellectual fabric of institution as contributors to innovative research scholarship. P/NP grading.

**15B. Collaborative Learning Workshops for Humanities and Social Sciences Majors.** (2) Seminar, two hours. Designed for students in First Year Scholars Program. Workshops are integral component of student learning and development. Continues to cultivate learning communities.
Workshops prepare students for second year, as they become more intentionally engaged in academic community, at UCLA and beyond. Workshops foster academic, professional, and personal development of students majoring in humanities and social sciences. Instructors, peer mentors, and campus partners facilitate interactive workshops that help students transition to engage with, and navigate UCLA as they culminate their first year at university. P/NP grading.

15C. Collaborative Learning Workshops for Humanities and Social Sciences Majors. (2) Seminar, two hours. Requisite: course 15B. Designed for students in First Year Scholars Program (FYSP), Part III of three-part series of collaborative learning and community-building work sessions. Students work together on ongoing research proposal and project presented at culminating of program. Collaborative work spaces and participatory learning environments are integral component of student development. Creates specific and unique space for FYSP scholars to cultivate community and support, as well as develop critical strategies to achieve undergraduate excellence at top-tier institution. Engages students collaboratively with diverse community of scholars; supports their understanding and application of effective learning strategies; guides students in practice growth mindset, navigation of complex structure of UCLA, thinking critically about diversity and their identity, and being fully aware of their value to intellectual fabric of institution as contributors to innovative research scholarship. P/NP grading.

20. ACE UCLA | Critical Strategies to Achieve Undergraduate Excellence for International Students. (2) Seminar, two hours. Designed to help first-year international students make successful transition to UCLA and to live as college students in U.S. Examination of research on transition of international students to college in U.S., adjustment to life in U.S., policies and procedures, and campus resources. P/NP grading.

30. How to Succeed at UCLA: Retention. (2) Seminar, two hours. Limited to students in Bruin Readmission Program. Designed to provide students who are working toward readmission critical understanding of how they and others arrive at their dismissal status and steps they can take that lead to academic success in future. Examination of research on retention and departure in high education and both individual and collective strategies for academic success. P/NP grading.

Graduate Course

375. Teaching Apprentice Practicum. (1 to 4) Seminar, to be arranged. Preparation: apprentice personnel agreement as teaching associate, assistant, or fellow. Teaching apprenticeship under active guidance and supervision of regular faculty member responsible for curriculum and instruction at UCLA. May be repeated for credit. S/U grading.

**Urban Planning**

Meyer and Renee Luskin School of Public Affairs

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Kirsten Schwarz, PhD

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Veronica Herrera, PhD
Liz C. Koslov, PhD
Jose Loya, PhD
Kelly Turner, PhD

Lecturers
Ted M. Bardacke, MS
Carol E. Goldstein, BA
Joan C. Ling, MA
Walker R. Wells, MCRP

Adjunct Assistant Professor
Gregory S. Pierce, PhD

Scope and Objectives

The professional urban planner works on the creation and management of the urban environment, including its physical, economic, and social elements. Housing, transportation, air and water quality, the preservation of historic communities, and the development of community-level economic and employment programs are some of the tasks undertaken by recent graduates of the Department of Urban Planning. Graduates have taken positions in local, state, and national governments, and increasingly with nonprofit and private companies whose products and services affect the urban environment. While most UCLA graduates find positions in the U.S., the program offers the opportunity to specialize in development planning abroad, including rural development, and many graduates have found positions in Latin America, Africa, and Asia.

The program offers an undergraduate minor in Urban and Regional Studies, a two-year Master of Urban and Regional Planning (MURP) degree, and a PhD degree. Concurrent students to combine study for a MURP in Urban Planning with work toward an MBA in the Anderson Graduate School of Management, a JD in the School of Law, an MArch in the Department of Architecture and Urban Design, an MA in Latin American Studies, or an MPH in Community Health Sciences and in Environmental Health Sciences in the Fielding School of Public Health.

The department takes pride in its collegial atmosphere. It features a lively mix of students from diverse academic backgrounds, drawn from many foreign countries and from every avenue of American life. It includes many members of racial and ethnic minority groups, and more than half the students are women. Student organizations provide an interesting program of extracurricular activities.

Undergraduate Study

Urban and Regional Studies Minor

The scale, diversity, balkanized governance, and natural environment of Southern California all contribute to making it an extraordinary natural laboratory for learning about urban and regional issues, whether the focus is on immigration, employment, the built environment, transportation, poverty, natural resources, or a host of other challenges. The Urban and Regional Studies minor offers undergraduate students a means to address some of these issues from an interdisciplinary perspective, giving a balanced mixture of theory, practice, and service learning courses.

To enter the minor, students must be in good academic standing with an overall grade-point average of 2.0 or better; have completed 90 or more units, and complete either Urban Planning M120 (or Public Affairs M109) or 121 with a grade of C or better. An introductory course in geography, political science, or sociology is recommended. For more information, contact the undergraduate advising office.

Required Courses (28 units): (1) Urban Planning M120 (or Public Affairs M109) or 121 with a grade of C or better; (2) Five elective courses selected from Public Affairs 10, 110, 120, 140, M142, 148, M152, M153, M159, M160, M161, Urban Planning M120 (unless taken under item 1), M121 (unless taken under item 1), CM151, M161, M167, M168 (electives may be added as additional undergraduate courses are offered; any urban planning course from 100-199 is permitted); (3) Capstone project that may be satisfied by one of the following: (a) Urban Planning 185SL—service learning project, (b) Urban Planning 195 or Public Affairs 195—internship in Urban Planning, or (c) Urban Planning 199 or Public Affairs 199 with a faculty mentor affiliated with this minor—individual research project.

By petition, courses outside the Luskin School of Public Affairs may be applied as an elective for the minor. No more than two courses from outside the Luskin School of Public Affairs may be applied toward the minor.

A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor.

Each minor course must be taken for a letter grade, and students must have an overall grade-point average of 2.0 or better in the minor. Successful completion of the minor is indicated on the transcript and diploma.
Graduate Study

Official, specific degree requirements are detailed in program requirements for UCLA graduate degrees, available at the Graduate Division website. In many cases, more detailed guidelines may be outlined in announcements, other publications, and websites of the schools, departments, and programs.

Graduate Degrees

The Department of Urban Planning offers the Master of Urban and Regional Planning (MURP) degree and the Doctor of Philosophy (PhD) degree in Urban Planning. See current academic catalog for specific course offerings.

Planning MURP/Architecture MArch, Urban Planning MURP/Community Health Sciences MPH, Urban Planning MURP/Environmental Health Sciences MPH, Urban Planning MURP/Latin American Studies MA, Urban Planning MURP/Law JD, and Urban Planning MURP/Management MBA are also offered.

Urban Planning

Lower-Division Courses

19. Fiat Lux Freshman Seminars. (1 Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

99. Honors Seminars. (1 Seminar, three hours. Limited to 20 students. Designed as adjunct to lower-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

99. Student Research Program. (1 to 2 Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Courses

M110. Inequality and Democracy: Analysis and Praxis of Public Problems. (4) Same as Social Welfare M110. Lecture, three hours; discussion, one hour. Analysis and praxis of public problems. Taking up case of persistent inequality in liberal democracies, coverage of key frameworks and methodologies for understanding and analyzing poverty and inequality and examination of forms of action, from role of government to social movements, that seek to intervene in such problems. Study of problems, problems, policies, and politics in globally interconnected, transnational world, while avoiding analytical divide between global north and global south. Letter grading.

M120. Introduction to Cities and Planning. (4) Formerly numbered 120.(Same as Public Affairs M108.) Lecture, three hours. Survey of urban history and evolution in U.S., urban social theory, current growth trends, system of cities, urban economy and economic restructuring, traditional and alternative location theories, urban transportation, and residential location and segregation. P/NP or letter grading.

121. Urban Policy and Planning. (4) Lecture, three hours. Examination of current urban planning and policy issues and debates, such as normative theories of good urban form, metropolitan organization and governance, economic development and growth management, edge cities, spatial mismatch hypothesis, urban poverty, racial/ethnic inequality, gender and urban structure, sustainability, and future of cities. P/NP or letter grading.

M122. Policy, Planning, and Community. (4) Same as Asian American Studies M120B. Lecture, three hours; field laboratory. Project-oriented course on conducting needs assessment in Asian American communities. Geographic information systems to be used to define problems and needs. Letter grading.

129. Special Topics in Urban Policy and Research. (4) Lecture, three hours. Examination of particular planning/policy subfield (e.g., economic development, environmental planning, housing and community development, international development, land use, or urban design) in some depth. Specific topic area rotates depending on instructor. May be repeated for credit with topic change. P/NP or letter grading.

130. Fundamentals of Urban and Regional Economics. (4) Lecture, three hours. Preparation: one introduction to microeconomics course. Most U.S. population lives and works in urbanized areas, and world’s population is becoming more urbanized with each passing decade. National, state, and local governments are engaged in managing, planning, policy-making, and governance in urban context. Ultimate efficacy of policies can be enhanced by understanding of economic forces acting on urban areas. Basic concepts related to location choice, agglomeration effects, economies of scale, and specialization by cities and transportation. P/NP or letter grading.

C133. Political Economy of Urbanization. (4) Lecture, three hours. Introduction to new approaches to urban studies, basic concepts and analytical approaches of urban political economy, with major emphasis on American urban problems and restructuring of modern metropolis. Topics include historical geography of urbanization, development and transformation of urban space, urbanization and metropolitan political fragmentation, urban fiscal crisis, and role of urban social movements. Concurrently scheduled with course C233. P/NP or letter grading.

CM137. Southern California Regional Economy. (4) Same as Labor Studies M180C. Lecture, three hours. Introduction to regional economy, with emphasis on Los Angeles. Key economic sectors, labor market composition, and review of conflicting portrayals drawing dynamics of region. Two all-day bus tours of key economic regions and guest lectures by regional experts included. Concurrently scheduled with course C237C. Letter grading.

M140. Issues in Latin/ Latino Poverty: Mexican and Central American Voices from Los Angeles. (4) Same as Chicana and Chicano Studies M121 and Labor Studies M121.) Lecture, four hours. Examination of key issues (work, housing, and neighborhoods) in urban poverty, with particular focus on Mexican and Central American immigrant populations in Los Angeles. Exploration of major theoretical models that explain urban poverty and application of them in comparative context while exploring differences between Mexican and Central American immigrants. Social conditions and factors that underlie the lived experiences of poor people in comparative context while looking at differences between two major Latino-origin populations in Los Angeles. Critical analysis of new forms of urban poverty in contemporary American society. Letter grading.

141. Planning with Minority Communities. (4) Lecture, three hours. Overview of planning history, theory, and contemporary planning in low-income communities, communities of color, and underserved neighborhoods, particularly in Los Angeles area. Field of planning offers distinct perspectives and opportunities for improving vulnerable communities. Topics range from discussion of intersection between race and income, critical race theory, community development, residential segregation, spatial mismatch, and environmental justice to social justice. P/NP or letter grading.

M150. Transportation Geography. (4) Same as Geography M153D. Lecture, three hours. Designed for juniors/seniors. Study of geographical aspects of transport, with focus on characteristics and functions of various modes and on complexities of intra-urban transport. P/NP or letter grading.

CM151. Transportation and Land Use: Parking. (4) Formerly numbered 151.) Same as Public Affairs M153.) Lecture, three hours. Requisite: Economics 1 or 11 or Public Affairs 40. Parking is misunderstood link between transportation and land use. Transportation engineers typically assume that free parking simply is there at end of most trips, while urban planners see parking as transport problem that engineers must study. No profession is intellectually responsible for parking, and everyone seems to assume that someone else is doing hard thinking. Mistakes in planning for parking help to explain why planning for transportation and land use has in many ways gone slowly, subtly, incrementally wrong. Study of theory and practice of planning for parking and examination of how planning for parking in U.S. has become planning for free parking. Exploration of new ways to improve planning for parking, transportation, and land use. Concurrently scheduled with C251. Letter grading.

M160. Environmental Politics and Governance. (4) Same as Environment M164.) Lecture, three hours. Environmental planning is more than simply finding problems and fixing them. Each policy must be negotiated and implemented within multiple, complex systems of governance. Institutions and politics matter deeply. Overview of how environmental governance works in practice and how might it be improved. Letter grading.

M161. Urban Sustainability. (4) Same as Public Affairs M160.) Lecture, three hours. In 21st century, majority of Earth’s population now lives in urban areas and virtually no part of globe remains untouched by human influence. Cities are responsible for most pressing social and environmental challenges but are also potential centers of innovation for addressing those challenges. Examination of theory and practice from geography and related disciplines to understand many articulations of urban sustainability and how it might be achieved. Letter grading.

M164A. Documentary Production for Social Change: Mobility in Los Angeles. (8) Same as Disability Studies M164A.) Seminar, three hours; fieldwork, two hours. Exploration of documentary filmmaking as catalyst for social change, using daily community practice. Films focus on issues of race, ethnicity, gender, disability, and class on experiences of commuting, access to public transportation, and car-based versus alternative (bike and pedestrian) forms of commuting. Exposure to observational, interview-based, and participatory documentary shooting and editing techniques, as well as social marketing strategies that are vital to documentary production and distribution. Letter grading.

M165. Environmentalism: Past, Present, and Future. (4) Same as Environment M125 and Geography M125.) Lecture, three hours; discussion, one hour. Exploration of history and origin of major environmental issue movements or countermovements they spawned, and new and changing nature of modern environmentalism. Introduction to early ideas of environment, how rise of modern sciences shaped environmental thought, and how this was later transformed by 19th-century ideas and rise of American conservation movements. Review of politics of American environmental thought and contemporary environmental questions as they relate to broader set of environmental issues. P/NP or letter grading.

CM166. Global Environment and Development: Problems and Issues. (4) Same as Geography M127.) Lecture, three hours; discussion, one hour. Designated for juniors/seniors. Study of geographical aspects of transport, with focus on characteristics and functions of various modes and on complexities of intra-urban transport. P/NP or letter grading.

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188A. Individual Studies for USIE Facilitators. (1)
Tutorial, to be arranged. Enforced prerequisite: Honors Collegium 101E. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to familiarize USIE 885 course. Individual study in regularly scheduled meetings with faculty mentor to finalize course syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.

188S. Individual Studies for USIE Facilitators. (2)
Tutorial, to be arranged. Enforced prerequisite: course 188B. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to familiarize USIE 885 course. Individual contract with faculty mentor required. May not be repeated. Letter grading.

189H. Honors Contracts. (1)
Tutorial, three hours. Limited to students in College Honors and depart­ ment of history. May be repeated for credit. Individual contract with super­ vising faculty member required. P/NP or letter grading.

190. Directed Research in Urban Planning. (2 to 8)
Tutorial, three hours. Limited to juniors/seniors. Super­ vised individual research or investigation under guidance of faculty member. May be repeated for credit. Individual contract required. P/NP or letter grading.

195. Community Internships in Urban Planning. (4)
Tutorial, 12 hours. Limited to junior/senior Urban and Regional Studies minors. Internship in supervised setting in community agency or urban planning setting. Students meet on regular basis with instructor and provide periodic reports of their experience. May be repeated for credit only once for a maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

C184. Looking at Los Angeles. (4)
Lecture, three hours. Introduction to history and physical form of Los Angeles, with emphasis on understanding social, eco­ nomic, and political issues in development of Los An­ geles. Concurrently scheduled with course C284. Letter grading.

185SL. Community-Based Research in Planning. (4)
Seminar, one hour; fieldwork, three hours. Preparation: at least four Urban and Regional Studies minor courses, of which at least one should be related to subject of study. Limited to junior/senior minors. Designed to serve as complement to service learning requirement and may be used to fulfill capstone requirement for minor. Stu­ dents are matched to a public agency or non­ profit organization through Center for Community Learning and must complete minimum of 30 hours of work. Duties and responsibilities are to be set by students and spon­ sor/agency and determined in consultation with instructor. P/NP grading.

(Same as Chicana and Chicano Studies M187 and History M151E.) Lecture, four hours. Introduction to history of architecture and urbanism in Americas, from fabled cities of Aztec empire to barrios of 21st­century Los Angeles and Miami. Emphasis on role of cities in Latina/Latino experience and uses of architecture and city planning to forge new social identities rooted in historical experiences of conquest, immigration, nationalization, and revolution. P/NP or letter grading.

202A-202B. Land Use. (202A: 3 or 4/202B: 1 or 2)
Lecture, three hours. Course 202A is enforced requisite to 202B. Exploration of 21st­century land­use public controls, programs, and litigation in Califor­ nia from basic planning, zoning, subdivision con­ trols, and official mapping to regional growth manage­ment, sustainability, and environmentally sensitive areas. Concurrently scheduled with Pre­­

202A. Colloquium in Planning Research. (4)
Lecture, one hour; discussion, two hours. Required of first­year PhD students. Introduction to design and ex­ ecution of planning research; exploration of subfields of planning scholarship; introduction to research on contemporary planning topics. Preparation and filing of PhD program study. Letter grading.
214. Neighborhood Analysis. (4)
211. Law and Quality of Urban Life. (4)

209. Special Topics in Planning Theory. (4)
Lecture, three hours. Topics in planning theory selected by faculty members. May be repeated for credit. S/U or letter grading.

M201A. Special Topics in Public Affairs. (4) (Same as Public Policy M291C and Social Welfare M293X.) Seminar, three hours; outside study, nine hours. Advanced seminar on emerging issues across public policy, social welfare, and urban planning. May be repeated for credit. S/U or letter grading.

M210B. Comparative Perspectives on States, Markets, and Civil Society. (4) (Same as Public Policy M247B and Social Welfare M290X.) Lecture, two and one-half hours; discussion, about solving and managing societal problems, such as climate change, poverty, migration, security, mobility, pollution, or trade relations. Contemporary governance is complex set of laws, rules, and regulations involving rights and responsibilities of intergovernmental and international actors. Modern societies (state, market, and civil society) interest that guide them, and legitimacy and resources command. Actors often reach across systemic, jurisdictional, and national boundaries; their relationships can be cooperative, neutral, or fraught with conflict, and governance outcomes can vary significantly. These dynamics involve fundamental challenges and, consequently, require present governance readiness. Lectures, debates, in-class exercises, and student presentations. Exploration of several issues in more detail, including collective capacities and democracies, crisis management, governance innovation, and specific policy fields such as infrastructure or global finance. S/U or letter grading.

211. Law and Quality of Urban Life. (4)
Lecture, three hours. Topics in law as urban problem. Examination of law in changing process, as is law's role as partial cause and cure of urban development, and function and critical to many aspects of society and culture. Focuses on urban planning and at other geographical levels. Topics in built environment selected by faculty members. May be repeated for credit. S/U or letter grading.

217A-217B. Comprehensive Planning Project. (4–6) Seminar, three hours. Designed for second-year students. Comprehensive planning project for a team of three to five students. Three-hour seminars in which teams discuss both team's project and the progress of the other teams. S/U or letter grading.

218A. Graphics and Urban Information. (4) (Formerly numbered 218L) Lecture, two hours; studio, one hour. Presentation of basic graphic methods and tools for urban analysis, documentation, and visualization of the built environment. Development of fundamental skills of graphic ideation and communication. Letter grading.

218B. Advanced Visual Communication. (4) Lecture, 90 minutes; computer laboratory. Development of advanced graphic design and oral communication skills, and strengthening of writing abilities through lectures and projects. Basic to intermediate level. Students apply visual communication skills through mesh of professional planning practice, assuming role of consultant to prepare presentations and plans for client. Focus on design of planning project from start to finish, and exposes students to professional consulting practice through quick, fast-paced project. Letter grading.

219. Special Topics in Built Environment. (4) Lecture, three hours. Topics in built environment selected by faculty members. May be repeated for credit. S/U or letter grading.

220A. Quantitative Analysis in Urban Planning I. (4) Lecture, three hours; laboratory, 90 minutes. Preparation: passing score on basic mathematics proficiency examination given first day of class. Introduction to mathematical and statistical concepts and methods with emphasis on urban planning applications. Topics include descriptive statistics, probability, data measurement, and display. Letter grading.

220B. Quantitative Analysis in Urban Planning II. (4) Lecture, three hours; laboratory, 90 minutes. Preparation: passing score on basic mathematics proficiency examination given first day of class. Introduction to statistical inference and modeling, with emphasis on urban planning applications. Topics include sampling, hypothesis testing, analysis of variance, correlation, and model selection. Use of computer as tool in statistical analysis and modeling. Letter grading.

222A. Introduction to Planning History and Theory. (4) Lecture, three hours; discussion, 90 minutes. Required of first-year MURP students, typically in Fall Quarter; required of first-year PhD students who have not completed comparable graduate course in planning history and theory. Exploration of planning thought and practice over time, leading authors and key issues in field of planning, traditional and insurgent histories of planning, and alternative approaches to planning for multiple and pluralistic publics. Letter grading.

222B-222C. Advanced Planning Theory and History I, II. (4–4) Lecture, three hours. Required of first-year MURP students. Special topics of planning that have influenced its development from early-19th century to present. Letter grading.

228. Visual Communication Skills. (2) Five-week course. Lecture, two hours; laboratory, one hour. Emphasis on graphic presentation and visual communication to educate stakeholders, advocate for change, and encourage participation in planning process in recent years, in both public and private sector. Visual communication requires analytic skills and strategic thinking, strong foundation in design theory, and technical skills in computer programs. Introduction to Adobe InDesign and Illustrator and foundation in design theory and continuity graphic design and presentation programs to create attractive and powerful planning materials and reports, design principles to communicate ideas in clear, succinct, and engaging manner, and to use graphic materials to support verbal presentations or written reports. Letter grading.

229. Special Topics in Planning Methods. (4) Lecture, three hours. Topics in planning methodology selected by faculty members. May be repeated for credit. S/U or letter grading.

M230. Introduction to Regional Planning. (4) (Same as Public Policy M241.) Lecture, three hours. Critical and historical survey of evolution of regional planning practice, with particular emphasis on relations between regional planning and developments within Western social and political philosophy. Major concepts include regions and regionalism, territorial community, and social production of space. Letter grading.

M231. Global Public Affairs: Governing in Interconnected World. (4) (Same as Public Policy M228B and Social Welfare M229A.) Lecture, three hours; outside study, nine hours. Conceptually, focus on interplay between three major institutional complexes of modern, globalizing societies and organizations that operate within these: state, market, and civil society. Study of moves between abstract theory and concrete examples, offers sense of where these institutions and organizations have come from, and helps chart their present trajectories. From perspective of governance, assessment of roles and configurations of institutions and organizations to address today's challenges. S/U or letter grading.

232. Disaster Management and Response. (4) Lecture, three hours. Through readings and presentations, examination of disaster management and response in both U.S. and developing countries. Exploration of how disaster impacts and risk reduction both relate to susceptibility and vulnerability, and in addition to acts of nature. Structured to allow students to focus on distinct disaster contexts and themes as set out in reading and weekly sessions. Letter grading.

C233. Political Economy of Urbanization. (4) Lecture, three hours. Introduction to new approaches to urban studies, basic concepts and analytical approaches of urban political economy, with major emphasis on American urban political economy, emerging trends in urbanization and urbanization, and role of urban social movements. Concurr-ently scheduled with course C133. S/U or letter grading.

M234A. Development Theory. (4) (Same as Geog- raphy M229A.) Lecture, three hours. Review of basic literature and schools of thought on development process.
theory through analysis of impact of mercantilism, colonialism, capitalism, and socialism on various urban and rural social and economic structures in Third World. Presentation, through evaluation of theoretical writings and case studies, of complexity and diversity of development strategies and changes in policy and planning in light of transformations inherent in global changes, and ways to address these questions in ways that go beyond green consumerism and bifurcation of wild, ecological, and human environments. American environmentalism has become dominant model for many conservation practices. Informd by Muirist model of idea of untrammeled nature with people-less set-asides for spiritual and scientific contemplation of nature; this approach used in environmental policy and as key idea in conservation and fragment biology. At opposite end is environmental policy devoted to infrastructures and habitats (cities). Exploration of these competing models and many reasons to be skeptical of both in 21st century. Letter grading.

M234C. Resource-Based Development. (Same as Geography M229C.) Lecture, three hours. Recommended preparation: course M265. Science and politics of environmental and planning in light of how to address these questions in ways that go beyond green consumerism and bifurcation of wild, ecological, and human environments. American environmentalism has become dominant model for many conservation practices. Informed by Muirist model of idea of untrammeled nature with people-less set-asides for spiritual and scientific contemplation of nature; this approach used in environmental policy and as key idea in conservation and fragment biology. At opposite end is environmental policy devoted to infrastructures and habitats (cities). Exploration of these competing models and many reasons to be skeptical of both in 21st century. Letter grading.

235A. Urbanization in Developing World. (4) Lecture, three hours. Course 235A is not required to 235B. Consideration of urbanization and planning in low and middle-income countries. Case studies from Latin America, Africa, and Asia. Lectures, student presentations, and policy debates. Letter grading.

C249. Special Topics in Transportation Policy and Planning. (4) Lecture, three hours. Topics in urban and regional development selected by faculty members. May be repeated for credit. S/U or letter grading.

M240. Local Government. (2 to 6) (Same as Law M285.) Lecture, three hours. Analysis of structure and function of local, regional, and state government in historical and institutional context: organization, finance, intergovernmental relations, role of judiciary, public services, lawmaking, citizen participation through initiatives and referenda, and government tort liability. Letter grading.

242. Poverty and Inequality. (4) Lecture, three hours. Examination of relationship between urbanization and spatial inequality in U.S.—spatial dynamics of urban growth, levels and causes of spatial inequality, and implications of spatial inequality for low-income communities. Topics include concentrated poverty, residential segregation, immigrant neighborhoods, spatial disparities in access to opportunities, housing mobility, neighborhood urban infrastructure, and political cohesion and participation. Analysis of role of policies in promoting and/or reducing spatial inequities. Letter grading.

244. Urban Poverty, Planning, and Policy. (4) Lecture, three hours. Examination of determinants of urban poverty, with emphasis on poverty in U.S. and on geographical dimensions of poverty and planning interventions that contribute to poverty reduction. Topics include relation between poverty and human and social capital, demographic change, low-wage labor market, spatial concentration of poor, residential segregation, and social policy. Letter grading.

245. Urban Public Finance. (4) Lecture, three hours. Requisites: courses 207, 220A. Theory and practice of urban public finance, with emphasis on methods used to fund public infrastructure. Topics include fiscal impact analysis of real estate development, effects of taxes on land-use decisions, benefit assessments to finance neighborhood public investment, private and intergovernmental contracting as method of supplying urban public services, financing urban redevelopment, and municipal bond market. S/U or letter grading.

246. Poverty, Poor, and Welfare Reform. (4) (Same as Public Policy M214 and Social Welfare M90L.) Lecture, three hours. Major policy research issues concerning poverty and social welfare policy directed toward poor in U.S. S/U or letter grading.

247. Planning for Multiple Publics. (4) Lecture, three hours. Exploration of planning needs of various social groups in urban settings, using existing literature and research studies to determine appropriate mechanisms of planning for multiple publics. Analysis of communities in Los Angeles metropolitan area to gain insights into practical, theoretical, and methodological problems of planning for multiple publics. Generally taken in first year. S/U or letter grading.

248. Law and Poor. (4) (Same as Public Policy M239.) Lecture, three hours. Design for graduate students. Study of major income-maintenance programs in U.S., with emphasis on interaction of moral attitudes toward poor and structure and implementation of law, policy, and administration. Current reform consensus and major reforms. Letter grading.

249. Special Topics in Transportation Policy and Planning. (4) Lecture, three hours. Topics in transportation policy and planning selected by faculty members. May be repeated for credit. S/U or letter grading.

M250. Transportation, Land Use, and Urban Form. (4) (Same as Public Policy M220.) Lecture, three hours. Historical evolution of urban form and transportation systems, intrametropolitan location theory, recent trends in urban form, spatial mismatch hypothesis, jobs/housing balance, transportation in strong central city and polycentric city, neotraditional town planning and debate, rail transit and urban form. Letter grading.

C251. Transportation and Land Use: Parking. (4) (Formerly numbered 251.) Lecture, three hours. Requi- site: course 207. Parking is misunderstood link between transportation and urban planning. Transportation engineers typically assume that free parking simply is there at end of most trips, while urban planners treat parking as transportation issue that engineers must study. No profession is intellectually responsible for parking, and everyone seems to assume that someone else is doing hard thinking. Mistakes in planning for parking help to make everyone planning for transportation look foolish. Students will work to improve planning for parking, transportation, and land use. Concur- rently scheduled with course CM137. Letter grading.

252. Transportation and Land Use: Transportation and Urban Design Studio. (4) Studio, three hours. Students of different backgrounds and interests col- laboratively and individually analyze and propose solutions for actual transportation planning and urban design problems. Course simulates real-world professional planning project of type that students might be assigned if working for consulting firms or public agencies. Students acquire ability to collect and syn- thesize data in typical manner, conduct and present research studies to determine appropriate mecha- nisms of planning for multiple publics. Analysis of communities in Los Angeles metropolitan area to gain insights into practical, theoretical, and methodological problems of planning for multiple publics. Generally taken in first year. S/U or letter grading.

M253. Travel Behavior Analysis. (4) (Same as Public Policy M221.) Lecture, three hours. Requisites: courses 207 and 220B, or Public Policy 201 and 203. Descriptions of travel patterns in metropolitan areas, recent trends and projections into future, overview of travel forecasting methods, trip generation, trip distri- bution, mode split traffic assignment, critique of tradi- tional travel forecasting methods and new approaches to travel behavior analysis, and effects of globalization on transportation policy and planning. Letter grading.

254. Bicycle and Pedestrian Planning. (4) Lecture, three hours. Walking and bicycling are essential com- ponents of sustainable transportation systems. In re- sponse growing concern about health, safety, public health, equity, climate change, and community sustainability issues, many government agencies and private developers are planning to improve pedestrian and bicycle transportation system. This course simulates real-world profes- sional planning project of type that students might be assigned if working for consulting firms or public agencies. Students acquire ability to collect and syn- thesize data in typical manner, conduct and present research studies to determine appropriate mecha- nisms of planning for multiple publics. Analysis of communities in Los Angeles metropolitan area to gain insights into practical, theoretical, and methodological problems of planning for multiple publics. Generally taken in first year. S/U or letter grading.

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M270. Homelessness: Housing and Social Service Issues. (4) (Same as Social Welfare M268A.) Lecture, 90 minutes; discussion, 90 minutes; one field trip. Review of current status of homelessness: who home- less are, what social services and housing are available, existing and proposed programs—and appropriate architecture, management, and sources of funding. Outside speakers include providers of services to homeless. Letter grading.

271A. Community Economic Development. (4) Lect-ure, three hours. Introduction to fundamentals of community economic development and neighborhood development strategies. Overview of basic ap- proaches, important concepts and language of field, and major strategies for revitalization of low-income neighborhoods. Letter grading.

271B. Labor and Economic Development. (4) Lec- ture, three hours. Exploration of economic develop- ment and identification of ways that labor and labor unions directly and indirectly influence and shape eco- nomic development. Wide range of roles that labor plays, and could play, in promoting and supporting economic development for all. Concurrantly sched- uled with course CM172. Letter grading.

M272. Real Estate Development and Finance. (4) (Same as Architecture and Urban Design M272.) Lect-ure, two hours; workshop, two hours; outside study, outside study. Requisites: courses recommended for first-year students in community development and built environment area of concentration. In- troduction to real estate development process specifi- cally geared to students interested in urban design, and urban design. Financial decision model, market and property operations and management. Students learn about behind-the-scene negotiations and decisions, and how to determine real estate project feasibility, deeper understanding about financing methods and alternatives, and knowledge about ways to frame development programs for suc- cess. Letter grading.

273. Site Planning. (4) Lecture, 90 minutes; labora- tory, 90 minutes. Requisite: course 274. Introduction to principles of site planning for urban areas. S/U or letter grading.

274. Introduction to Physical Planning. (4) Lecture/ Discussion, three hours. Focus on ways of addressing issues of energy, water access, transportation, habitat, biornicromy, and local economics at district or neighbor- hood scale. Letter grading.


268. Policy Analysis of Emerging Environmental Technologies. (4) (Same as Public Policy M268B.) Lec- ture, three hours. Acquisition and utilization of eco- nomic, finance, planning, and policy analytic tools needed to evaluate factors that drive market adoption from early to middle market phases. Rooftop solar, electric vehicle, and energy efficiency as focal exam- ples, with emphasis on role of policy and planning in- centives intended to spur adoption. Letter grading.

269. Special Topics in Environmental Analysis and Policy. (4) Lecture, three hours. Topics in environ- mental analysis and current faculty inter- ests, May be repeated for credit. S/U or letter grading.
277. Historic Preservation: Principles and Practice. (4) Lecture, 90 minutes; discussion, 90 minutes. Overview of preservation field, including history and theory, current legislation, tax incentives, preservation planning, landmark and district surveys and designations, and the role of community involvement, and social issues. S/U or letter grading.

278. More Jobs, Better Jobs: Work and Policy. (4) Lecture, three hours. Central issues in urban economic development is how to create them, how to help different populations get access to them, and how to ensure that they are of adequate quality in terms of wages, advancement, and skill development. Examination of how current labor market work and what can be done to help them work better, with focus on U.S. Particular emphasis on low-wage, low-skill workers and marginalized groups, such as inner-city people of color and immigrants. Analysis of how urban labor markets work with discussions of policy options for making them work better and range of solutions, including job creation, workforce training, job ladder creation, union and community organizing, and immigration reform. Examination of power and economic inequality and how to make changes. Letter grading.

279. Seminar: Public Space. (4) Seminar, 90 minutes; outside study, nine hours. Examination of theory and practice of urban planning, landmark and district surveys and designations, and the role of community involvement, and social issues. S/U or letter grading.

280. Affordable Housing Development. (4) Lecture, three hours. Changes in production, consumption, design, and meaning of public space and analysis of socioeconomic, political, and cultural factors that lie behind them. Letter grading.

281. Introduction to History of Built Environment in U.S. (4) Lecture, three hours. Introduction to history of physical forms of urbanization in America; survey of economic, political, social, and aesthetic forces behind creation of built environments. S/U or letter grading.

282. Urban Design: Theories, Paradigms, Applications. (4) Lecture, three hours. Discussion and evaluation of philosophical bases, ideologies, and paradigms of urban design in last century; examination of how these are reflected on built environment of cities. Letter grading.

283. Community Research and Organizing. (4) Lecture, three hours. Examination of theory and practice of organizing, analysis of role of community organizing as empowerment strategy in disadvantaged and marginalized communities, and relationship of community and worker organizing to broader movements for social change. Analysis of different research methods and strategies in terms of best supporting organizing and movement building, with focus on community-based participatory research (CBPR). Understanding of theories, principles, and strategies of CBPR, appreciation of advantages and limitations of this approach, and skills necessary for participating effectively in CBPR. Use of case studies and case of one ongoing research project that supports one local community or worker organization, exploring links between research and organizing campaign to which it is connected. Particular attention to race, gender, and class dimensions of CBPR and issues of power and decolonizing research. Letter grading.

284. Looking at Los Angeles. (4) Lecture, three hours. Introduction to history and physical form of Los Angeles, with emphasis on understanding social, economic, and political issues in development of Los Angeles. Concurrently scheduled with course C184. Letter grading.

285. Politics, Power, and Philanthropy. (4) Same as Public Policy M227 and Social Welfare M290S.) Lecture, three hours; outside study, nine hours. Use of political economy perspective to analyze forces that have shaped rise and characteristics of nonprofit sector and its constituent elements. Examination of social history of nonprofit sector in U.S. Exploration of legal and policy environments of different organizational forms. Comparative perspective between U.S. and other countries. S/U or letter grading.

286. Leadership, Development, and Governance of Nonprofit Organizations. (4) Same as Public Policy M228 and Social Welfare M241E.) Lecture, three hours; outside study, nine hours. Designed for graduate students. Various patterns of community action and social welfare objectives. Investigates trends and field experience directed toward study of social problems within context of community planning; examination of political, social, and economic planning framework of social change theory. Letter grading.

287. Sprawl and Smart Growth. (4) Lecture, three hours. Suburbs are not new, but metropolitan areas in U.S. and elsewhere continue to grow rapidly at their edges in ways that many consider poorly planned. Discussion of causes and impacts of sprawl as it relates to smart growth. Letter grading.

288. Strategic Planning for Public and Nonprofit Organizations. (4) Same as Public Policy M247 and Social Welfare M2541F.) Lecture, three hours; outside study, nine hours. Designed for graduate students. Technical problems of solving regarding social welfare objectives. Practical and theoretical aspects at community level. This form of community practice fills niche between professional and knowledge and skill set possessed by agency and program administrators on one hand and by researchers and analysts on other. Letter grading.


291. Political, Ideology, and Design. (4) Same as Architecture and Urban Design M293.) Lecture, three hours. Exploration of cultural and political context of architecture and planning work. Examination of theory and practice of professional design of buildings and planning of communities. Emphasis on energy efficiency, renewable energy, and appropriate technologies, including materials, water, and land. Letter grading.

292. Housing in Developing Countries: Policy Ob- jectives and Options. (4) Lecture, three hours. Examination of relevant policies of public policies and their intended and unintended effects on housing demand and supply in developing countries. How definitions of housing problems, and scope of solutions, has changed over time. Critical assessment of some key solutions that have been tried in past, their advantages and setbacks, and resultant trade-offs, and likely directions for future housing policy. Letter grading.

293. Introduction to Urban Humanities. (4) Same as Architecture and Urban Design M295.) Seminar, six hours; studio, six hours. Core introduction to urban humanities. Analytical and descriptive methods of humanities paired with speculative and projective methods of architectural and urban design to better understand contemporary state of human environment. Focus on Los Angeles, with concepts seminar, methods laboratory, projects studio, and site visit components. Offered in summer only. S/U or letter grading.


295. Special Topics in Emerging Planning Issues. (2 or 4) Seminar, three hours. Topics in newly emerging planning issues such as role of cutting-edge technology, innovative policies, and experimental programs. May be repeated for credit. S/U grading.

375. Teaching Apprentice Practicum. (1 to 4) Seminar, to be arranged. Preparation: apprentice personnel employment as teaching assistant, associate, or fellow. Teaching apprenticeship under active guidance and supervision of regular faculty member. S/U option for curricular credit. May be repeated for credit. S/U grading.

M404. Joint Planning/Architecture Studio. (4) (Same as Architecture and Urban Design M404.) Lecture, one hour; discussion, one hour; studio, four hours. Opportunity to work on joint planning/architecture project for client. Outside speakers; field trips. Examples of past projects include Third Street Housing, Santa Monica; New American House for nontraditional housing, Pico-Burnsville Housing, Boyle Heights; working with resident leaders at Los Angeles City public housing developments. S/U or letter grading.

M470. Improving Worker Health: Social Move- ments, Policy Debates, and Public Health. (4) (Same as Community Health Sciences CM470 and Environmental Health Sciences CM471.) Lecture, three hours; fieldwork, two hours. Examination of intersection between work, health, and environment, analysis of social causes of health disparities, investigation of historical trends and social movements, interpretation of current policy debates, and development of innovative solutions. S/U or letter grading.

496. Field Projects. (4) Tutorial, four hours. May not be repeated for credit. S/U grading.

501. Cooperative Program. (2 to 8) Tutorial, to be arranged. Preparation: consent of UCLA graduate adviser and graduate dean. May not be repeated for credit. May be repeated for credit for maximum of 8 units. S/U grading.

502. Preparation for MA Comprehensive Examination or PhD Qualifying Examinations. (4 to 12) Tutorial, four hours. May be repeated for credit. S/U grading.

503. Politics, Idealogy, and Design. (4) Same as Architecture and Urban Design M293.) Lecture, three hours. Exploration of cultural and political context of architecture and urban design. Examination of theory and practice of variety of approaches applied to set of varied physical environments and to set of current spatialized concepts. Consideration of theoretical propositions that are shaping present urban and architectural debate and concrete case studies where politics and ideology shape design process. Letter grading.

504. Current Issues in Urban Planning. (2 to 4) Seminar, three hours. Current issues in urban planning selected by students in conjunction with faculty members. May be repeated for credit. S/U grading.

UROLOGY

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Urology

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Mark S. Litwin, MD, MPH, FACS (Fran and Ray Stark Foundation Professor of Urology), Chair

Scope and Objectives

The fundamental goal of the Department of Urology is to teach medical students the general principles of diagnosis and management in diseases of the genitourinary tract. Urology encompasses a wide scope of human illness, including conditions

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Letter grading.

Tutorial, to be arranged. Preparation: consent of UCLA graduate adviser and graduate dean. May not be repeated for credit. May be repeated for credit for maximum of 8 units. S/U grading.

502. Preparation for MA Comprehensive Examination or PhD Qualifying Examinations. (4 to 12) Tutorial, four hours. May be repeated for credit. S/U grading.

503. Politics, Ideology, and Design. (4) Same as Architecture and Urban Design M293.) Lecture, three hours. Exploration of cultural and political context of architecture and urban design. Examination of theory and practice of variety of approaches applied to set of varied physical environments and to set of current spatialized concepts. Consideration of theoretical propositions that are shaping present urban and architectural debate and concrete case studies where politics and ideology shape design process. Letter grading.

504. Current Issues in Urban Planning. (2 to 4) Seminar, three hours. Current issues in urban planning selected by students in conjunction with faculty members. May be repeated for credit. S/U grading.

UROLOGY

David Geffen School of Medicine

379 Wasserman Building

Box 957383

Los Angeles, CA 90095-7383

Urology

310-794-8492

Mark S. Litwin, MD, MPH, FACS (Fran and Ray Stark Foundation Professor of Urology), Chair

Scope and Objectives

The fundamental goal of the Department of Urology is to teach medical students the general principles of diagnosis and management in diseases of the genitourinary tract. Urology encompasses a wide scope of human illness, including conditions
that are congenital and acquired, pediatric and adult, male and female, malignant and benign. The department functions to acquaint students with the skills necessary to manage these conditions in the initial stages and over the long term.

Instruction spans all four years of the undergraduate medical school curriculum but is concentrated during the clinical rotations. Students spend two weeks on the urology service during the third year and may return for an additional three-week elective rotation during the fourth year. The clinical experience includes time spent in the faculty and resident clinics, on ward rounds, and in didactic conferences that cover general urology, urological subspecialties, uropathology, and uroradiology. Urology teaching settings include the Reagan UCLA, Harbor-UCLA, Olive View-UCLA, Santa Monica-UCLA, and West Los Angeles VA medical centers.

For more details on the Department of Urology and courses offered, see the department website.

Urology

Lower-Division Courses

19. Fiat Lux Freshman Seminars. (1 Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA.)

99. Student Research Program. (1 to 2) Supervised research or other scholarly work, three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Course

199. Directed Research in Urology. (2 to 8) Tutorial, two hours. Limited to juniors/seniors. Supervised individual research or investigation under guidance of faculty mentor. Culminating paper required. May be repeated for credit. Individual contract required. P/NP or letter grading.

Visual and Performing Arts Education

Interdisciplinary Minor School of the Arts and Architecture

2101 Broad Art Center Box 951620 Los Angeles, CA 90095-1620

Visual and Performing Arts Education 310-794-4822

Minor e-mail

David J. Roussève, BA, Chair

Faculty Committee

Lily Chen-Hafteck, PhD (Music) Penny M. Daniel, MFA (Theater) David H. Gere, PhD (World Arts and Cultures/Dance) Kevin M. Kane, PhD (Arts and Architecture)

Victoria E. Marks, BA (World Arts and Cultures/Dance) Lauren L. McCarthy, MFA (Design/Media Arts) Chandler McWilliams, MFA, MA (Design/Media Arts) Hirsch Perlman, BA (Art) Karen Hunter Quartz, PhD (Education) David J. Roussève, BA (World Arts and Cultures/Dance)

Scope and Objectives

The Visual and Performing Arts Education minor is an interdisciplinary and interdepartmental series of courses designed to (1) introduce students to the field of arts education for multiple publics in general and specifically in relationship to the K-12 public school system, (2) introduce students to the profession of the teaching artist and to a broad range of careers in the arts, including K-12 teaching, community arts education, museum education, creative arts therapies, and arts advocacy and to a variety of arts-related programs and cultural agencies, including community arts centers, museums, after-school programs, and nonprofit arts institutions, (3) expand the ongoing dialogue and interaction between UCLA, extended Los Angeles community, K-12 public school system, and students in the arts, and (4) extend the School of the Arts and Architecture commitment to UCLA and community partnerships by linking teaching and research with undergraduate education, civic engagement, and support for institutional priorities to improve the quality of life for Los Angeles residents.

Undergraduate Study

Visual and Performing Arts Education Minor

The Visual and Performing Arts Education minor is intended to supplement the education of undergraduate students enrolled in the Architectural Studies, Art, Art History, Dance, Design/Media Arts, Ethnomusicology, Music, Theater, and World Arts and Cultures majors.

To apply to the minor, students must have completed at least 50 percent of the lower-division requirements of their specific majors and Arts Education M102 with a grade of B or better, be in good academic standing with an overall grade-point average of at least 2.7, and submit a minor application, which includes a concentration proposal to be developed in consultation with the Visual and Performing Arts Education director.

Required Courses (28 to 32 units with a minimum of 24 upper-division units): (1) Core and capstone sequence requirement: Arts Education M102, M192, M192SL. (Arts Education M192 and M192SL include a guided teaching experience), (2) arts education requirement: two courses selected from Arts Education 20, 101, 103, 105, 195 (minimum 4 units), 197 (minimum 4 units), (3) one upper-division education course (list of recommended courses available from the Arts Education program office or the school Office of Student Services), and (4) one upper-division elective course (minimum 4 units) selected from arts education or, by petition, an arts education related course (list of recommended courses available from the Arts Education program office or the school Office of Student Services).

A minimum of 20 units applied toward the minor requirements must be in addition to units applied toward major requirements or another minor.

Each minor course must be taken for a letter grade. Successful completion of the minor is indicated on the transcript and diploma.

Arts Education

Lower-Division Courses

19. Fiat Lux Freshman Seminars. (1 Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA.)

89. Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designated as adjunct to lower-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor.

99. Student Research Program. (1 to 2) Supervised research or other scholarly work, three hours per week per unit. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP or letter grading.

Upper-Division Courses

101. Selected Topics in Arts Education. (4) Lecture, three hours; outside study, nine hours. Selected topics in arts education explored through various approaches that may include community projects, guided teaching experiences, studio and/or fieldwork, readings, discussion, research papers, and oral presentation. Topics announced in advance. May be repeated for maximum of 8 units. P/NP or letter grading.

M102. Introduction to Arts Education for Multiple Publics: Theory and Practice. (4) Same as Education M102. Seminar, three hours; outside study, nine hours. Introductory course with focus on arts education for multiple publics in inner-city settings. Study of core issues in arts education, creativity, and social justice as students develop, implement, and assess original syllabi, lesson plans, and community learning projects for multiple publics in inner-city schools and arts organizations. Collaboration with partner schools in planning, teaching, and evaluation of arts education programs in dance, music, theater, and visual arts. P/NP or letter grading.

103. Socially Engaged Pedagogy in Arts. (4) Lecture, three hours; outside study, nine hours. Students are in contact and conversation with active community-based artists and youth workers regularly utilizing socially engaged goals, principles, and practices. Based on readings and investigations, students research and write one case study on one particular arts
105. Arts Programs in Correctional Institutions: History, Theory, and Practice. (4) Lecture. three hours; outside study, nine hours. Examination of attitudes of prison arts programming with correctional staff, artists working in prisons, political figures, and community while critically engaging with consequences of correctional environment without outside influence of arts as role model for inspiration and discipline. Selected topics and themes in arts education in correctional institutions explored through variety of approaches that may include readings, visual and audio documentation, discussion, research papers, oral presentations, and relevant guest speakers. P/NP or letter grading. 

189. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

M192. Arts Education Undergraduate Practicum: Preparation, Observation, and Practice. (4) (Same as Education M190.) Seminar, three hours. Enforced requisite: course M102. Limited to juniors/seniors. Preparation, supervised practicum for advanced undergraduate students participating in Visual and Performing Arts Education minor. Students implement and evaluate original arts education programs under guidance of faculty members in small course settings. P/NP or letter grading.

M192SL. Arts Education Undergraduate Practicum and Capstone Project. (4) (Same as Education M190SL.) Seminar, three hours: practicum, three hours; outside study, six hours. Enforced requisites: courses M102, M192. Limited to juniors/seniors. Continuation of arts education training and supervised practicum for advanced undergraduate students participating in Visual and Performing Arts Education minor. Students continue to implement and evaluate original arts education programs under guidance of faculty members and designated guiding teachers in K-12 public school settings. May be repeated for credit with consent of instructor. P/NP or letter grading.

196. Community Internships in Arts Education. (2 to 4) Tutorial, one hour; fieldwork, eight to 10 hours. Limited to juniors/seniors. Internship in supervised setting in K-12 schools or community arts organizations. Students meet on regular basis with instructor and provide periodic reports of their experience. May be repeated for maximum of 8 units. Individual contract with supervising faculty member required. P/NP or letter grading.

197. Individual Studies in Arts Education. (2 to 4) Tutorial, to be arranged. Preparation: 3.0 grade-point average in major. Limited to juniors/seniors in Visual and Performing Arts Education minor and/or arts education teaching sequence. Individual intensive study, with scheduled meetings to be arranged between faculty member and student. Tangible evidence of mastery of subject matter required. May be repeated for credit. Individual contract required. Letter grading.
All students are encouraged to complement the required set of core and elective departmental courses with others offered across campus, such as courses from ethnic and area studies programs, and may organize their course of study in relation to particular interests or professional goals (e.g., international comparative studies, intercultural studies, education, area specializations such as Africa, Asia, or Latin America, minority discourse, gender studies).

The graduate program offers Master of Arts and PhD degrees in Culture and Performance and a Master of Fine Arts in Choreographic Inquiry. Culture and performance students research communities, cultures, and transnational movements through heritage and globalization studies, multivocal ethnographies, dance and theories of corporeality and embodiment, visual and material culture, critical museum and curatorial studies, documentary practice and internet interventions, as well as arts activism and interdisciplinary art making. The MFA in Choreographic Inquiry offers opportunities to engage multiple movement practices as students work on pioneering research in the form of new choreography. Students may focus on media, dance studies theory, and theories of the body as supplements to their work as choreographers. The Art and Global Health Center within the department presents further opportunity for learning and practice.

While operating with considerable independence, the two graduate degree areas are unified by the department’s common concern for aesthetic production, corporeality and performance, the dynamics of tradition, and culture-building in contemporary societies. Connections are forged between critical theory and artistic practices, and attention is given to the changing social roles and responsibilities of artists, practitioners, and scholars of the arts in the U.S. and worldwide.

Undergraduates and graduates have excelled in fields including technology and the arts, videography, documentary work, public service, education, theatrical/events production, performing arts, urban planning, law, environmental activism, public health, and medicine. They have made careers in community nonprofits and activist groups, government agencies, museums, and arts foundations. Potential careers for MA, PhD, and MFA graduates also include positions in research universities and colleges, and MFA graduates are active as choreographers/performers in their own companies or with other professional organizations.

Undergraduate Study

Dance BA

All students take a set of courses as preparation for the Dance major that focus on the integration of dance and critical analysis. For students who transfer into the major, depending on the year of entry and prior coursework, lower-division preparatory coursework may be waived or substituted. When students enter the major, they continue their studies of dance technique, composition, and analysis, and they also enroll in a primary and secondary research area.

The three research areas are (1) creative inquiry as research, (2) critical dance studies, and (3) dance and civic engagement. The creative inquiry research area is grounded in contemporary choreography with a focus on dance-making and performing in a wide range of genres from throughout the world. Opportunities are provided for students to present their own choreography, to participate in performances by others, and to study performance production and videography. The critical dance studies area focuses on study of scholarship examining the body and dance, in their cultural and historical contexts. Courses in dance history, dance and culture, and dance as an identifier examines dance that enable students to analyze the rhetorical and ideological significance of dance. The dance and civic engagement area is grounded in the investigation and activist-oriented work of artists and the role of dance in the public sphere, and offers a wide range of courses in the nature of activism as well as opportunities for fieldwork, education internships, and other forms of community involvement.

Students select one area as their primary area and another as their secondary area. Elective options provide further deepening of student knowledge and skills in any or all of the areas. Students may also consider courses from programs outside the department and may organize their course of study in relation to their particular interests.

Students who wish to confer with the departmental student affairs officer regarding program planning and major requirements should contact the undergraduate counselor at 310-825-8537.

Learning Outcomes

The Dance major has the following learning outcomes:

- Choreography of dances in various settings, cultural contexts, and media, with emphasis on progressive approaches
- Creative problem-solving of issues tied to arts and activism, dance-making, and producing in multiple formats, in an intercultural and interdisciplinary context
- Think critically about the relationship between aesthetics and politics through choreography, written analysis, and multiple research methods
- Demonstrated advanced proficiency in at least two movement disciplines
- Analysis of vocabulary, location, and syntax of dance works
- Analysis of political, cultural, and historical implications of dance works
- Demonstrated ability to understand and implement collaboration in an art-making practice
- Written and oral recognition and synthesis of key concepts in critical dance studies

Admission

New students are admitted to the Dance major for fall quarter only. All applicants are reviewed individually, based on submission of a written research paper, transcripts, two letters of recommendation, and one personal essay. These supplementary materials are requested from students in mid-December, after the general UC application is received and processed, and are due back in the department in January. For freshman applicants, college placement test scores are also considered. Students must participate in a late January/early February audition. Specifics about the audition are included in the e-mail requesting the above-mentioned supplementary materials.

Change of major applications are considered once a year. Current UCLA students who petition to change their major are required to meet with the student affairs officer prior to application, but no later than the eighth week of fall quarter in order to participate in the departmental supplemental application process during fall/winter quarters for admission into the program the following spring or fall quarter. They are required to take selected departmental courses before and during the term in which they apply to the program (contact the student affairs officer for a list of selected courses). They must have a minimum 2.0 overall grade-point average, a minimum 2.0 GPA in all departmental courses taken, and no more than 90 quarter units at the time of application. All students are required to audition in early winter quarter and may be interviewed as part of the application process.

Preparation for the Major

Required: Dance 1, 16, 44, 45, 67A, 67B, 70.

The Major

The Dance major consists of 76 units of coursework.

Required: (1) Dance 101, 117A, 117B and (2) 10 units in the primary area and 5 units in the secondary area selected from the following: (a) creative inquiry as research—Dance 114, 116, 117C, C122, 169, 170, C171, 174A, 174B, C180, or other upper-division courses with faculty approval, (b) critical dance studies—Dance C134S, C152, M157, 158, 159, 160, CM168, C171, 182, World Arts and Cultures 199, or other upper-division courses with faculty approval, (c) dance and civic engagement—Dance 165, 166, 167, C184, World Arts and Cultures 100A, 100B, 103, 114, 144, 160, 177SL, 195, or other upper-division courses with faculty approval (no more than 8 units of courses 114 and/or 160 may be applied toward this area). Students also have the option to propose a senior honors project through Dance 186A and 186B.

Movement Arts/Dance Practices—Required: A total of 48 units of practice courses. A minimum of two technique courses per term until completion is strongly recommended. Thirty of the total 48 units must be selected from Dance 6, 9, 13, 15, 56, 59, 63, 65, C106A, C113A, C115, 116. Of these 30 units, a minimum of 6 units of a first style and 4 units of a second style must be at the advanced level. Fifteen of the total 48 units may be selected from Dance 5, 10, 11, 12, 16, 52, 60, C112A, 116, 159, 160, World Arts and Cultures 55, 78, 80, 178. No more than 8 units of World Arts and Cultures 78 or 178 may be applied toward this requirement.

Senior Honors Project

Students may participate in a senior honors project consisting of 10 additional units. The project provides students with opportunity to demonstrate mastery and integration of knowledge and learned abilities from the major. The project may take various forms—from choreographic performance
Write the text in a single passage without breaking it into paragraphs.
13. Beginning Ballet. (2) Studio, three hours; Beginning-level study of ballet as movement practice. May be repeated for credit without limitation. P/NP or letter grading.

15. Beginning Modern/Postmodern Dance. (2) Laboratory, four hours. Study of modern and/or postmodern movement practices. May be repeated for credit without limitation. P/NP or letter grading.

16. Beginning Improvisation in Dance. (2) Laboratory, four hours. Introduction to creative exploration in movement through improvisational and compositional exercises that access and develop imagination, find relationship between imagination and dance making, and enrich movement vocabulary. May be repeated for credit without limitation. P/NP or letter grading.

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

44. World Dance Histories. (5) Lecture, three hours; discussion, two hours. Comparative framework for looking at dance practices through time as they have developed around world, questioning relation of dance to culture and providing students with tools for investigating histories of any given dance form. P/NP or letter grading.

45. Introduction to Dance Studies. (4) Lecture, three hours. Examines course 44, introduction to discipline of dance studies, with focus on study of corporeality as key contemporary perspective on body. Multidisciplinary approach to dancing bodies conceptualized as social constructs, including attention to gender, race, class, and national identity. P/NP or letter grading.

52. Intermediate Special Topics. (2) Studio, three hours. Intermediate-level study of variable movement practices. May be repeated for credit without limitation. P/NP or letter grading.

56. Intermediate West African Dance. (2) Studio, three hours. Intermediate-level study of dances originating from Mandingo culture in sub-Saharan Africa. May be repeated for credit without limitation. P/NP or letter grading.


60. Intermediate Martial Arts. (2) Studio, three hours. Intermediate-level study of Tai Chi Chuan and other martial arts forms. May be repeated for credit without limitation. P/NP or letter grading.

63. Intermediate Ballet. (2) Studio, three hours. Intermediate-level study of ballet as movement practice. May be repeated for credit without limitation. P/NP or letter grading.

65. Intermediate Modern/Postmodern Dance. (2) Studio, four hours. Intermediate-level work in modern and/or postmodern movement practices. Technical training with emphasis on increasing skill. May be repeated for credit without limitation. P/NP or letter grading.

67A. Theories and Methods in Dance Composition I: Languages. (4) Seminar, two hours; studio, two hours; outside study, eight hours. Enforced requisite: course 16. Examination of a broad range of artistic approaches, acknowledging that dance-making occurs distinctly in different cultural contexts and different historical moments. Use of these analyses to assist in creative process for making new dances. P/NP or letter grading.

117A. Theories and Methods in Dance Composition III: Locations. (4) Seminar, two hours; studio, two hours; outside study, eight hours. Enforced requisite: courses 16, 67A, 67B. Examination of how locations and/or postmodern movement practices. Technical training with emphasis on increased understanding of movement principles and ability to apply these to performance. May be repeated for credit without limitation. Concurrently scheduled with course C415, P/NP or letter grading.

117B. Theories and Methods in Dance Composition IV: Impacts. (4) Seminar, two hours; studio, two hours; outside study, eight hours. Enforced requisite: courses 16, 67A, 67B. Examination of relation of dance to its audience. Synthesis of analyses undertaken in previous courses, and how dances move their viewers. How do dances appeal to or address their audiences? How do dance vocabulary, sequencing, and location combine to create particular effects? Answers to these questions in relation to broad range of artistic approaches, acknowledging that dance-making occurs distinctly in different cultural contexts and different historical moments. May be repeated for credit without limitation. Concurrently scheduled with course C416, P/NP or letter grading.

C115. Advanced Modern/Postmodern Dance. (2) Studio, six hours. Advanced-level work in modern and/or postmodern movement practices. Technical training, with emphasis on increased understanding of movement principles and ability to apply these to performance. May be repeated for credit without limitation. Concurrently scheduled with course C415, P/NP or letter grading.


784  / World Arts and Cultures/Dance

C117. Advanced Topics in Choreography. (4) Lecture, four hours; studio, two hours; outside study, six hours. Enforced requisite: courses 16, 67A, 67B. Examination of how locations and/or postmodern movement practices. Technical training with emphasis on increased understanding of movement principles and ability to apply these to performance. May be repeated for credit without limitation. Concurrently scheduled with course C416, P/NP or letter grading.

C122. Music and Dance Collaborations. (4) Studio, four hours. Requisites: courses 67A, 67B. Designed for dance students who have had prior coursework/experience in choreography and for music students who have had prior coursework/experience in music composition. Opportunity for directors, choreographers, and composers to work together creating and developing material in their respective disciplines. Examination of different forms and ways of approaching creative process of making dance and music, presenting material on weekly basis, and developing skills for discussion, critique, and review. Concurrently scheduled with course C245, P/NP or letter grading.

C145. Selected Topics in Dance Studies. (4) Lecture, four hours; outside study, eight hours. Designed for seniors/juniors. Selected topics in study of dance and corporeality. Consult with letter grade on topics to be offered in specified term. May be repeated for credit with topic change. Concurrently scheduled with course C245, P/NP or letter grading.
158. Choreographing Gender. (4) Lecture, three hours; laboratory, two hours. Designed for juniors/seniors. Analysis of aesthetic codes and theatrical choreography as they intersect with constructions of gender in U.S., with close attention to race, class, and sexuality. P/NP or letter grading.

159. Movement Theories. (2) Lecture, two hours; laboratory, two hours. Study of motor coordination patterns and their application in dance. Techniques and practical issues as publicity and grant-writing. Concurrently scheduled with course C128. S/U or letter grading.

160. Topics in Body Mechanics. (4) Lecture, four hours. Examination of aesthetic differences between dance, film, and video and exploration of new aesthetics when they are combined. Analysis of record and documentary dance film, choreo-cinema, and impact of MTV, as well as integration of media with performance. Letter or P/NP grading.

161. Dance and Visual Media. (4) Lecture, four hours. Examination of differences between dance, film, and video and exploration of new aesthetics when they are combined. Analysis of record and documentary dance film, choreo-cinema, and impact of MTV, as well as integration of media with performance. Letter or P/NP grading.

162. Dance and Visual Media. (4) Lecture, four hours. Examination of differences between dance, film, and video and exploration of new aesthetics when they are combined. Analysis of record and documentary dance film, choreo-cinema, and impact of MTV, as well as integration of media with performance. Letter or P/NP grading.

163. Advanced Production. (1 to 2) Lecture, studio, two hours; laboratory, one hour. Introduction to key figures in creation of modern dance, with special attention to their theories and philosophies and tracing of radical shift to postmodern dance. May be repeated for credit without limitation. P/NP or letter grading.

164. Production and Planning. (4) Lecture, four hours; laboratory, two hours; studio, two hours. Study of motor coordination patterns and their application in dance. Techniques and practical issues as publicity and grant-writing. Concurrently scheduled with course C128. S/U or letter grading.

165. Foundations of Dance Education. (4) Lecture, two hours; laboratory, three hours. Introduction to movement concepts, skills, and teaching principles for modern/postmodern dance instruction. Supervised teaching experience in a real world setting. P/NP or letter grading.

166. Dance as Culture in Education. (4) Lecture, two hours; laboratory, two hours. Theoretical and practical aspects of teaching ethnic dance, especially in higher education. P/NP or letter grading.

167. Creative Dance Composition. (4) Lecture, three hours; laboratory, one hour. Introduction to movement concepts, skills, and principles for teaching children’s dance; emphasis on dance as creative medium of expression. P/NP or letter grading.

168A-168B. Senior Projects in Dance. (5–5) Lecture, four hours; outside study, 11 hours. Course 188A is requisite to 188B. Limited to Senior Dance majors. Application of concepts, skills, and content from interdisciplinary majors. Performance pieces may include critical, comparative, ethnographic, and performance approaches. Lecture/seminar format with Dance faculty during first term; faculty-directed projects. Students gain deeper understanding of conceptualization, practice, theory, history, and current state of dance for camera. Concurrently scheduled with course C224. P/NP or letter grading.

169. Repertory Tour Ensemble. (2 or 4) Lecture, two hours; studio, four to six hours. Designed for World Arts and Cultures majors. Creation and presentation of performances in community, with special emphasis on problem solving and performance in television and radio repertories. May be repeated once. P/NP or letter grading.

170. Advanced Production. (1 to 2) Laboratory, three hours; outside study, up to three hours. Requisite: course 70. Further development and application of practical perspectives on producing events in department, including but not limited to theatrical support and planning and executing lecture series. Provides students with advanced practical knowledge necessary to study nature of this component in world arts and cultures/dance studies. May be repeated for credit without limitation. P/NP grading.

Graduate Courses

211A-211E. Advanced Choreography. (4 each) Lecture, two hours; studio, two hours. Theoretical aspects of advanced choreography for students who have reached level of substantial graduate work. Rehearsal and practical self-evaluation; critical counsel by acknowledged choreographers. S/U or letter grading.

222. Music and Dance Collaborations. (4) Studio, four hours. Requisite: courses 67A, 67B. Designed for dance students who have had prior coursework/experience in choreography and for music students who have had prior coursework/experience in music composition. Opportunity for directors, choreographers, and composers to work together creating and developing material in their respective disciplines. Exploration of different forms and ways of approaching creative process of making dance and music, presenting material on weekly basis, and developing skills for discussion, critique, and review. Concurrently scheduled with course C224. P/NP or letter grading.

243. Production Arts Seminar. (4) Seminar, four hours. Theory and practice of production administration, including hands-on case studies for producing public events in arts and academia. Topics include, but are not limited to, history and theories of producing, mission statements, budgeting, marketing, public relations, fund-raising, legalities, and archiving. Concurrently scheduled with course C184. S/U or letter grading.

245. Selected Topics in Dance Studies. (4) Lecture, four hours; outside study, eight hours. Designed for graduate students. Selected topics in study of dance and corporeality. Consult Schedule of Classes for topics to be offered in specific term. May be repeated for credit with topic change. Concurrently scheduled with course C145. S/U or letter grading.

252S. History and Theory of Modern/Postmodern Dance. (Same as World Arts and Cultures CM268.) Lecture, four hours; outside study, eight hours. Designed for graduate students. Focus on understanding of bureaucratic structures and regional histories conditioning creation of art in real world, including such practical issues as publicity and grant-writing. Concurrently scheduled with course CM168. S/U or letter grading.

271. Dance Production: Variable Topics. (4) Lecture, four hours; laboratory, two hours. Foundational experience in range of dance production practices, including but not limited to lighting design, set design, costume design, and stage management. Practical training in area covered, combined with theoretical inquiry into practice and opportunities for students to reflect on their own work and that of others. Completion of production project required. May be repeated for credit with topic change. Concurrently scheduled with course CM168. S/U or letter grading.

280. Dance for Camera. (4) Lecture, two hours; laboratory, two hours. Introduction to making dance for camera. Students acquire and apply basic video production skills for creation of movement-based projects. Students gain deeper understanding of conceptualization, practice, theory, history, and current state of dance for camera. Concurrently scheduled with course C224. P/NP or letter grading.

281A-281B. Graduation Seminar. (4) Seminar, four hours. Theory and practice of production administration, including hands-on case studies for producing public events in arts and academia. Topics include, but are not limited to, history and theories of producing, mission statements, budgeting, marketing, public relations, fund-raising, legalities, and archiving. Concurrently scheduled with course C224. P/NP or letter grading.

282. Dance Production: Variable Topics. (4) Lecture, four hours; laboratory, two hours. Foundational experience in range of dance production practices, including but not limited to lighting design, set design, costume design, and stage management. Practical training in area covered, combined with theoretical inquiry into practice and opportunities for students to reflect on their own work and that of others. Completion of production project required. May be repeated for maximum of 12 units. Concurrently scheduled with course C171. S/U or letter grading.

286. Dance for Camera. (4) Lecture, two hours; laboratory, up to two hours. Introduction to making dance for camera. Students acquire and apply basic video production skills for creation of movement-based projects. With rudimentary tools—to film, frame, set up shots, storyboard, design shot lists, and set-up lists, log and capture, edit, and export footage—students create their own dance for camera video projects. Students gain deeper understanding of conceptualization, practice, theory, history, and current state of dance for camera. Concurrently scheduled with course C180. Letter grading.

288. Dance for Camera. (4) Lecture, two hours; laboratory, two hours. Introduction to making dance for camera. Students acquire and apply basic video production skills for creation of movement-based projects. With rudimentary tools—to film, frame, set up shots, storyboard, design shot lists, and set-up lists, log and capture, edit, and export footage—students create their own dance for camera video projects. Students gain deeper understanding of conceptualization, practice, theory, history, and current state of dance for camera. Concurrently scheduled with course C180. Letter grading.

289. Advanced African Dance. (2) Studio, three hours. Advanced-level study of hip-hop movement originating from Mandingo culture in sub-Saharan Africa. May be repeated for credit without limitation. May be repeated for credit without limitation. Concurrently scheduled with course C206A. S/U or letter grading.

290A. Advanced Afropop Dance. (2) Studio, three hours. Advanced-level study of hip-hop movement originating from Mandingo culture in sub-Saharan Africa. May be repeated for credit without limitation. May be repeated for credit without limitation. Concurrently scheduled with course C206A. S/U or letter grading.

292A. Advanced Hip-Hop Dance. (2) Studio, three hours. Advanced-level study of hip-hop movement practices. May be repeated for credit without limitation. Concurrently scheduled with course C108A. S/U or letter grading.

412A. Advanced Special Topics. (2) Studio, three hours. Advanced-level study of variable movement practices. May be repeated for credit without limitation. Concurrently scheduled with course C112A. S/U or letter grading.
World Arts and Cultures

Lower-Division Courses

1. Introduction to World Arts and Cultures. (5) Lecture, three hours; discussion, one hour. Survey of concepts and theories involved in intercultural, interdisciplinary study of art, aesthetics, and performance. Examination of intercultural art-making among various modes of creative expression, role of style in daily life, performative representation of cultural identity and difference, and interaction of diverse artistic traditions. Letter grading.

2. Lower-Division Seminar. (5) Seminar, four hours; outside study, 11 hours. Variable topics seminar with focus on scholarly and practice-based research in arts. In-depth investigations of topics ranging from body in cultural context, interdisciplinary art-making, visual cultures, oral genres, material culture, study of culture and performance, including individual and cultural identity through arts, creation of dance/theatrical performance, theoretical and analytical approaches to arts practice, arts activism, and other topics pertaining to broad fields of culture, performance, and dance. Research inquiry methods may include readings, assigned written analysis, supervised fieldwork, individual and collaborative assignments, and/or practice-oriented processes. Substantial culminating project integrating theoretical and practical components of selected seminar topic required. May be repeated for credit. Letter grading.

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

20. Culture: Introduction. (5) Lecture, four hours. Introduction to key concepts and major theoretical and methodological questions that characterize field of cultural studies, including discussion of notions of cultural, popular culture, subculture, youth culture, hegemony, gender, race, class, and national identity. Letter grading.

22. Introduction to American Folklore Studies. (5) Lecture, four hours; discussion, one hour; outside study, 10 hours. Cultural/historical survey of role of folklore in development of American civilization and of influence of American experience in shaping folklore in American society; attention also to representative areas of inquiry and analytical procedures. P/NP or letter grading.

M23. Introduction to American Indian Studies. (5) (Same as American Indian Studies M10.) Lecture, three hours; discussion, one hour; activity, one hour. Survey of cultural history of American Indian groups from pre-Western contact to contemporary period, with particular emphasis on early cultural diversity and diverse patterns of political, linguistic, social, legal, and cultural change in postcontact period. P/NP or letter grading.

24. World Arts, Local Lives. (5) Lecture, three hours; discussion, one hour. Use of Fowler Museum's long-term exhibition entitled “Intersections: World Arts/Local Lives” as object of study to examine many insights that arts can offer into social, political, and religious experience. Drawing heavily on cultures of Africa, Asia, Pacific, and indigenous Americas, both ancient and contemporary, and of Europe in which notions of aesthetics and efficacy are intertwined and interdependent in art forms made to interweave in people's lives in active, instrumental ways. Use of specific case studies and inter/intragenre theoretical paradigms. P/NP or letter grading.

33. Colonialisms and Resistance. (5) Lecture, three hours; discussion, one hour. Introduction to study of indigenous worldview as they are expressed throughout society in art, mythology, ritual, health practice, languages, and ecology. With examples spanning globe, consideration of issues of colonialism, tradition, religious change, and legal and social implications of epistemological differences between indigenous, dominant, and hybrid (postcolonial) critical perspectives on social development, historical progress, and intellectual assimilation. P/NP or letter grading.


55. Intermediate World Arts Practices in Global and Transcultural Forms. (2) Studio, three hours; outside study, three hours. Intermediate-level study of world arts practices crossing national and cultural boundaries. Variable topics, such as body music, cross-cultural textile creation, or mural painting, in cultural and historical context. May be repeated for credit with permission. P/NP or letter grading.

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79. Food Politics: Cultural Solutions to political Problems. (5) Formerly numbered 79.) (Same as Food Studies M79.) Lecture, four hours; discussion, one hour. Examination of issues of environmental and public health effects of intensive and extensive agriculture, influence of corporations on government, animal ethics, food politics, gardening, and food insecurity. Focus on representation of such issues in documentaries, public lectures, memoirs, novels, and visual art, as well as on initiatives to address such problems through policy and activism. P/NP or letter grading.

80. Video Techniques and Practices. (2) Laboratory, four hours. Introduction to video tools and practices to train students in key techniques of video production. Basic skills spanning to short videos for circulation via DVD and/or Internet. Practical exercises based on materials and instruction provided in class, spanning production and postproduction processes of video making. Evaluation of student on these exercises and final submission of edited sequence of any video materials developed. Training in technical aspects of video production and usage of video tools. P/NP or letter grading.

85. Sophomore-Year Proposal. (1) Lecture, 90 minutes. Planning and execution of proposal for junior or senior year. Attention to exploring resources of department and University as whole. P/NP grading.

89. Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Designed as a junior-level introductory course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

99. Student Research Program. (1 to 2) Tutorial (supervised research or other scholarly work), three hours per week per unit. Entry-level research for lower-division students under guidance of faculty member. Student must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Courses

100A. Art as Social Action. (5) Lecture, four hours; discussion, one hour. Designed for juniors/seniors. Discussion of what constitutes artist's social responsibility and in what ways art is qualified to engage in direct political action. Study of tension between powers of this world and powers of art. P/NP or letter grading.

100B. Art as Moral Action. (5) Lecture, four hours; discussion, one hour. Designed for juniors/seniors. One's ability to distinguish between right and wrong is an intuitive and a developed skill. The course is an introduction to the study of cultural strategies of moral engagement, persuasion, and inquiry in personal and public life, including factors of conscience and civil disobedience. P/NP or letter grading.

101. Theories of Performance. (5) Lecture, four hours; studio, two hours. Performance commonly refers to activities on prosenium stage. Explosion of that narrow notion of performance by delving into the scholarship from young field of performance studies, which's draws on disciplines of anthropology, cultural studies, gender studies, linguistics, postcolonial theory, and sociology. Emphasis on concept of performing theory by creating interdisciplinary performance works that engage with and amplify theories studied. P/NP or letter grading.

103. Arts in Communities. (5) Lecture, four hours. In-depth exploration of theoretical and practical strategies by delving into the scholarship from young field of community arts by and for multiple publics. Review of relevant issues in field and exploration of roles of artists and arts organizations in struggles for social change, representation, and community building. Through national and international examples, exploration of art works that emphasize participation of citizens in community-based and culturally relevant performance, art, and experimentation of processes of creative thinking, community involvement, collaborative enterprise, research, and education in community arts. Letter grading.


CM113B. Legislative Theater for Race and Gender Justice. (Same as American Theater CM113B.) Lecture, three hours; discussion, one hour (when scheduled). Exploration and application of range of interactive methods and arts-based strategies with participants from UCLA and broader Los Angeles community in order to research and influence
public policy and legislative change. Students and campus partners create and perform legislative theater addressing issues of race, gender, and criminal justice system. Critical texts, collaborative work, and creative methods are used to engage perspectives on justice. Analyzing and growing body of work on systems of justice through research, writing, workshops, performances, and critiques of original writings and performances developed in response to visiting artists. Lecture/Studio; four hours. Corequisite: course CM213B. P/NP or letter grading.

114. Performance Practicum. (1 to 4) Studio, three to 12 hours. Exploration of performance in selected community-based or theatrical work. May be repeated for credit without limitation. P/NP grading.

120. Selected Topics in Cultural Studies. (4) Lecture, three hours. Designed for juniors/seniors. Selected topics in interdisciplinary study of arts and performance in cultural and historical context. Consult Schedule of Classes for topics to be offered in specific term. May be repeated for credit with topic change. P/NP or letter grading.

121. Ethnography and Performance. (4) Lecture, four hours; outside study, eight hours. Survey of some ways that ethnography and performance interrelate, as well as development of some preliminary apparatus for document performance events. Reading of ethnographies of performances, as well as consideration of how performances can work ethnographically. P/NP or letter grading.

124. Introduction to Field-Based Research Methods. (5) Seminar, three hours. Introduction to methods, techniques, and issues in conducting field-based research, including nature, uses, and limitations of major data-gathering procedures, ethical concerns, sampling, checks and controls, teamwork, interventions, and results as not only tangible and imperfect outcomes of inquiry but also personal and intangible. Through readings, discussion, and hands-on exercises, students learn to move between fieldwork projects and write proposals, prepare consent forms and deal with ethical issues, observe behavior, construct questionnaires, use audiovisual documentation, and manage and present data. P/NP or letter grading.

M125A. Beyond Mexican Mural: Beginning Muralism and Community Development. (4) (Same as Art M186A and Chicana and Chicano Studies M186A.) Studio/lecture, four hours. Corequisite: course M125AL. Investigation of muralism as method of community education, development, and empowerment. Exploration of issues through development of large-scale collaborative digitally created image and/or painting for placement in community. Students research, design, and work with community participants. Continuation of project through installation, documentation, and dedication, with work on more advanced independent projects. P/NP or letter grading.

M125B. Beyond Mexican Mural: Advanced Muralism and Community Development. (4) (Same as Art M186B and Chicana and Chicano Studies M186B.) Studio/lecture, four hours. Requisites: courses M125B, M125BL Corequisite: course M125CL. Continuation of investigation of muralism as method of community education, development, and empowerment. Exploration of issues through development of large-scale collaborative digitally created image and/or painting for placement in community. Research, design, and management of projects and work with community participants. Continuation of project through installation, documentation, and dedication, with work on more advanced independent projects. P/NP or letter grading.

M126. Whose Monument Where: Course on Public Art. (4) (Same as Art M185 and Chicana and Chicano Studies M185.) Lecture, four hours. Recommended corequisite: course M125A, M125B, or M125C. Examination of public monuments in U.S. as basis for cultural insight and critique of American values from perspective of artist. Use of urban Los Angeles as textbook in urban space issues such as who is public, who is public property, what is public space, what defines neighborhoods, and do different ethnic populations use public space differently. P/NP or letter grading.

M128. Chicana Art and Artists. (4) (Same as Art M184 and Chicana and Chicano Studies M175.) Lecture, four hours. Introduction to Chicana art and artists. Examination of Chicana aesthetic. Chicana artists have developed unique experience and identity as artists and Chicanas. Letter grading.

C129. Food Customs and Symbolism. (4) Lecture, three hours. Designed for juniors/seniors. Introduction to foodways, with particular attention to customs and symbolism in America. Topics include sensory realm, children’s food, and food and identity, food and its emotional significance, aversions and taboos, advertising, changing food habits, and American diet. Concurrently scheduled with course C229. P/NP or letter grading.

CM130. Space and Place. (4) (Formerly numbered M130.) (Same as Architecture and Urban Design CM130.) Lecture, three hours. Survey of ways of thinking about space, particularly cultural and geographical perspective and with performance emphasis, with focus on mutual interaction of human beings and their created environments. Emphasis on common, ordinary usages, and vernacular nonbuilt and built environments, which are built and used by members of small-scale, traditional, and transitional communities around world. Concurrently scheduled with course CM230. P/NP or letter grading.

132. Narrative and Oral Performance. (4) Lecture, four hours. Survey of concepts of story as text versus narrating as oral performance, studies of individual narrators, how stories are composed in performance, interaction of narrator and audience, how place and experience become embodied in narratives, modes of representing oral narrating, and politics of stories and oral performance. P/NP or letter grading.

133. Textiles Production. (4) Seminar, four hours; discussion, one hour; laboratory, one hour. How cloth and clothing was and continues to be hand-woven in indigenous societies. Use of textiles from Fowler Museums collection to coordinate hands-on experience with cultural history. May be repeated twice for credit. P/NP or letter grading.

C138. American Indian Arts in Performance. (4) Seminar, four hours. Acquisition of awareness and training in performance techniques for Native American worlds of performance and material culture and development of ability to focus on them and learn to conduct research on them. Examination of wide range of American Indian art and art traditions within fullest possible range of such contexts, with performance given its most generous definition. Study of spectrum of genres, including architecture, social and dance re- galia, masks, and utilitarian material culture, to investigate how such items play their part and come alive through movement, sound, spoken word, silence, and emotion, drama and violence. Concurrently scheduled with course C238. P/NP or letter grading.


C141. Carnival and Festivity. (4) Lecture, three hours; fieldwork, one hour. Study of traditional calendrical, religious, and local festivals and related events in their cultural and historical contexts, with emphasis on American festival occasions and Old World antecedents. Topics include carnival and carnivalesque and politics of celebration. Concurrently scheduled with course C241. P/NP or letter grading.


144. Make Art/Stop AIDS. (5) Lecture, four hours; studio, two hours. Can arts save lives? That is central question posed here in relation to global AIDS epidemic. Working in close connection with public health and epidemiology, exploration of arts as powerfully effective tool in AIDS prevention and treatment efforts. Review of literature of AIDS cultural analysis that emerged in late 1980s in U.S. and application of that literature to international hot spots such as India, China, South Africa, and Africa. Explorations of transformative theory-in-action projects. P/NP or letter grading.


C146. Politics of Performance. (4) Seminar, four hours; outside study, eight hours. Designed for juniors/seniors. Opportunity to reflect on artists and intellectuals as cultural workers operating in domains of ideology, aesthetics, and theory. Analysis of such keywords as ideology, aesthetics, theory, art, politics, intervention, intellectuals, and artists. Concurrently scheduled with course C246. P/NP or letter grading.

C150. Critical Ethnographies. (5) Lecture, three hours. Enforced requisite: course 20 or 33. Survey of modern and postmodern analyses and implications of the explicitly locative ethnographic method as key component of cross-cultural understanding. Examination of categoric- nal notions of insider and outsider while also developing various perspectives on objects, issues, and modes of identity formation. Concurrently scheduled with course C250. P/NP or letter grading.

C151. Ethnography of Religions. (4) Lecture, three hours. Religions are cultural systems helping people to cope with misfortune, deal with death, and find fulfillment in life. Case studies reveal commonalities across cultures as cosmologies define moral being in world, divination determines causes of difficulty, spirit modes function to embody and activate arts render deities tangible. Nonjudgmental comparision
C152. Visual Cultures. (4) Lecture, three hours. How are ways of seeing constructed through culture, gender, religion, class, and nation? Theories and case studies from around the world. Permitting understanding of social processes through which gaze is determined and image economies negotiated. Topics include scopic regimes, aesthetics of streamlined design, and visual and material culture. Offered by UCLA Art and Global Health Center. Arts activist projects organized by seminar members supported and encouraged. Concurrently scheduled with course C252. P/NP or letter grading.

C158. Theorizing Arts Activism. (4) Seminar, three hours. Historiconizing and theorizing of arts activism to provide context for class. New forms of new media protest. Readings include theoretical texts and current performance histories. Consideration of one particular activist project, with focus on ongoing activism sponsored by UCLA Art and Global Health Center. Arts activist projects organized by seminar members supported and encouraged. Concurrently scheduled with course C258. P/NP or letter grading.

C159. Art and Global Health. (4) Seminar, three hours. Exploration of interface of arts and heuristic-based methodologies in pursuit of improved health outcomes, using examples from international projects created and supported by UCLA Art and Global Health Center. Readings by artists and health scholars and articles from public health and medical literature. Seminar members propose their own arts-based health promotion interventions. Concurrently scheduled with course C259. P/NP or letter grading.

160. Performing Sexual Health: UCLA Sex Squad. (4) Seminar, three hours. Exploration of activist sexual health education theater as it has been used both locally and globally. Examination specifically of how humor, personal narrative, and nonjudgmental pro-sex approaches have been utilized to open empowering and educational dialogues about sexual health by and for diverse range of communities. Intensive training on sex, sexuality, and gender. Opportunities to document, collaborate and promote. Concurrently scheduled with course C260. P/NP or letter grading.

C164. Public Writing in Arts. (4) Lecture, four hours; outside study, eight hours. Survey of journalistic approaches to writing about arts, with eye toward shaping critique of public writing practices and putting that critique into practice. Exploration of new modes of (and venues for) writing that rebalance power differentials between art critics and artmakers. Concurrently scheduled with course C264. P/NP or letter grading.

CM168. Beyond Academia: Making Art in Real World. (4) (Formerly numbered C168.) Same as Dance CM168. Lecture, four hours; outside study, eight hours. Designed for juniors/seniors. Focus on understanding bureaucratic structures and regional histories conditioning creation of art in real world, including such practical issues as publicly and grant-writing. Concurrently scheduled with course CM268. P/NP or letter grading.

C173. Sound Resources for Performance. (4) Lecture, three hours; studio, one hour; outside study, eight hours. Designed for juniors/senior. Investigation of musical possibilities via record store, Internet, and music library; environmental sounds and patterns; body (clapping, stepping, and singing); and hardware store (found sound). Participants collaborate with fellow students in creative efforts and in presentations of research results. Concurrently scheduled with course C273. P/NP or letter grading.

174A. Projects in World Arts and Cultures. (2 to 5) Lab, seven hours; outside study, 90 minutes. Limited to World Arts and Cultures majors. Planning and execution of proposal outside study, 90 minutes. Limited to World Arts and Cultures majors. May be repeated for maximum of 10 units. Individual contract required. P/NP or letter grading.

174B. Projects in World Arts and Cultures. (2 to 5) Lab, eight hours. Designed for juniors/seniors. Application of training in world arts and cultures through service projects designed by students in collaborative community organizations and institutions. Reflection on impact of service on communities and theories. May be repeated once for credit. P/NP or letter grading.

178. Advanced Private Instruction in World Arts and Cultures. (2 to 8) Lecture, nine hours; outside study, 90 minutes. Supervised individual research or investigation under faculty mentor. May be repeated for maximum of 8 units. Individual contract with supervising faculty member required. P/NP or letter grading.

180. Advanced Honors Seminars. (1) Seminar, three hours. Limited to 20 students. Directed as an independent research project required. May be repeated for maximum of 10 units. Individual contract required. P/NP or letter grading.

185. Directed Research in World Arts and Cultures. (2 to 5) Seminar, three hours; outside study, nine hours. Close reading and analysis of classic and contemporary studies of performance and related aesthetic practices. Familiarization with ways in which “performance” is defined and deployed by scholars working in disciplines of anthropology, dance, folklore, linguistics, literature, musicology, performance studies, philosophy, sociology, and theater. S/U or letter grading.

202. Research Methodologies. (4) Seminar, three hours; outside study, nine hours. Survey of theoretical and methodological issues and problems in study of dance and body movement in cultural, social, and historical context. S/U or letter grading.

204. Theories of Corporate. (4) Seminar, three hours; outside study, nine hours. Analyze a corporation and its social responsibility. May be repeated for maximum of 12 units. P/NP or letter grading.

206A-186B. Senior Honors Projects in World Arts and Cultures. (5) Lecture, four hours; outside study, 90 minutes. Limited to senior World Arts and Cultures majors. Application of concepts and content from interdisciplinary major to individual projects. May be repeated for credit. P/NP or letter grading.

207. Indigenous Film. (5) Same as American Indian Studies M187.) Lecture, four hours; discussion, one hour. Introduction to study of indigenous filmic images and representations, with focus on selected ethnographic, documentary, and feature films, ranging from 1920 to present. P/NP or letter grading.

208A. Individual Studies for USIE Facilitators. (1) Tutorial, to be arranged. Enforced corequisite: Honors Collegium 101E. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to discuss selected USIE seminar topic, conduct preparatory research, and begin preparation of syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.

188SB. Individual Studies for USIE Facilitators. (1) Tutorial, to be arranged. Enforced prerequisite: course 188SA. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor to finalize course syllabus. Individual contract with faculty mentor required. May not be repeated. Letter grading.

188SC. Individual Studies for USIE Facilitators. (2) Tutorial, to be arranged. Enforced prerequisite: course 188SB. Limited to junior/senior USIE facilitators. Individual study in regularly scheduled meetings with faculty mentor while facilitating USIE 88S course. Individual contract with faculty mentor required. May not be repeated. Letter grading.

188. Advanced Literature in World Arts and Cultures. (4) Seminar, three hours. Application of training in world arts and cultures through service projects designed by students in collaborative community organizations and institutions. Reflection on impact of service on communities and theories. May be repeated once for credit. P/NP or letter grading.

200. Theories of Culture. (4) Seminar, three hours; outside study, nine hours. Introduction to history of human culture in anthropological, historical, and sociological approaches. May be repeated for credit. P/NP or letter grading.

201. Theories of Performance. (4) Seminar, three hours; outside study, nine hours. Survey of theoretical and methodological issues and problems in study of dance and body movement in cultural, social, and historical context. S/U or letter grading.

203. Proseminar: Dance Studies. (4) Seminar, three hours; outside study, nine hours. Close reading and analysis of classic and contemporary studies of performance and related aesthetic practices. Familiarization with ways in which “performance” is defined and deployed by scholars working in disciplines of anthropology, dance, folklore, linguistics, literature, musicology, performance studies, philosophy, sociology, and theater. S/U or letter grading.

Graduate Courses

200. Theories of Culture. (4) Seminar, three hours; outside study, nine hours. Introduction to the history of human culture in anthropological, historical, and sociological approaches. May be repeated for credit. P/NP or letter grading.

201. Theories of Performance. (4) Seminar, three hours; outside study, nine hours. Survey of theoretical and methodological issues and problems in study of dance and body movement in cultural, social, and historical context. S/U or letter grading.

203. Proseminar: Dance Studies. (4) Seminar, three hours; outside study, nine hours. Survey of theoretical and methodological issues and problems in study of dance and body movement in cultural, social, and historical context. S/U or letter grading.
210. Ethnography of and as Performance. (4) Seminar, three hours. Prerequisites: 1560. Drawing on 1560 debates over Native American and American history, and focusing on collaborative projects, this seminar examines performance within cultural contexts. Students and faculty work together to develop and present their own performances, and to examine the role of performance in social and historical context. May be repeated for credit. Concurrently scheduled with course C214. S/U or letter grading.

210. Ethnography of and as Performance. (4) Seminar, three hours. Prerequisites: 1560. Drawing on 1560 debates over Native American and American history, and focusing on collaborative projects, this seminar examines performance within cultural contexts. Students and faculty work together to develop and present their own performances, and to examine the role of performance in social and historical context. May be repeated for credit. Concurrently scheduled with course C214. S/U or letter grading.

220. Seminar: Culture and Performance. (4) Seminar, three hours; outside study, nine hours. Designed for graduate students. Exploration of ways of documenting individual narrators and interpreting their styles and repertoires; how narrators conceptualize and perform narratives; the course, impact of audience and situated event on both narrative and story, how experiences and values are communicated through narrating, modes of representing oral narrative, and politics of oral performance. S/U or letter grading.


240. Food Customs and Symbolism. (4) Lecture, three hours; outside study, eight hours. Designed for graduate students. Examination of role of healers, historically and currently within contemporary culture-specific contexts. Exploration of psychological functions served by rites of passage and healing rituals and role of arts in healing troubled communities. Concurrently scheduled with course C140. S/U or letter grading.

241. Carnival and Festivity. (4) Lecture, three hours; fieldwork, one week. Study of traditional calen- drical, religious, and local festivals and related events in their cultural and historical contexts, with emphasis on American festival occasions and their Old World antecedents. Topics include Carnival, carnival, and Carnival in the Caribbean, popular carnival, and Carnival and politics of celebration. Concurrently scheduled with course C141. S/U or letter grading.


246. Politics of Performance. (4) Seminar, four hours; outside study, eight hours. Designed for graduate students. Opportunity to reflect on artists and intellectuals as cultural workers operating in domains of ideology, aesthetics, and theory. Analysis of such key words as ideology, aesthetics, theory, art, politics, intervention, and soft power. Concurrently scheduled with course C146. S/U or letter grading.

250. Critical Ethnographies. (5) Lecture, three hours. Enforced requisite: course 20 or 33. Survey of major tropes and rhetorical strategies to explicitly locate ethnography as a component of cross-cultural understanding. Examination of categor- ical notions of insider and outsider while also develop- ing various perspectives on performed acts of identity formation. Concurrently scheduled with course C150. S/U or letter grading.


252. Visual Cultures. (4) Lecture, three hours. How are visual representations of culture, gender, religion, class, and nation? Theories and approaches to visible representations within cultural contexts. Case studies from around world permit understanding of social processes and power relations as they are manifested in visual arts, and in visual economies of modernity. Topics include the aesthetic of the modern, aesthetic traditions, and the political nature of the aesthetic. Concurrently scheduled with course C152. S/U or letter grading.

258. Theorizing Arts Activism. (4) Seminar, three hours. Hystoricizing and theorizing of arts activism to provide context for concerted analysis, creation, and protest. Readings include theoretical texts and current performance histories. Concurrently scheduled with course C158. S/U or letter grading.

259. Art and Global Health. (4) Seminar, three hours. Exploration of interface of arts- and health-based methodologies in pursuit of improved health outcomes, using examples from international projects currently supported by UCLA Art and Global Health Center. Readings include texts by artists and arts scholars and articles from public health and medical literature. Students and faculty members propose their own art-based health promotion interventions. Concurrently scheduled with course C159. S/U or letter grading.

264. Public Writing in Arts. (4) Lecture, four hours; outside study, eight hours. Survey of journalistic ap- proaches to writing about arts, with eye toward shaping critique of public writing practices and putting that critique into practice. Exploration of new modes of and (and venues) for writing that rebalance power differ- ential between art makers and commentators. Concurrently scheduled with course C164. S/U or letter grading.

268. Beyond Academia: Making Art in Real World. (4) Formerly numbered C268. (Same as Department of Art 268) Lecture, four hours; fieldwork, one week. For graduate students. Art as political, social, and cultural activist project, with focus on ongoing activism sponsored by UCLA Art and Global Health Center. Arts ac- tivist projects organized by seminar members sup- ported and encouraged. Concurrently scheduled with course C158. S/U or letter grading.

282. Film and Feminism. (5) Lecture, three hours; outside study, eight hours. Designed for graduate students. Exploration of music, in search of interesting, new, and un- usual. Investigation of musical possibilities as a visual and auditory languages and their use in film and video production, with focus on practical aspects of music and sound. Concurrently scheduled with course CM168. S/U or letter grading.

283. Sound Resources for Performance. (4) Lecture, three hours; studio, one hour; outside study, eight hours. Designed for graduate students. Exploration of music, in search of interesting, new, and un- usual. Investigation of musical possibilities as a visual and auditory languages and their use in film and video production, with focus on practical aspects of music and sound. Concurrently scheduled with course CM168. S/U or letter grading.

284. Documentary: Theories and Approaches. (5) Lecture, three hours. Enforced requisite: course 104. Training in low-budget and independent video and documentary practice as re- search tool. Visual ethnography combined with experi- mental film. Introduction to history, ethics, and aesthes- tics of documentary form, the technology of film, per- formance, and dance among range of forms for bodily expression and experience. Film and documentary theory, ethnography, and phenomenology used to create innovative and credible visual document- ation. Skills include cinematography, sound rec- ording, interviews, and digital editing. May be re- peated once for credit. Concurrently scheduled with course C180. Letter grading.


375. Teaching Apprentice Practicum. (1 to 4) Seminar, to be arranged. Preparation: apprentice per- sonnel employment as teaching assistant, associate, assistant, and instructor. Concurrently scheduled with course C185. S/U or letter grading.
or fellow. Teaching apprenticeship under active guid-
ance and supervision of regular faculty member re-
ponsible for curriculum and instruction at UCLA. May
be repeated for credit. S/U grading.
400. Directed Professional Activities. (2 to 8) Lect-
ture, to be arranged. Directed projects in professional
ing, bibliography, filmography, videography, con-
ference and festival direction, and other professional
activities. May not be applied toward MA degree re-
quirements. May be repeated. S/U grading.
451. Teaching Assistant Seminar. (2) Seminar, one
hour; laboratory, three hours. Required of all World
Arts and Cultures Department teaching assistants.
Lectures, discussion, readings, and practice teaching.
May be repeated once for credit. S/U grading.
478. Advanced Private Instruction in World Arts
and Cultures. (2 to 8) Studio, three to 12 hours; out-
side study, three to 12 hours. Private or semiprivate in-
struction with distinguished community-based artist to
be arranged by students and approved by instructor.
May be repeated for maximum of 24 units. S/U grad-
ing.
480. Seminar: Research Topics. (2 to 4) Seminar,
three hours; outside study, three to nine hours. Forum
in which faculty, students, and visitors make presenta-
tions and obtain feedback on research being planned,
conducted, or recently completed. Students required
to make minimum of one presentation each term they
are enrolled for credit. May be repeated for maximum
of 8 units. S/U grading.
495. Teaching Assistant Seminar. (2) Seminar, one
hour; laboratory, three hours. Required of all World
Arts and Cultures Department teaching assistants.
Lectures, discussion, readings, and practice teaching.
May be repeated once for credit. S/U grading.
496. Teacher Preparation in World Arts and Cul-
tures. (2) Seminar, two hours. Directed work in prepa-
rations of course syllabi and discussion of topics rele-
vant to developing teaching skills. Fundamental princi-
ples and methods with which to design course syllabi
and gather resources for courses. Topics include de-
velopment of teaching philosophy, evaluating/teac-
thing Bible, leading to the development of teaching
theories, assessment/evaluation/practice of course,
consideration of practical, administrative, and ethical
issues. Students meet with instructor to review their
specific needs as they progress in development and elab-
oration of course plans. Microteaching sessions provide
context for applying concepts and principles discus-
sioned. S/U grading.
596A. Directed Individual Study or Research. (2 to
8) Tutorial, to be arranged. S/U or letter grading.
596R. Directed Study or Research in Hospital or
Clinic. (2 to 8) Tutorial, to be arranged. S/U grading.
597. Preparation for Master’s Comprehensive Ex-
amination or PhD Qualifying Examination. (2 to 8)
Tutorial, to be arranged. Preparation for MA or MFA
comprehensive examination or PhD qualifying exami-
nation. S/U grading.
598. Research for and Preparation of Master’s The-
sis. (2 to 8) Tutorial, to be arranged. Research for
599. Research for and Preparation of PhD Disser-
tation. (2 to 12) Tutorial, to be arranged. Preparation
of research data and writing of PhD dissertation. May
be repeated for credit. S/U grading.

**Writing Programs**

**College of Letters and Science**

146 Kaplan Hall
Box 951384
Los Angeles, CA 90095-1384

**Writing Programs**

310-206-7145

**Director**

Janet M. Goodwin, MA, Associate Director
Christine Holten, MA, Director, Undergraduate
Writing Center

**Lecturers**

Dana Cairns Watson, PhD
Teddi L. Chichester, PhD
Tamar S. Christensen, MA
Richard A. Creese, PhD
Shane Crosby, PhD
Margaret E. Davis, MA
Nathan A. Deuel, MFA
Randall J. Fallow, PhD
Mary E. Galvin, PhD
Janet M. Goodwin, MA
Thomas A. Hitchner, PhD
Christine Holten, MA
Laila D. Hualpa, PhD
Colleen M. Jauretche, PhD
Linz M. Juliano, PhD
Jeremy C. Kelley, PhD
David M. Kipen, BA
Karl F. Lisovsky, MA
Maja Manoljovic, PhD
Lauri M. Mattenson, MA
Mia L.G. Mclver, PhD
Nedda Mehdizedeh, PhD
Michele L. Moe, PhD
Esha Niyogi De, PhD
Shelby A. Popham, PhD
Tara L. Prescott-Johnson, PhD
Susannah Rodriguez Drissi, PhD
Gregory J. Rubinson, PhD
Mary G. Samuels, PhD
Leslie A. Sherwood, MS
Steven K. Steinberg, EdD
Bruce D. Stone, MFA
Amber I. West, PhD
Lauri M. Mattenson, MA

**Scope and Objectives**

Writing Programs is committed to inclusive peda-
gogy and student success, serving undergraduates
through a curriculum in composition and English as
a second language (ESL), as well as through the
Undergraduate Writing Center (UWC). Writing
Programs serves as the chief resource for writing
and English language instruction through entry-
level writing, first-year composition, writing-in-the-
disciplines, and professional writing courses. Its
courses play a vital role in preparing undergraduates
from diverse linguistic and academic-skill back-
gounds to succeed as writers/communicators in
their UCLA studies as well as in future professional
contexts. Writing Programs’ courses facilitate dis-
covery, understanding, analysis, inspiration, com-
unity building, and global citizenship.

The undergraduate curriculum develops writing
skills in linguistic, visual, and digital forms, and en-
courages students to see the classroom as a place to
be challenged by new ideas, to investigate, prob-
lem-solve, reflect, imagine, think and rethink, and
ultimately, to learn. Writing Program’s undergradu-
ate teaching mission is extended by the UWC, which
also provides numerous courses annually from all disci-
plines and all divisions at UCLA to communicate
effectively in their coursework.

A curriculum in writing pedagogy for graduate stu-
dents is also offered. Graduate writing instructors
from across campus benefit from an intensive writ-
ping pedagogy training as preparation for teaching
freshman composition (satisfies Writing I require-
ment) and writing in the disciplines (satisfies Writing
II requirement). Writing Programs also provides
writing pedagogy training for teaching assistants
(TAs) in the Samueli School of Engineering and gen-
eral education freshman cluster program. Teaching
assistants interested in expanding their professional
writing profile as writing specialists can pursue a
graduate certificate in Writing Pedagogy and par-
ticipate in the certificate’s annual teaching
symposium.

In addition, Writing Programs serves international
graduate students as writers and communicators
through graduate-level academic writing courses
that satisfy the UCLA ESL requirement, elective writ-
ing workshop courses, and oral communication
courses for international students who plan to serve
as TAs and need to satisfy the Test of Oral Profi-
ciency (TOP) requirement. During the summer, re-
quired writing courses are offered for matriculated
students as well as a suite of ESL courses for interna-
tional student visitors.

Writing Programs works closely with the Office
of Equity, Diversity, and Inclusion to help all students
experience academic belonging, and bring to-
gether members of the UCLA and Los Angeles com-
unities through service learning courses, summer
bridge programs for high school students, the
UCLA prison education program, and public events.
Writing Programs educational initiatives promote
the impact of writing, writ large, around issues of
self expression, public discourse, diversity, and ex-
periential learning.

**Undergraduate Study**

**Entry-Level Writing**

Every student who does not satisfy the Entry-Level
Writing requirement by presenting transfer credit
or acceptable test scores is required to take, as early
as possible during the first year in residence, English
Composition 1, 1A, 1B, 2, or 2I as determined by
performance on the Analytical Writing Placement
Examination (AWPE). Students who have not other-
wise satisfied the Entry-Level Writing requirement
and who have not taken the AWPE before entering
UCLA must take it in their first term. For more
information regarding **Entry-Level Writing**, see
Undergraduate Degree Requirements in the Under-
graduate Study chapter.

**English as a Second Language Requirement**

All entering undergraduate students whose native
language is not English and who have not otherwise
satisfied the English as a Second Language (ESL) re-
quirement may be required to take one or more En-
**Writing Programs / 791**

Graduate Study

**English as a Second Language Requirement**

All entering graduate students whose native language is not English and who have not otherwise satisfied the English as a Second Language (ESL) requirement may be required to take one or more ESL courses. Students are placed in the courses based on the UCLA English as a Second Language Placement Examination (ESLPE). Transfer students who are required to take the ESLPE include those who have not yet satisfied the Intersegmental General Education Transfer Curriculum (IGETC), and those held at the discretion of Undergraduate Admission. The ESLPE may be taken once only.

**Graduate Study**

**English as a Second Language**

**Lower-Division Courses**

19. Fiat Lux Freshman Seminars. (1 Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP or letter grading.

20. Conversation and Fluency. (4 Lecture, four hours. Emphasis on speaking fluently in English by examining rules of conversation, participating actively in class discussions, making group presentations, and completing out-of-class assignments designed to promote interaction with native speakers and familiarize international students with UCLA campus and local community. Offered in summer only. P/NP or letter grading.

21. Pronunciation. (4 Lecture, four hours. Designed to improve clarity, accuracy, and understanding of spoken English through study and practice of pronunciation features as they occur in real speech, using models from television, movies, and online talks. Emphasis on individualized feedback through audiorecording and videorecording technology. Offered in summer only. P/NP or letter grading.

22. Public Speaking. (4 Lecture, four hours. Emphasis on making presentations, interacting with audience members, and leading group discussions. Videorecording of student performances to allow students to improve through self and peer evaluation, as well as through individualized instructor feedback. Offered in summer only. P/NP or letter grading.

23. American Culture through Film. (4 Lecture, four hours. Designed to improve listening comprehension and discussion skills by viewing and analyzing a variety of American films. Emphasis on understanding and using idiomatic language, expanding vocabulary, recognizing dialect differences, and reflecting on cultural similarities and differences. Offered in summer only. P/NP or letter grading.

24. Preparation for American Universities. (4 Lecture, four hours. Designed for international students planning to study at American universities. Students research and select graduate or graduate programs, interview advisers at local universities, and learn to write effective personal statements. Additional focus on academic reading, vocabulary, and speaking skills. Offered in summer only. P/NP or letter grading.

25. Academic Reading and Writing. (4 Lecture, four hours. Designed to improve reading speed, comprehension, and knowledge of academic writing conventions. Emphasis on synthesizing information from sources, providing underdations, and avoiding plagiarism. Focus on development of ability to revise and edit one’s own writing. Offered in summer only. P/NP or letter grading.

26. Business Communication. (4 Lecture, four hours. Emphasis on using business and marketing-focused presentations (both individual and group), handling audience questions, and running effective meetings. Video recording of student performances to allow students to improve through self-evaluation, as well as through individualized instructor feedback. Offered in summer only. P/NP or letter grading.

27. Business Communication: Writing. (4 Lecture, four hours. Emphasis on writing persuasive texts for diverse business audiences. Topics include writing effective summaries and reports, researching companies, and developing a professional online profile. Offered in summer only. P/NP or letter grading.

28. English through Language, Culture, and Society. (4 Lecture, four hours. Survey of selective language structures through their occurrence within contemporary cultural and societal topics within thematic, content-based English language learning environment. Focus on understanding and applying these structures to improve fluency while enhancing critical thinking skills. Meaningful discussions in conjunction with salient written/spoken assignments that situate language within authentic contexts. Topics may include gender, sexuality, politics, humor, intercultural communication, family, environmental issues, and local/regional identities. P/NP or letter grading.

89. Honors Seminars. (1 Seminar, three hours. Limited to 20 students. Designed as adjunct to lower-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be applied toward honors credit for eligible students. Honors content noted on transcript. P/NP or letter grading.

89HC. Honors Contracts. (1 Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to lower-division lecture course. In-depth and in-depth study of topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

97A. Variable Topics in English as a Second Language. (4 Lecture, four hours. Specialized topics in English as second language or English for academic purposes. Emphasis varies according to topics covered and/or audience to whom course is directed. May be repeated for credit with topic change. Offered in summer only. P/NP (undergraduates), S/U (graduates), or letter grading.

97B. Variable Topics in English as a Second Language. (2 Lecture, two hours. Enroll required: course 33B or proficiency demonstrated on English as a Second Language Placement Examination. Specialized topics in English as second language or English for academic purposes. Emphasis varies according to topics covered and/or audience to whom course is directed. May be repeated for credit with topic change. P/NP (undergraduates), S/U (graduates), or letter grading.

99. Student Research Program. (1 to 2 Tutorial (supervised research or other scholarly work), three hours per week per term. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in minimum of 12 units (excluding this course). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

**Upper-Division Courses**

103. Pronunciation for Multilingual Students. (4 Lecture, four hours. Emphasis on accurate articulation of sounds, word stress, rhythm, linking between syllables, intonation, and other features of fluent spoken English, using variety of videorecorded models and online pronunciation resources. Individualized feedback provided through frequent recording assignments. P/NP or letter grading.

104. Public Speaking for Multilingual Students. (4 Lecture, four hours. Emphasis on preparing presentations in academic and professional settings, interacting with audience members, leading group discussions, and preparing for job interviews. Videorecording of student performances to allow students to improve through self and peer evaluation, as well as through individualized instructor feedback. P/NP or letter grading.


106. Workshop in Disciplinary Writing for Multilingual Students. (4 Lecture, four hours. Emphasis on writing effective summaries and reports, researching companies, and developing a professional online profile. Offered in summer only. P/NP or letter grading.

107. Academic Reading and Vocabulary for Multilingual Students. (4 Lecture, four hours. Instruction in and practice of academic reading skills using authentic university texts. Focus on improving reading rate and comprehension, expanding academic vocabulary, and developing critical reading skills. P/NP or letter grading.

109. Literature and Language for Multilingual Students. (4 Lecture, four hours. Emphasis on accurate articulation of sounds, word stress, rhythm, linking between syllables, intonation, and other features of fluent spoken English, using variety of videorecorded models and online pronunciation resources. Individualized feedback provided through frequent recording assignments. P/NP or letter grading.

189. Advanced Honors Seminars. (1 Seminar, three hours. Limited to 20 students. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. P/NP or letter grading.

189HC. Honors Contracts. (1 Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to upper-division lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities. May be repeated for maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.
Graduate Courses

300. Intermediate Writing and Communication for International Graduate Students. (4) Lecture, five hours. Enforced requisite: proficiency demonstrated on English as a Second Language Placement Examination. Development of academic writing, reading, and language skills with focus on presenting academic subject matter in well-organized, interactive, and accessible way. Students are encouraged to discuss their work with diverse communities. Minimum of 15 to 20 pages of revised text required to receive grade of C or better. Satisfies Writing I requirement. Letter grading.

301. Introduction to University Discourse. (4) For- merly named: Effective Teaching for Non-Tenure-Track Faculty. (4) Lecture, three hours. Enforced requisite: proficiency demonstrated on Analytical Writing Placement Examination. Introduction to college-level critical reading and academic writing. Development of techniques and skills for effective teaching assistants through interactive teaching, demonstrations and student-led discussions of topics from one’s own field. Emphasis on presenting academic subject matter in well-organized, interactive, and accessible way. Satisfies Writing II requirement. Letter grading.

English Composition

Lower-Division Courses

1. Introduction to University Discourse. (4) For- merly named: Effective Teaching for Non-Tenure-Track Faculty. (4) Lecture, three hours. Enforced requisite: proficiency demonstrated on Analytical Writing Placement Examination. Introduction to college-level critical reading and academic writing. Development of academic writing skills through practicing and building on reading, writing, and rhetorical skills. Emphasis on revision, developing syntactic and academic vocabulary, and editing for grammar and style. Completion of course with grade of C or better is requisite to course 2. Letter grading.

1A. Intermediate Composition for Multilingual Students. (4) Lecture, five hours. Enforced requisite: proficiency demonstrated on Analytical Writing Placement Examination (first-year students) or English as a Second Language Placement Examination (transfer students). Development of academic writing skills with focus on reading comprehension, vocabulary development, and composition techniques, with additional work on grammar and editing. Minimum of 15 to 20 pages of revised text required. Satisfies Writing I requirement. Letter grading.

1B. High-Intermediate Composition for Multilingual Students. (4) Lecture, five hours. Enforced requisite: proficiency demonstrated on Analytical Writing Placement Examination (first-year students) or English as a Second Language Placement Examination (transfer students) or course 1A (C or better). Development of academic writing skills with focus on synthesis sources, strategies of argumentation, academic reading, and vocabulary, with assignments work on grammar and editing. Satisfies Writing I requirement. Letter grading.

1C. Advanced Composition for Multilingual Transfer Students. (5) Lecture, four hours. Enforced requisite: proficiency demonstrated on Analytical Writing Placement Examination (enforced) or course 1B (C or better). Development of academic writing skills with focus on writing process, grammatical structures, key to clear and effective style, and practice with major forms of academic writing, with additional work on critical analysis of readings. Completion of course with grade of C or better satisfies English as a Second Language Placement Examination requirement. Letter grading.

2. Approaches to University Writing. (5) Lecture, six hours. Enforced requisite: proficiency demonstrated on Analytical Writing Placement Examination (enforced) or course A (C or better). Second course in university-level discourse, with analysis and critique of university-level texts. Emphasis on revision for argumentative coherence and effective style. Completion of course with grade of C or better satisfies Entry-Level Writing requirement. Letter grading.

2A. Approaches to University Writing for Multilingual Students. (5) Lecture, six hours. Enforced requisite: proficiency demonstrated on Analytical Writing Placement Examination (enforced) or course 1B (C or better). Second course in university-level discourse, with analysis and critique of university-level texts. Emphasis on strategies for developing coherent and well-argued pieces of academic writing and for achieving effective and clear prose. Completion of course with grade of C or better satisfies Entry-Level Writing and English as a Second Language requirements. Letter grading.

3. English Composition, Rhetoric, and Language (Service Learning). (5) Lecture, four hours. Enforced requisite: course 2 or 2I (C or better). Rhetorical techniques and skillful argument. Analysis of varieties of academic prose and writing of minimum 20 pages of revised text. Completion of course with grade of C or better satisfies Writing II requirement. Letter grading.

3E. English Composition, Rhetoric, and Language (Service Learning). (5) Lecture, four hours; fieldwork, two hours. Enforced requisite: satisfaction of Entry-Level Writing requirement or course 2 or 2I (C or better). Investigation of diversity and writing about topics important to academic inquiry and responsible citizenship. Minimum of 15 to 20 pages of revised text required in addition to regular informal writing exercises. Satisfies Writing II requirement. Letter grading.

5W. Literature, Culture, and Critical Inquiry. (5) Lec- ture, four hours. Enforced requisite: course 3. Use of analysis of literary works within cultural context to engage students in critical thinking and writing about issues important to academic inquiry and responsible citizenship. Minimum of 15 to 20 pages of revised text required in addition to regular informal writing exercises. Satisfies Writing II requirement. Letter grading.

6W. Language, Culture, and Discourse. (5) Lecture, four hours. Enforced requisite: course 3. Study of cultural context and use of English as a social structure and cultural values. Readings in linguistic analysis, language acquisition, sociolinguistics, and pragmatics provide foundation as students analyze authentic language as it is used in private and public contexts. Minimum of 15 to 20 pages of revised text required. Satisfies Writing II requirement. Letter grading.

19. Fiat Lux Freshman Seminars. (1) Seminar, one hour. Discussion of and critical thinking about topics of current intellectual importance, taught by faculty members in their areas of expertise and illuminating many paths of discovery at UCLA. P/NP grading.

dress specific writing tasks such as timed examination, application essay, effective e-mail, and college paper. Offered in summer only. P/NP or letter grading.

51. Writing Workshop. (2) Lecture; two hours. Limited to students admitted to one UC campus who have not completed their first year of college coursework. Introduction to demands of university writing and often un unstated conventions that govern it. Addresses not only specific writing tasks such as timed examinations, effective e-mail, and college papers, but also broad communication situations. Students must attend at least 20 meetings and complete all assignments; classroom participation and oral presentations. P/NP or letter grading.

89H. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to lower-division course. May be repeated for a maximum of 4 units. Individual honors contract required. Honors content noted on transcript. P/NP or letter grading.

89HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to lower-division course with lecture instructor to explore topics in greater depth through supplemental readings, papers, or other activities. May be repeated for a maximum of 4 units. Individual honors contract required. Honors content noted on transcript. Letter grading.

99. Student Research Program. (1 to 2) Tutorial. Supervised research, other scholarly work, three hours per week. Entry-level research for lower-division students under guidance of faculty mentor. Students must be in good academic standing and enrolled in a degree program (excluding off-campus study courses). Individual contract required; consult Undergraduate Research Center. May be repeated. P/NP grading.

Upper-Division Courses

100W. Interdisciplinary Academic Writing. (5) Lecture, four hours. Requisites: course 3 or 3H or English as a Second Language 3A. Designed for sophomores/seniors. Course in academic writing suitable for both lower- and upper-division students that helps them develop academic papers with range of complexity and length. Focus on conventions of academic prose and genres across disciplines. Written assignments include common forms of academic writing such as argument, research paper, and/or critical essay. Enforced requisite: Writing 1 requirement. Letter grading.

100WD. Interdisciplinary Academic Writing. (5) Lecture, four hours. Requisite: course 3, 3D, 3DS, or 3E. Course in academic writing suitable for both lower- and upper-division students that helps them develop academic papers with range of complexity and length. Focus on conventions of academic prose and genres across disciplines. Written assignments include common forms of academic writing such as argument, research paper, and/or critical essay. Enforced requisite: Writing 1 requirement. Letter grading.

101A. Language Study for Teachers: Elementary School. (4) Lecture; four hours. Requisites: satisfaction of Entry-Level Writing and English Composition requirements. Designed to provide special interest to elementary school teachers. Subjects include approaches to English grammar; language acquisition and development; language attitudes; regional and social dialects of American English; bilingual schooling; contribution of English language study to teaching of reading, writing, spelling, and literature. P/NP or letter grading.

102B. Language Study for Teachers of English: Secondary School. (4) Lecture; four hours. Requisite: satisfaction of Entry-Level Writing and English Composition requirements. Focus on terminology of English grammar and survey of development of modern grammars. Introduction to basic concepts in field, including part of speech, social linguistics, dialectology, and stylistics, especially as applied to analysis and evaluation of written assignments in secondary school settings. May be taken independently for credit. P/NP or letter grading.

123. Information Literacy and Research Skills. (1) Lecture, one hour. Preparation: satisfaction of Writing I requirement. Designed to help students become information literate, so they know how to identify, locate, and use print and electronic information effectively and ethically. Closely interwoven with Writing Programs courses that have information/research-related assignments. P/NP or letter grading.

124A-129D. Academic Writing in Disciplines. (4 each section) Lecture; two hours. Designed for juniors/seniors. Advanced study of writing conventions in specific disciplinary areas, with focus on analysis and development of writing expertise in common discursive forms, research practices in given discipline. Each course may be taken independently for credit. P/NP or letter grading. 129A. Literature; 129B. Social Sciences. Lectures, three hours; discussion, one hour. P/NP or letter grading. 129D. Fine Arts.

130A. Professional Writing: Digital Writing and Web Literacy. (5) Lecture, four hours. Requisites: satisfaction of Entry-Level Writing requirement, course 3. Emphasis on writing for digital environments such as websites, blogs, newsletters, and social media. Common professional settings for these skills include journalism, political campaigns, marketing, and corporate communication. P/NP or letter grading.

130B. Professional Writing: Business and Entrepreneurship. (5) Lecture, four hours. Requisites: satisfaction of Entry-Level Writing requirement, course 3. Emphasis on developing written oral, and visual communication skills for entrepreneurial settings. Common tasks including pitching idea, seeking funding for startup, or promoting product or service. P/NP or letter grading.

130C. Professional Writing: Science and Technology. (5) Lecture, four hours. Requisites: satisfaction of Entry-Level Writing requirement, course 3. Emphasis on communicating complex technical concepts and scientific research findings to non-technical audience. P/NP or letter grading.

130D. Professional Writing: Nonprofits and Public Engagement. (5) Lecture, four hours. Requisites: satisfaction of Entry-Level Writing requirement, course 3. Emphasis on writing persuasively and effectively in both nonprofit and public sectors. Writing genres include mission and vision statements, grant proposals, and public service announcements, and outreach campaigns. P/NP or letter grading.

130E. Professional Writing: Arts and Entertainment. (5) Lecture, four hours. Requisites: satisfaction of Entry-Level Writing requirement, course 3. Emphasis on the ability to write professionally about creative material and performances in areas such as film, television, theater, music, art/design, podcasts, and video games. Writing genres include critical reviews, recaps, promotional materials, treatments, and profiles. P/NP or letter grading.

131A-131C. Specialized Writing. (4–4–4) Lecture; four hours. Requisite: satisfaction of Entry-Level Writing and English Composition requirements. Designed to help students develop stylistic, formal, and argumentative sophistication in various rhetorical contexts, including different sections that emphasize rhetoric with audiences and design, research areas. Each course may be taken independently for credit. P/NP or letter grading. 131A. Law and Politics; 131C. Medicine and Public Health; 131D. Media and Communications.

131B. Specialized Writing: Business and Social Policy. (5) Lecture, four hours. Requisite: satisfaction of Entry-Level Writing and English Composition requirements. Designed for juniors/seniors. Advanced writing course designed to help students develop stylistic, formal, and argumentative sophistication in various rhetorical contexts, including different sections that emphasize rhetoric with audiences and design, research areas. May be taken independently for credit. P/NP or letter grading.

132. Variable Topics in Rhetoric and Writing. (Formerly numbered 132D.) Lecture; four hours. Requisites: satisfaction of Entry-Level Writing requirement, consent of instructor. Intensive study of writing within one academic or professional context. Consult Schedule of Classes for topic focus in specific term. May be repeated for credit with topic change. P/NP or letter grading.

132A-132B-132C. Topics in Rhetoric and Writing. (4–4–4) Lecture; four hours; discussion, one hour. Requisite: satisfaction of Entry-Level Writing and English Composition requirements. Designed for juniors/seniors. Study of specific topics in relationship between rhetoric/writing and social or political history. Each course may be taken independently for credit. P/NP or letter grading. English majors who wish to use course to satisfy departmental requirement must take it for letter grade. 132A. Gender and Writing; 132B. Autobiographical Writing; 132C. Cultural Studies.

133. Topics in Writing for Multimedia Environments. (5) Lecture, four hours. Requisites: satisfaction of Entry-Level Writing requirement, course 3. Special topics in professional writing exploring current digital developments, issues, or debates within art, entertainment, social media, or video game industries. May be repeated for a maximum of 10 units. P/NP or letter grading.

134. Topics in Science Writing. (5) Lecture, four hours. Requisites: satisfaction of Entry-Level Writing requirement, course 3. Focus on developing grammatical precision and rhetorical values of major professions and research areas. Designed for juniors/seniors. Each course may be repeated for a maximum of 4 units. P/NP or letter grading.

136. Practical Writing and Editing. (5) (Formerly numbered 136A.) Lecture; four hours. Requisites: satisfaction of Entry-Level Writing requirement, course 3. Focus on developing grammatical precision and rhetorical values of major professions and research areas. Designed for juniors/seniors. Each course may be repeated for a maximum of 4 units. P/NP or letter grading.

137. Writing for Public Speaking. (5) Lecture, four hours. Requisites: satisfaction of Entry-Level Writing requirement, course 3. Focus on developing grammatical precision and rhetorical values of major professions and research areas. Designed for juniors/seniors. Each course may be repeated for a maximum of 4 units. P/NP or letter grading.


M138. Topics in Creative Writing. (5) Same as English M138.) Seminar, three hours. Requisite: English Composition 3 or 3D or 3SL. Introductory workshop in genre(s) of instructor choice, that may include mixed genres, playwriting, screenwriting, literary fiction, or others. Enrollment in more than one section per quarter is not permitted for a maximum of 10 units. May not be used to satisfy work-shop requirements for English creative writing concentration. P/NP or letter grading.

M141. Current Methods of Language Teaching. (Same as Linguistics M141.) Lecture, four hours; discussion, one hour. Enforced requisite: Linguistics 20. Survey of theory and practice in teaching second languages, including (1) past and present methods used to teach second languages; (2) current theory and practice underlying skills-based instruction and integrated approaches, and (3) factors that affect second language acquisition and learning. Development of knowledge base in and rational base for design, development, implementation, and evaluation of second language instruction programs. P/NP or letter grading.

142. Teaching Grammar and Style. (5) Lecture, four hours. Requisite: Linguistics 20. Survey of English language structures and conventions to better under-
375. Teaching Apprentice Practicum. (1 to 4) Seminar, to be arranged. Preparation: apprentice personnel employment as teaching assistant, associate, or fellow. Teaching apprenticeship under active guidance and supervision of regular faculty member responsible for course. May be repeated for credit. S/U grading.

401. Current Issues in University Writing Pedagogy. (4) Seminar, three hours. Limited to graduate students. Exploration of literature and theories of postsecondary writing pedagogy that may include focus on changing institutional role of writing instruction, multimodal pedagogy, and linguistic/educational diversity. Letter grading.

402. Writing Pedagogy across Disciplines: Genre and Discourse. (4) Seminar, three hours. Limited to graduate students. Survey of literature on academic writing across curriculum. Examination of writing conventions, genres, and styles in graduate student academic discipines, with focus on evolving academic discourse in emerging and hybrid areas of inquiry. Development of best practices for adapting writing pedagogy to changes in disciplinary academic discourse, with discussion of challenges for multilingual learners. Letter grading.

403. Language Pedagogy: Form, Meaning, and Function. (4) Seminar, three hours. Designed for graduate students. Survey of theories and applications of language structures and conventions, with insights from discourse analysis and functional grammar. Designed to develop instructor ability to explain structures and to articulate language-based issues of meaning. Integrates research and successful applications of knowledge for improved language-related instruction and feedback in composition studies. Letter grading.

404. Diversity and Student-Centered Pedagogy. (4) Seminar, three hours. Limited to graduate students. Survey of diversity in heterogeneous classrooms, with focus on diversity of student demographics, geographic background, linguistic skills, and academic preparedness. Development of best practices for accommodating diverse student populations and building active inclusive curriculum and classroom environments at university level. S/U or letter grading.

495A. Teaching Preparation Seminar: Second Language Learners. (4) Seminar, three hours. Limited to graduate students. Survey of language (ESL) teaching assistants and open to students seeking Graduate Certificate in Writing Pedagogy. Focus on pedagogical issues specifically related to teaching ESL courses. Includes design skills for second language learners, including course design, assessment of student writing, conferencing, and specialized problems that may occur in teaching ESL courses. S/U grading.

495B. Supervised Teaching of Second Language Learners. (4) Seminar, two hours. Enforced requisite: course 495A. Required of all English as a second language (ESL) teaching assistants to teach ESL courses. Focus on composition pedagogy, writing course design, assessment of student writing, and specialized problems that may occur in teaching ESL courses. S/U grading.

495C. Teaching Preparation Seminar: First-Year Composition. (4) Seminar, three hours. Limited to graduate students. Required of all teaching assistants prior to teaching English Composition 3 courses and to open to students seeking Graduate Certificate in Writing Pedagogy. Focus on composition pedagogy, writing course design, assessment of student writing, and specialized problems that may occur in teaching English Composition 3 courses. S/U grading.

495D. Supervised Teaching of First-Year Composition. (2) Seminar, two hours. Enforced requisite: course 495C. Required of all teaching assistants who are assigned to English Composition 3 courses. Focus on composition pedagogy, writing course design, assessment of student writing, and specialized problems that may occur in teaching English Composition 3. May be repeated for credit. S/U grading.

495E. Teaching Preparation Seminar: Writing in Disciplines. (2) Seminar, three hours every other week. Limited to graduate students. Required of all teaching assistants for Writing II courses not exempt by appropriate departmental or program training and open to students seeking Graduate Certificate in Writing Pedagogy. Training focused on composition pedagogy, assessment of student writing, guidance of revision process, and specialized writing problems that may occur in disciplinary contexts. Practical concerns of creating assignments, marking and grading essays, and conducting peer reviews and conferences. May be repeated for credit. S/U grading.

175. Apprenticeship in Composition Tutoring. (2) Seminar, two hours. Enforced requisite: satisfaction of Writing II requirement. Composition Peer Learning Facilitators (PLFs) who work in Undergraduate Writing Center provide ongoing mentoring in composition and peer learning methodologies. Overview of language, writing, and literacy needs of diverse college-age writer populations. Writing Buddies, methods of peer tutoring, and issues of intercultural exchange. Live and non-live (NNS) English-speaking (NNS) writers. Provides opportunity to reflect critically on theoretical and practical frameworks for tutoring to which students have been introduced. PLFs receive guidance in their tutoring process via observations by course instructor and their peers. May be repeated for credit with consent of instructor. P/NP grading.

180. Research Writing Workshop. (5) Lecture, three hours; laboratory, four hours. Advanced workshop designed for juniors and seniors engaged in large-scale research projects in humanities or social sciences. Students hone research, critical reading, and writing skills through close reading of digital research note book, and writing workshops. Students practice giving, receiving, and incorporating feedback through peer review, and develop research projects in consultation with their instructor, and faculty and fellow academic advisors. Culminates with completion of literature review, academic article, or thesis chapter. P/NP or letter grading.

189HC. Honors Contracts. (1) Tutorial, three hours. Limited to students in College Honors Program. Designed as adjunct to undergraduate lecture course. Exploration of topics in greater depth through supplemental readings, papers, or other activities and led by lecture course instructor. May be repeated for a maximum of 4 units. Individual honors contract required. Honors contract noted on transcript. P/NP or letter grading.

199. Directed Research or Senior Project in English. (2 to 4) Seminar, two and one half hours. Limited to graduate students. Required of all English as a second language learners, including course design, assessment of student writing, guidance of revision process, and specialized writing problems that may occur in engineering contexts. Prerequisites:護 students to write course assignments, marking and grading essays, and conducting peer reviews and conferences. S/U grading.

M495I. Teaching Preparation Seminar: Writing for Engineering Disciplines. (4) Same as English 495I. Seminar, two and one half hours. Limited to graduate students. Required of all teaching assistants for Engineering writing courses not exempt by appropriate departmental or program training. Training focused on composition pedagogy, assessment of student writing, guidance of revision process, and specialized writing problems that may occur in engineering contexts. Prerequisites:護 students to write course assignments, marking and grading essays, and conducting peer reviews and conferences. S/U grading.

M495J. Supervised Teaching of Writing for Engineering Disciplines. (2) Same as English 495J. Seminar, one hour. Enforced requisite: course M495I. Required of all teaching assistants in their initial term of teaching Engineering writing courses. Mentoring in group and individual meetings. Continued focus on composition pedagogy, assessment of student writing, guidance of revision process, and specialized writing problems that may occur in engineering contexts. Prerequisites:護 students to write course assignments, marking and grading essays, and conducting peer reviews and conferences. S/U grading.

M495K. Teaching Preparation Seminar: Teaching and Writing Pedagogies. (2) Seminar, two hours. Limited to graduate students. Required of all departmental writing teaching assistants who concurrently hold a TA appointment. Seminar on pedagogy and logistics of being a TA with emphasis on student-centered teaching, clear communication, and multimodal teaching and learning. S/U grading.

M495M. Teaching Preparation Seminar: Clusters. (2) Seminar, two hours. Limited to graduate students. Required of all Clusters teaching assistants in their first quarter with Clusters. Training focused on student-centered pedagogy, reflecting teaching of all Clusters teaching assistants in quarter prior to their first Clusters seminar and open to students seeking Graduate Certificate in Writing Pedagogy. Training focused on developing writing-intensive seminar with emphasis on identifying course objectives, choosing appropriate readings, sequencing and scaffolding curriculum, drafting integrated assignments, and foregrounding writing in discipline-specific composition of syllabus for seminar that satisfies Writing II requirement. S/U grading.
495O. Supervised Teaching of Clusters Seminar. (2) Seminar, two hours. Requisite: course 495N. Required of all Clusters teaching assistants teaching their first Clusters seminar. Mentoring conferences and teaching observations, with focus on student-centered pedagogy, assessment of student writing, guidance of revision process, and specialized writing problems that may occur in disciplinary and Clusters contexts. Practical concerns of creating assignments, responding to and grading essays, and conducting peer reviews and conferences. May be repeated for credit. S/U grading.

495P. Teaching Preparation Seminar: Empowering Culturally Diverse Student Writers. (2) Seminar, two hours. Limited to graduate students. Recommended for all teaching assistants planning to teach English composition as part of AAP’s summer bridge programs. Focus on pedagogy that serves heterogeneous classrooms, with emphasis on diversity of race, socioeconomic status, citizenship status, and academic preparedness. Practical concerns include lesson planning and professionalization for composition instructors. S/U grading.

495S. Supervised Summer Teaching of Language and Composition. (2) Seminar, 90 minutes. Requisite: course 495A or 495C. Recommended for all teaching assistants teaching English as a second language, English composition, and Writing II courses during summer. Focus determined on individual basis according to class appointed and may include oral skills pedagogy, composition pedagogy, course design, assessment of student performance, and specialized problems that may occur in intensive summer language and/or composition courses. Supervision during appointment and mentor meetings and reflection on teaching experience following summer appointment. S/U grading.

499. Academic Professionalization Colloquium. (2) Colloquium/workshop, three hours every other week. Limited to graduate students. Rotating speakers on topics such as designing digital teaching portfolio, drafting academic/teaching curriculum vitae (CV), writing application letters for academic jobs, and pursuing alternative academic careers. Speaker sessions and panels to be followed by workshops. Revision of application letter, CV, teaching portfolio, or other relevant document to be determined in consultation with colloquium organizer. S/U grading.
APPENDIX A: REGULATIONS AND POLICIES

Nondiscrimination

The University of California, in accordance with applicable federal and state laws and University policies, does not discriminate on the basis of race, color, national origin, religion, sex, gender identity, pregnancy (including pregnancy, childbirth, and medical conditions related to pregnancy and childbirth), physical or mental disability, medical condition (cancer-related or genetic characteristics), ancestry, marital status, age, sexual orientation, citizenship, or service in the uniformed services (including membership, application for membership, performance of service, application for service, or obligation for service in the uniformed services). The University also prohibits sexual harassment and harassment on any of the above bases. This nondiscrimination policy covers admission, access, and treatment in University programs and activities.

Students may grieve any action that they believe discriminates against them on the ground of race, color, national or ethnic origin, alienage, sex, religion, age, sexual orientation, gender identity, marital status, veteran status, or perceived membership, application for membership, or service in the uniformed services. Students may grieve any action that they believe discriminates against them on the basis of disability by contacting the Office of the Dean of Students by e-mail, or in person at 1104 Murphy Hall. Refer to UCLA Procedure 230.2 for more information and procedures.

Title IX prohibits sex discrimination, including sexual harassment and sexual violence, in any education program or activity receiving federal financial assistance. Inquiries regarding the application of Title IX may be directed to the Title IX Office, 2255 Murphy Hall, 310-206-3417, or the U.S. Department of Education Office for Civil Rights.

Student Conduct Policies

Students are members of both society and the academic community with attendant rights and responsibilities. Students are expected to make themselves aware of and comply with the law, and with University and campus policies and regulations. While many UCLA policies and regulations parallel federal, state, and local laws, UCLA standards may be set higher. The University of California Policies Applying to Campus Activities, Organizations, and Students (UCP Policies) have been incorporated into the UCLA Student Conduct Code either by adapting or inserting verbatim the language of the policies. Students may contact the Office of Student Conduct, Office of Ombuds Services, or Student Legal Services for advice concerning these policies.

A. Jurisdiction

The University has jurisdiction over student conduct that occurs on University property, or in connection with official University functions whether on or off University property. The University may, at its sole discretion, exercise jurisdiction over conduct that occurs off campus and that would violate student conduct when (1) the alleged misconduct indicates the student poses a threat to the safety or security of any member(s) of the University community or (2) the alleged misconduct involves academic work or the forgery, alteration, or misuse of any University document, record, key, electronic device, or identification.

In determining whether or not to exercise off-campus jurisdiction, the University will consider the seriousness of the alleged misconduct; whether the alleged victim is a member of the campus community; the ability of the University to gather information, including the statements of witnesses; and whether the off-campus conduct is part of a series of actions that occurred both on and off campus.

B. Types of Misconduct

Students may be held accountable for committing or attempting to commit a violation of the UCLA Student Conduct Code or for assisting, facilitating, or participating in the planning of an act that violates this Code (or an act that would be in violation of this Code if it were carried out by a student). Violations include the following types of misconduct:

102.01: Academic Dishonesty. All forms of academic misconduct, including but not limited to cheating, fabrication or falsification, plagiarism, multiple submissions, or facilitating academic misconduct. For the purposes of the UCLA Student Conduct Code, the following definitions apply:

102.01a: Cheating. Includes, but is not limited to, the use of unauthorized materials, information, or study aids in any academic exercise; the alteration of any answers on a graded document before submitting it for grading; or the failure to observe the expressed procedures or instructions of an academic exercise (e.g., examination instructions regarding alternate seating or conversation during an examination).

102.01b: Fabrication. Includes, but is not limited to, falsification or invention of any information or citation in an academic exercise, including fabrication or falsification of research. Fabrication of research is making up data or results and recording or reporting them. Falsification of research is manipulating research materials, equipment, or processes, or changing or omitting data or results such that the research is not accurately represented in the research record.

102.01c: Plagiarism. Includes, but is not limited to, the use of another person’s work (including words, ideas, designs, or data), without giving appropriate attribution or citation. This includes, but is not limited to, representing, with or without the intent to deceive, part or all of an entire work obtained by purchase or otherwise, as the student’s original work; the omission of or failure to acknowledge the true source of the work; or representing an altered but identifiable work of another person or the student’s own previous work as if it were the student’s original or new work.

Unless otherwise specified by the faculty member, all submissions, whether in draft or final form, to meet course requirements (including a paper, project, take-home examination, computer program, oral presentation, or other work) must either be the student’s own work, or must clearly acknowledge the source.

102.01d: Multiple Submissions. Multiple submissions include, but is not limited to, the resubmission in identical or similar form by a student of any work which has been previously submitted for credit, whether at UCLA or any other school, college, or university in identical or similar form in one course to fulfill the requirements of a second course, without the informed permission/consent
of the instructor of the second course; or the sub-
mission by a student of any work submitted for
credit in identical or similar form in one course to
fulfill the requirements of a concurrent course,
without the permission/consent of the instructors
of both courses.

102.01e: Facilitating Academic Dishonesty. Facili-
tating academic dishonesty includes, but is not
limited to, knowingly helping another student
commit an act of academic dishonesty.

102.01f: Coercion Regarding Grading or Evalua-
tion of Coursework. Threatening personal or pro-
fessional repercussions or discipline against an in-
structor to coerce the instructor to change a grade
or otherwise evaluate the student's work by criteria
not directly reflective of coursework.

102.01g: Unauthorized Collaboration. Unautho-
rized collaboration means working with others
without the expressed permission of the instructor
on any submission, whether in draft or final form, to
meet course requirements (including a paper, proj-
ect, take-home examination, computer program,
oral presentation, or other work). Collaboration
between students will be considered unauthorized
unless expressly part of the assignment in question,
or expressly permitted by the instructor.

102.02: Other Forms of Dishonesty. Other forms
of dishonesty, including but not limited to fabricat-
ing information or knowingly furnishing false infor-
mation or reporting a false emergency to the Uni-
versity.

102.03: Forgery. Forgery, alteration, or misuse of
any University document, record, key, electronic
device, or identification, or submission of any
forged document or record to the University.

102.04: Theft, Damage, or Destruction of Property.

102.04a: Theft. Theft includes taking without ex-
pressed permission or, misappropriation of any
property or services of the University or property of
others while on University premises or at official
University functions; or possession of any property
that the student had knowledge or reasonably
should have had knowledge was stolen.

102.04b: Damage or Destruction of Property.
Damage or destruction of any University property
or the property of others while on University prem-
ises or at official University functions.

102.05: Computer Misuse. Theft or abuse of Uni-
versity computers and other University electronic
resources such as computer and electronic com-
munications facilities, systems, and services. Abuses
include, but are not limited to, unauthorized entry,
use, transfer, or tampering with the communica-
tions of others; use of either software or physical
devices to enroll in classes for yourself or on behalf
of others using processes other than those specifi-
cally delineated by the UCLA Registrar’s Office; in-
terference with the work of others and with the op-
eration of computer or electronic communications
facilities, systems, and services; or violations of
copyright laws, whether by theft, unauthorized
sharing, or other misuse of copyrighted materials
such as songs, movies, software, photos, or text.
Violation of the University of California Electronic
Communications Policy or of any other University
acceptable or allowable use policy is also consid-
ered a violation of Section 102.05.

102.06: Unauthorized Use of University Resources or
Name. Unauthorized entry to, possession of,
receipt of, or use of any University services, equip-
ment, resources, or properties, including the Uni-
versity’s name, insignia, or seal.

102.07: Violations of University Policy. Students
may be subject to discipline for violation of any Uni-
versity policy.

102.07a: University Housing. Violations of policy
regarding University-owned, -operated, or -leased
housing facilities or other housing facilities located
on University property.

102.07b: University Parking. Violations of policy
regarding University parking services or University-
owned or -operated parking facilities.

102.07c: University Recreation. Violations of pol-
icy regarding University recreation services, pro-
grams, or within University-owned or -operated
recreation facilities.

102.08: Conduct that Threatens Health or Safety.
Conduct that threatens the health or safety of any
person, including oneself. This includes, but is not
limited to, physical assault, sexual misconduct, do-
men’s violence, dating violence, threats that cause
a person reasonably to believe he or she is in danger
of his or her own safety or of other conduct that
threatens the health or safety of any person.

For incidents involving allegations of sexual violence
(including domestic violence, dating violence, and
sexual assault), see the UC Policy on Sexual Vio-
lence and Sexual Harassment (hereafter referred
to as the SVSH Policy).

102.09: Sexual Harassment. For incidents involv-
ing allegations of sexual harassment, see the SVSH Policy.

102.10: Stalking. Stalking is behavior in which a stu-
dent repeatedly engages in a course of conduct di-
rected at another person and makes a credible
threat with the intent to place that person in rea-
sonable fear for his or her safety, or the safety of his
or her family, where the threat is reasonably deter-
mined by the University to seriously alarm, torment,
or terrorize the person, and where the threat is ad-
ditionally determined by the University to serve no
legitimate purpose.

The UCLA Student Conduct Code prohibits retalia-
tion against a person who reports stalking, assists
someone with a report of stalking, or participates in
any manner in an investigation or resolution of a
stalking report. Retaliation includes threats, intimi-
dation, reprisals, and/or adverse actions related to
employment or education.

For stalking violations of a sexual nature, see the
SVSH Policy.

102.11: Harassment. Harassment is defined as con-
duct that is so severe and/or pervasive, and objec-
tively offensive, and that so substantially impairs a
person’s access to University programs or activities
that the person is effectively denied equal access to
the University’s resources and opportunities.

Sanctions may be enhanced where an individual was
selected for harassment because of the individual’s
race, color, national or ethnic origin, citizenship, sex,
religion, age, sexual orientation, gender iden-
tity, pregnancy, marital status, ancestry, sex in the
uniformed services, physical or mental disabil-
ity, medical condition, or perceived membership in
any of these classifications.

For violations involving sexual harassment and sex-
ual violence (including domestic violence, dating
violence, and sexual assault), see the SVSH Policy.

102.12: Hazing. Participating in, engaging in, or
supporting hazing or any method of initiation or pre-
rentiation into a campus organization or other
activity engaged in by the organization or members
of the organization at any time that causes, or is
likely to cause, physical injury or personal degrada-
tion or disgrace resulting in psychological harm to
any student or other person.

102.13: Obstruction or Disruption. Obstruction or
disruption of teaching, research, administration,
disciplinary procedures, or other University activi-
ties.

102.14: Disorderly Behavior. Engaging in disor-
derly or lewd conduct.

102.15: Disturbing the Peace. Participation in a dis-
turbance of the peace or unlawful assembly.

102.16: Failure to Comply. Failure to identify one-
self to, or comply with directions of, a University of-
official or other public official acting in the per-
formance of her or his duties while on University prop-
erty or at official University functions, or resisting or
obstructing such University or other public officials
in the performance of or the attempt to perform
their duties.

102.17: Controlled Substances. Manufacture, dis-
tribution, dispensing, possession, use, or sale of,
or the attempted manufacture, distribution, dispens-
ings, or sale of controlled substances (including
medicinal marijuana), identified in federal and state
laws or regulations, which is unlawful or otherwise
prohibited by, or not in compliance with, any Uni-
versity policy or campus regulations or being un-
able to exercise care for one’s own safety because
one is under the influence of controlled substances.
NOTE: This provision shall not apply to circum-
stances wherein the person under the influence was
given a controlled substance without her or his
knowledge and permission.

102.18: Alcohol. Manufacture, distribution, dis-
ensing, possession, use, or sale of, or the at-
tempted manufacture, distribution, dispensing,
or sale of alcohol which is unlawful or otherwise pro-
banned by, or not in compliance with, University
policy or campus regulations, or being unable to
exercise care for one’s own safety because one is
under the influence of alcohol. NOTE: This provision
shall not apply to circumstances wherein the person

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under the influence was given alcohol without her or his knowledge and permission.

102.19: Destructive Devices. Possession, use, storage, or manufacture of explosives, firebombs, or other destructive devices.

102.20a: Weapons and Replica Weapons. Except as expressly permitted by law, possession, use, storage, or manufacture of a firearm or other weapon capable of causing bodily injury is prohibited.

102.20b: Replica Weapons. Except as expressly permitted by UCPD policy, possession, use, storage, or manufacture of replicas of firearms or other weapons is prohibited.

102.21: Violation of Disciplinary Conditions. Violation of the conditions contained in the terms of a disciplinary action imposed under the UCLA Student Conduct Code.

102.22: Violation of Interim or Emergency Suspension Conditions. Violation of the conditions contained in a written Notice of Interim or Emergency Suspension issued pursuant to Section IV of the UCLA Student Conduct Code.

102.23: Unauthorized Use or Sale of University Materials. Except as provided herein, no student shall give, sell, or otherwise distribute to others or publish any recording made during any course presentation without the written consent of the University and the instructor/presenter. This policy is applicable to any recording in any medium, including handwritten or typed notes.

Any distribution of a recording of a course presentation at UCLA that captures the actual sounds and/or images of that course presentation, in any medium, must consider not only the rights of the instructor and the University, but also those of other parties. Examples include the privacy rights of students enrolled in the course, the rights of guest lecturers, and the copyright interests in materials authored by others that are displayed or presented during the course presentation. In addition to the consent of the University and the instructor/presenter, it may be necessary to secure permission from these other parties before any recording, distribution, publication, or communication is legally permitted.

102.23a: Selling Academic Materials. Selling, preparing, or distributing for any commercial purpose academic materials, including but not limited to written, video, or audio recordings of any course unless authorized by the University in advance and explicitly permitted by the course instructor in writing. The unauthorized sale or commercial distribution of academic materials, including but not limited to recordings, by a student is a violation of the UCLA Student Conduct Code whether or not it was the student or someone else who prepared the notes or recordings. This policy is applicable to any recording in any medium, including handwritten or typed notes.

102.23b: Copying Course Notes. Copying for any commercial purpose handouts, readers, or other course materials provided by an instructor as part of a University of California course unless authorized by the University in advance and explicitly permitted by the course instructor or the copyright holder in writing (if the instructor is not the copyright holder). Students currently enrolled in a course may provide a copy of their own notes or recordings to other currently enrolled students for noncommercial purposes reasonably arising from participation in the course, including individual or group study.

102.23c: Commencement Tickets. Selling commencement tickets.

102.24: Misuse of University Property. Organizing or carrying out unlawful activity on University property.

102.25: Violations of Law. Students may be subject to discipline on the basis of a conviction under any federal, California state, or local criminal law, when the conviction constitutes reasonable cause to believe that the student poses a threat to the health or safety of any person, or to the security of any property, on University premises or at official University functions, or to the orderly operation of the campus.

102.26: Terrorism Conduct. Conduct, where the actor means to communicate a serious expression of intent to terrorize, or acts in reckless disregard of the risk of terrorizing, one or more University students, faculty, or staff. Terrorize means to cause a reasonable person to fear bodily harm or death, perpetrated by the actor or those acting under his/her control. Reckless disregard means consciously disregarding a substantial risk. This section applies without regard to whether the conduct is motivated by race, ethnicity, personal animosity, or other reasons. This section does not apply to conduct that constitutes the lawful defense of oneself, of another, or of property.

102.27: Unwanted Personal Contact. Contact (whether physical, verbal, written, face-to-face, telephonic, electronic, or by other means) that (1) a student knows or should know is unwanted, (2) is communicated directly to one or more specific students, faculty, or staff, (3) constitutes severe and/or pervasive, and objectively offensive, conduct, and (4) does not constitute speech protected by the First Amendment to the U.S. Constitution (e.g., speech in a public forum on a matter of public concern).

102.28: Expectation of Privacy. The following is prohibited:

Making a video recording, audio recording, taking photographs, or streaming audio/video of any person in a location where the person has a reasonable expectation of privacy, without that person’s knowledge and express consent.

Making a video recording, audio recording, or streaming audio/video of private nonpublic conversations and/or meetings, without the knowledge and express consent of all recorded parties. Looking through a hole or opening, into, or otherwise viewing, by means of any instrumentality, the interior of a private location without the subject’s knowledge and express consent.

Express consent is clear, unmistakable, and voluntary consent that may be in written, oral, or nonverbal form. Private locations are settings where the person reasonably expects privacy. For example, in most cases the following are considered private locations: residential living quarters, bathrooms, locker rooms, and personal offices.

Private nonpublic conversations and/or meetings include any communication carried on in circumstances that reasonably indicate that any party wants the communication to be confined to the parties, but excludes a communication made in a public gathering, or in any other circumstance in which the parties to the communication may reasonably expect that the communication may be overheard or recorded.

These provisions do not extend to public events or discussions, nor to lawful official law or policy enforcement activities. These provisions may not be utilized to impinge on the lawful exercise of constitutionally protected rights of freedom of speech or assembly.

Sexual Assault and Other Sexual Violence

UCLA does not tolerate sexual violence and responds to all reports of sexual violence in accordance with UCLA procedures and the UC Policy on Sexual Violence and Sexual Harassment. Sanctions for a student found responsible for committing sexual assault or other sexual violence may include dismissal from the University. See the sexual violence prevention and response policies web page.

If a Person Has Been Sexually Assaulted

Those who believe that they are the victims of sexual assault can

1. Immediately call the police department. If possible, call the UCLA Police Department at 310-206-3417 or 911.

2. Get medical attention. Campus police will provide transportation to the Rape Treatment Center at Santa Monica-UCLA Medical Center for medical treatment and evidence collection. A confidential counselor from the Rape Treatment Center will be available at that time, free of charge.

3. Report to Title IX. You have the right to report to the University, and you can do that by contacting the Title IX Office by e-mail or by calling 310-206-3417. If the other person is a student or employee, the Title IX Office can take administrative action, and the Title IX Office can explain those options to you. In addition, the Title IX Office offers interim measures to prevent individuals from experiencing additional harm. Those measures can include, but are not limited to, academic accommodations, no-contact directives prohibiting contact, and housing transfers.

Utilize confidential campus and community support services

1. Contact a Campus Assault Resources and Education (CARE) advocate. CARE Advocates are available to support and advocate for UCLA victims or survivors. They can discuss options and alternatives, help identify the most appropriate support services, and provide information about medical care, psychological counseling,
Harassment

Sexual Harassment

The University of California is committed to creating and maintaining a community where all persons who participate in University programs and activities can work and learn together in an atmosphere free from all forms of harassment, exploitation, or intimidation. Every member of the University community should be aware that the University is strongly opposed to sexual harassment and that such behavior is prohibited both by law and by the UC Policy on Sexual Violence and Sexual Harassment (hereafter referred to as the SVSH Policy). The University will respond promptly and effectively to reports of sexual harassment and will take appropriate action to prevent, correct and, if necessary, discipline behavior that violates the SVSH Policy. See the Title IX sexual harassment prevention website.

Definitions

For detailed definitions of sexual harassment, refer to the SVSH Policy.

Complaint Resolution

An individual who believes that they have been sexually harassed may contact Title IX Director Mohammed Cato, 2255 Murphy Hall, 310-206-3417. If a student reports sexual harassment or sexual violence to a responsible employee, as defined under the SVSH Policy, the responsible employee must report it to the Title IX director. Responsible employees include academic personnel, faculty members, and most other employees who are not defined as a confidential resource under the SVSH Policy.

Title IX prohibits sex discrimination, including sexual harassment and sexual violence, in any education program or activity receiving federal financial assistance. Inquiries regarding Title IX may be directed to the Title IX Office, 2255 Murphy Hall, 310-206-3417, or the U.S. Department of Education Office for Civil Rights.

Other Forms of Harassment

The University strives to create an environment that fosters the values of mutual respect and tolerance and is free from discrimination based on race, ethnicity, sex, religion, sexual orientation, disability, age, and other personal characteristics. Certainly harassment, in its many forms, works against those values and often corrodes a person’s sense of worth and interferes with one’s ability to participate in University programs or activities. While the University is committed to the free exchange of ideas and the full protection of free expression, the University also recognizes that words can be used in such a way that they no longer express an idea, but rather injure and intimidate, thus undermining the ability of individuals to participate in the University community. The University of California Policies Applying to Campus Activities, Organizations, and Students (hereafter referred to as Policies) presently prohibit a variety of conduct by students which, in certain contexts, may be regarded as harassment or intimidation.

For example, harassing expression which is accompanied by physical abuse, threats of violence, or conduct that threatens the health or safety of any person on University property or in connection with official University functions may subject an offending student to University discipline under the provisions of the Policies.

Similarly, harassing conduct, including symbolic expression, which also involves conduct resulting in damage to or destruction of any property of the University or property of others while on University premises may subject a student violator to University discipline under the provisions of Section 102.04 of the Policies.

Further, under specific circumstances described in Section 102.11 of the Policies, students may be subject to University discipline for misconduct which may consist solely of expression. Copies of these Policies are available in the Office of Student Conduct, 1104 Murphy Hall.

Complaint Resolution

One of the necessary measures in our efforts to assure an atmosphere of civility and mutual respect is the establishment of procedures which provide effective informal and formal mechanisms for those who believe that they have been victims of any of the above misconduct.

Many incidents of harassment and intimidation can be effectively resolved through informal means. For example, an individual may wish to confront the alleged offender immediately and firmly. An individual who chooses not to confront the alleged offender and who wishes help, advice, or information is urged to contact the Office of Student Conduct.

In addition to providing support for those who believe they have been victims of harassment, the Office of Student Conduct can help students to consider which of the available options is the most useful for the particular circumstances.

With regard to the University-wide Student Conduct Harassment Policy, complainants should be aware that not all conduct which is offensive may be regarded as a violation of this Policy and may, in fact, be protected expression. Thus, the application of formal institutional discipline to such protected expression may not be legally permissible. Nevertheless, the University is committed to reviewing any complaint of harassing or intimidating conduct by a student and intervening on behalf of the complainant to the extent possible.
Sexual violence and sexual harassment, as defined by University policy, of a student.

Violation of University policy, including the pertinent guidelines, applying to nondiscrimination against students on the basis of disability.

Use of the position or powers of a faculty member to coerce the judgment or conscience of a student or to cause harm to a student for arbitrary or personal reasons.

Participating in or deliberately abetting disruption, interference, or intimidation in the classroom.

Entering into a romantic or sexual relationship with any student for whom a faculty member has, or should reasonably expect to have in the future, academic responsibility (instructional, evaluative, or supervisory).

Exercising academic responsibility (instructional, evaluative, or supervisory) for any student with whom a faculty member has a romantic or sexual relationship.

Charges of Violation

If a student has reason to believe that a faculty member has violated the Faculty Code of Conduct and that formal discipline may be warranted, the alleged violator should be reported to the chair of the department and to the dean of the division or school with a request that a charge be filed with the Academic Senate Charges Committee. If the dean, in consultation with the vice chancellor of academic personnel, determines that there are not sufficient grounds for the administration to file a charge, the student may, after discussing the matter with the Office of Ombuds Services and a member of the Academic Senate Grievance Advisory Committee, file such a charge in person if the student continues to feel it is warranted.

Residence for Tuition Purposes

Students who have not been living in California with intent to make it their permanent home for more than one year immediately before the residence determination date for each term in which they propose to attend the University must pay nonresident supplemental tuition in addition to all other fees. The residence determination date is the day instruction begins at the last of the University of California campuses to open for the quarter; and for schools on the semester system, the day instruction begins for the semester.

Who Is a Resident?

Persons who are adult students (at least 18 years of age) may establish residence for tuition purposes in California if they are (1) a U.S. citizen, (2) a permanent resident or other immigrant, or (3) a nonimmigrant who is not precluded from establishing a domicile in the U.S. Nonimmigrants who are not precluded from establishing a domicile in the U.S. include those who hold valid visas of the following types: A, E, G, H-1, H-4, Humanitarian Parole, I, K, L, N-8, N-9, NATO 1-7, O-1, P-1, P-2, P-3, R, T, U, or V.

To establish residence in California, students and/or parents must be physically present in California for more than one year, and they must have come here with the intent to make California their home as opposed to coming to this state to go to school. Physical presence within the state solely for educational purposes does not constitute the establishment of California residence, regardless of the length of stay. Students and/or parents must demonstrate their intention to make California their home by severing any and all residential ties with their former state of residence and establishing those ties with California. If these steps are delayed, the one-year duration period is extended until students and/or parents have demonstrated both presence and intent for one full year. If their parents are not California residents (over one year of physical presence with intent to remain in the state), students are required to be financially independent in order to be a resident for tuition purposes. Their residence cannot be derived from their spouse, registered domestic partner, or their parents.

Requirements for Financial Independence

A student is considered financially independent if one or more of the following apply: they (1) are at least 24 years of age by December 31 of the academic year for which they are requesting residence classification; (2) they are a veteran of the U.S. Armed Forces; (3) they are serving in the U.S. Armed Forces; (4) they are a ward of the court or both parents are deceased; (5) they have legal dependents other than a spouse; (6) they are married or have a registered domestic partner as of the residence determination date; (7) they have been determined to be an unaccompanied youth who was homeless pursuant to federal financial aid rules; (8) they receive an independent student status determined by UC campus financial aid office; (9) they are a graduate or professional student; or (10) they are a single undergraduate student and they were not claimed as an income tax deduction by their parents or any other individual for the one tax year immediately preceding the term for which they are requesting resident classification, and they can demonstrate self-sufficiency for one full year prior to the residence determination date of the term they propose to attend the University through their own resources (such as employment, commercial loans, financial aid, and savings that can be officially documented). The one year required for self-support might not coincide with the one tax year during which the student must not have been claimed by their parents.

Establishing Intent to Become a California Resident

Indications of students’ intent to make California their permanent residence can include the following: (1) registering to vote and voting in California elections, (2) designating California as their permanent address on all school and employment records, including military records if they are in the U.S. Armed Forces, (3) obtaining a California Driver License or, if they do not drive, a California Identification Card, (4) obtaining California vehicle registration, (5) paying California income taxes as a resident, including taxes on income earned outside California from the date they establish residence, (6) establishing a California residence in which they keep their personal belongings, and (7) licensing for professional practice in California.

The absence of these indica in other states during any period for which students claim residence can also serve as an indication of their intent. Documentary evidence is required, and all relevant indications are considered in determining the classification. Intent is questioned if students return to their prior state of residence when the University is not in session.

Temporary Absences

If persons are nonresident students who are in the process of establishing a residence for tuition purposes and they return to their former home during noninstructional periods, their presence in the state is presumed to be solely for educational purposes and only convincing evidence to the contrary rebuts this presumption. Students who are in the state solely for educational purposes are not classified as residents for tuition purposes regardless of the length of their stay.

If persons are students who have been classified as residents for tuition purposes and they leave the state temporarily, their absence could result in the loss of their California residence. The burden is on students (or their parents if they are minors) to verify that they did nothing inconsistent with their claim of a continuing California residence during their absence. Steps that students (or their parents) should take to retain a California residence include the following:

1. Maintain a domicile in California.
2. Continue to use a California permanent address in all records—educational, employment, military, etc.
3. Continue to satisfy California Resident tax obligations. If a student claims California residence, they are liable for payment of income taxes on their total income from the date they establish their residence in the state, including income earned in another state or country.
4. Retain California voter registration and vote by absentee ballot.
5. Maintain a California driver license and vehicle registration. If it is necessary to change the driver license or vehicle registration, the student must change them back within the time prescribed by law.

General Rules Applying to Minors

If students are unmarried minors (under age 18), the residence of the parent with whom they live is considered to be their residence. If they have a parent living, they cannot change their residence by their own act, by the appointment of a legal guardian, or by the relinquishment of their parent’s right of control. If students live with neither parent, their residence is that of the parent with whom they last lived. Unless they are minor aliens present in the U.S. under the terms of a nonimmigrant visa that precludes them from establishing a domicile in the U.S., students may establish their own residence when both their parents are deceased and a legal guardian has not been appointed. If they derive California residence from a parent, that parent must
satisfy the one-year durational residence requirement.

Specific Rules Applying to Minors

Divorced or Separated Parents

Minor U.S. citizens or eligible aliens may be able to derive California resident status from a California resident parent, if they move to California to live with that parent before their 18th birthday. If they then reside with their California parent after their 18th birthday, they are treated like any other adult student coming to California to establish residence.

Parent of Minor Moves from California

Students may be entitled to resident status if they are minor U.S. citizens or eligible aliens whose parent(s) has been under the continuous direct care and control of an adult or adults other than a parent for a period of no less than two years. The adult or adults having control must have been residents of California during the one year immediately prior to the residence determination date. The classification continues until students have attained the age of 19 and have lived in the state the minimum time necessary to become a resident, so long as continuous full-time attendance is maintained at a public postsecondary institution.

Self Support

If students are U.S. citizens or eligible aliens and are minors who can prove that they lived in California for the entire year immediately before the residence determination date, that they have been self-supporting for that year, and that they intend to make California their permanent home, they may be eligible for resident status.

Exemptions from Nonresident Supplemental Tuition

Member of the U.S. Armed Forces

Some members of the U.S. Armed Forces may qualify for an exemption from nonresident supplemental tuition based on the federal Higher Education Opportunity Act of 2008. Under this Act, undergraduate and graduate students who are members of the U.S. Armed Forces on active duty and veterans (and their dependents) who were separated from U.S. military service within the 36 months of enrolling at UC and are eligible for (1) Bill (Post-9/11 or Montgomery) program funds, (2) qualify for an exemption from nonresident supplemental tuition.

Special circumstances: Members of the U.S. Armed Forces stationed in California are entitled to student classification unless their assignment to California is for the purpose of attending a state-supported institution of higher education. They must provide the campus residence deputy with a statement from their commanding officer or personnel officer stating that their assignment to active duty in California is not for educational purposes. The letter must include the dates of their assignment to the state.

Students discharged from military service after having been stationed in California on active duty for at least 366 days are entitled to resident classification for the minimum time necessary to establish residence (366 days).

Spouse or Other Dependents of Military Personnel

Some dependents of members of the U.S. Armed Forces may qualify for an exemption from nonresident supplemental tuition based on the federal Higher Education Opportunity Act of 2008. Under this Act, undergraduate or graduate students who are the spouse or dependent child of a member of the U.S. Armed Forces on active duty for a period of more than 30 days and whose domicile or permanent duty station is in California, are entitled to an exemption from nonresident supplemental tuition. Students must be continuously enrolled at the University, notwithstanding a subsequent change in their permanent duty station to a location outside of California.

Effective July 2015, certain members of the U.S. Armed Forces on active duty and veterans (and their dependents) who were separated from U.S. military service within 36 months of enrolling at UC and are eligible for (1) Bill (Post-9/11 or Montgomery) program funds (may qualify for an exemption from nonresident supplemental tuition).

Special circumstances: Members of the U.S. Armed Forces stationed in California are entitled to resident classification unless their assignment to California is for the purpose of attending a state-supported institution of higher education. They must provide the campus residence deputy with a statement from their commanding officer or personnel officer stating that their assignment to active duty in California is not for educational purposes. The letter must include the dates of their assignment to the state.

Students discharged from military service after having been stationed in California on active duty for at least 366 days are entitled to resident classification for the minimum time necessary to establish residence (366 days).

Graduate of a California High School

Under California law AB 540, certain nonresident students are exempt from paying nonresident supplemental tuition. To be eligible, students must have attended three full-time years at a California high school (9th grade included), adult school, or community college (maximum of two years), or attained credits/units earned in California from a California high school equivalent to three or more years of full-time high school coursework and attended a combination of elementary, middle, and/or high school (K-12) in California for a total of three or more years; and graduated from a California high school (or attained the equivalent, such as a High School Equivalency Certificate issued by the California state GED Office or a Certificate of Proficiency resulting from the California High School Proficiency Examination), attained an associate’s degree from a California community college, or fulfilled minimum transfer requirements from a California community college to a UC campus. See AB 540 nonresident tuition exemption. Nonimmigrant alien students are not eligible for the exemption.

Child, Spouse, or Registered Domestic Partner of a UC Faculty Member

To the extent funds are available, if students are an unmarried dependent child, spouse, or registered domestic partner of a member of the University faculty who is a member of the Academic Senate, they may be eligible for a waiver of nonresident supplemental tuition resident classification. Certification of the faculty member’s membership on the Academic Senate must be secured each term this waiver is granted.

Child, Spouse, or Registered Domestic Partner of a UC Employee

Students may be entitled to resident classification if they are a dependent child, spouse, or registered domestic partner of a full-time University employee whose assignment is outside California. Their parent’s, spouse’s, or registered domestic partner’s employment status with the University must be ascertained each term.

Dependent Child of a California Resident

If students have not been an adult resident of California for more than one year and are the natural or adopted dependent child of a California resident who has been a resident for more than one year immediately prior to the residence determination date, they may be entitled to a resident classification until they have resided in California the minimum time necessary to become a resident, so long as continuous attendance is maintained at an institution.

Native American Graduate of a Bureau of Indian Affairs High School

Students who are graduates of a California high school operated by the federal Bureau of Indian Affairs may be entitled to a resident classification.

Employee of a California Public School District

Students holding a valid credential authorizing service in the public schools of the State of California who are employed by a school district in a full-time certificate position may be entitled to a resident classification.

Student Athlete in Training at the U.S. Olympic Training Center, Chula Vista

Any amateur student athlete in training at the U.S. Olympic Training Center in Chula Vista may be entitled to a resident classification for one year. Such a student may thereafter be eligible to receive a resident classification if the student demonstrated satisfactory satisfaction of residence requirements. A U.S.
Olympic Training Center official must provide the student with a letter confirming eligibility.

Dependent or Ward of the State of California Child Welfare System

Notwithstanding any other provisions, students who reside in California and who are currently dependents or wards of the state through the California child welfare system, or were served by the California child welfare system shall be entitled to a resident classification as long as they remain continuously enrolled.

Child, Spouse, or Registered Domestic Partner of Deceased Public Law Enforcement or Fire Suppression Employee

Students may be entitled to a waiver of nonresident supplemental tuition if they are the child, spouse, or registered domestic partner of a deceased public law enforcement or fire suppression employee who was a California resident at the time of his or her death, and who was killed in the course of fire suppression or law enforcement duties.

Congressional Medal of Honor Recipients, and Their Children

Students who are recipients of the Congressional Medal of Honor or who are the children of a recipient may be exempt from nonresident supplemental tuition.

Residence Classification Change

Students may obtain a Petition for Residence Classification from the Registrar website to request a change of classification from nonresident to resident status. All changes of status must be initiated in advance of the petition filing deadline.

Time Limit on Submitting Documentation

If additional documentation is required for residence classification but is not readily accessible, students have until the end of the applicable term to submit it.

Incorrect Classification

Students who were incorrectly classified as residents are subject to reclassification as nonresidents and to payment of all nonresident tuition and fees not paid. If students concealed information or furnished false information and were classified incorrectly as a result, they are also subject to University discipline.

Student Status Change

Resident students who become nonresidents must immediately notify the residence deputy of their change in status.

Inquiries and Appeals

Inquiries regarding residence requirements, determination, and/or recognized exceptions should be directed to the Residence Deputy, UCLA Registrar’s Office, 1113 Murphy Hall, Box 951429, Los Angeles, CA 90095-1429, 310-825-3447.

Students are cautioned that this summary is not a complete explanation of the law regarding residence. Note that changes may be made in the residence requirements between the publication of this statement and the relevant residence determination date.

Grounds for Appeal

Students may appeal a campus nonresident determination to the UC Office of the General Counsel only on the grounds and within the deadline specified.

1. The decision to classify a student as a nonresident for tuition purposes was based on (a) a significant error of fact; (b) a significant procedural error, or (c) an incorrect application of policy that, if corrected, would require that the student be reclassified as a resident.

2. Significant new information became available after the date of the campus decision classifying the student as a nonresident; despite the exercise of reasonable diligence (care and attention), the information was not previously known or available to the student; and based on the new information, classification as a nonresident is incorrect.

No appeals based solely on disagreement with the campus decision are acceptable.

Appeal Deadline

The UC Office of the General Counsel must receive the appeal from the student within 30 days of the date of the campus decision notifying the student of the nonresident classification. Send the completed Application to Appeal and a copy of the nonresident decision by e-mail to the Residency Analyst; fax to 510-987-9757; or mail to Residency Analyst, UC Office of the General Counsel, 1111 Franklin Street, 8th Floor, Oakland, CA 94607-5200. No other University personnel are authorized to supply information relative to residence requirements for tuition purposes.

Privacy Notice

All information requested on the Statement of Legal Residence (SLR) form is required for determining whether or not students are legal residents of California for tuition purposes. Registration cannot be processed without this information. The Registrar’s Office on campus maintains the requested information. University of California policies governing residence for tuition purposes are established by the Regents pursuant to and implemented by regulations established by the president, in consultation with the general counsel (Regents Policy 3105). Students have the right to inspect University records containing the residence information requested on the SLR form.

Financial Aid Standards for Satisfactory Academic Progress

UCLA Financial Aid and Scholarships establishes standards for satisfactory academic progress to measure students’ progress toward degree completion using both qualitative and quantitative methods in accordance with federal regulations. To be eligible for financial aid, students must meet or exceed these standards. Failure to maintain these standards may result in suspension of financial aid eligibility. The standards are as strict as, or more strict than, the UCLA standards for a student enrolled in the same educational program who is not receiving Title IV assistance. See the Standards for Satisfactory Academic Progress Guide.

Professional Schools

Students attending the schools of Dentistry, Law, Management, Medicine, and UCLA Extension are covered by criteria established by the respective school.

Qualitative Standard

Undergraduate students must maintain a cumulative 2.0 grade-point average (GPA); graduate students must maintain a cumulative 3.0 GPA.

Quantitative Standard

Students must complete a minimum of 67 percent of cumulative coursework attempted.

Maximum Timeframe

Units attempted or total enrolled terms may not exceed 150 percent of the published length of students’ programs.

Change of Academic Major/Pursuit of Double Major or Minor

Students who have a change of academic major, or pursue a double major or minor, do not have additional financial aid eligibility beyond the maximum timeframe established in this policy.

Successful Completion of Units

To successfully complete units, students must receive a grade of A, B, C, D, or P (S for graduate students) in each course. Grades of F, I, NP (U for graduate students), NR (No Report), and DR (Deferred Report) do not count as successful completion of coursework attempted.

The standards for satisfactory academic progress apply to all coursework attempted, including coursework for which students did not receive financial aid.

Cancellation

Cancellation of registration on or before the first day of classes does not count as units attempted.

English as a Second Language and Summer Sessions Coursework

English as a Second Language (ESL) and Summer Sessions coursework counts as units attempted, and toward the cumulative grade-point average.
Remedial Coursework
Remedial coursework counts as units attempted, but does not count toward the cumulative grade-point average.

Repeat Coursework
Repeated courses and grade-point average are treated in accordance with the academic policy as outlined in this catalog. If the Registrar’s Office counts repeat coursework as attempted/completed, this counts equally for academic progress standards. Financial Aid and Scholarships determines if students are eligible for aid for repeat coursework.

Transfer Coursework
Coursework accepted for transfer credit counts as both units attempted and completed, and has no affect on grade-point average unless the coursework is transferred from another UC campus.

Withdrawal
Withdrawal after the first day of classes during a term count as units attempted, unless students do not attend any classes for the given term and receive a 100 percent refund of all fees.

Evaluation
Academic progress is evaluated annually after winter quarter grades are available. For students on probation and for students who are required to follow an academic plan (see below), academic progress is evaluated each term.

Suspension
Students who fail to meet the standards for satisfactory academic progress are placed on suspension and are no longer eligible to receive financial aid. Suspended students are notified through their MyUCLA account.

Appeal Process
Students who have their financial aid suspended may submit a written appeal using the Satisfactory Academic Progress Appeal form. When filing an appeal, they must provide a full explanation along with documentation, verifying the circumstances that led to their inability to meet the standards for satisfactory academic progress. Before filing an appeal, students should seek assistance from an academic adviser to explore ways to eliminate deficiencies and to establish a realistic plan toward graduation. Refer to the appeal instruction packet for specific examples of valid reasons for an appeal.

Appeal Deadline
Appeals must be submitted to Financial Aid and Scholarships prior to the last day of the term for which students are appealing to have aid reinstated. Appeals are not considered retroactively. Refer to the appeal instruction packet for priority deadlines.

Denied Appeals
If the appeal is denied, students may file a secondary appeal and submit additional information that may help explain the circumstances by which they were not able to maintain the standards for satisfactory academic progress. They are notified of the decision of the secondary appeal in writing; the decision is final.

Probation
Students who have an appeal approved are placed on probation and their academic progress monitored on a quarterly basis to ensure that they meet the conditions of their academic plan.

Academic Plans
If students are required to submit an academic plan as a condition of their approved appeal, their financial aid cannot be disbursed until Financial Aid and Scholarships confirms that they are adhering to their academic plan. Students on an academic plan are evaluated each term. Their ability to adhere to the units and courses specified in their academic plan is closely monitored. Failure to adhere to their academic plan causes delays in students’ aid being disbursed, and may result in suspension of their financial aid eligibility.

Grading Regulations
Assigning a Grade
The instructor in charge of a course is responsible for determining the grade of each student in the course. The standards for evaluating student performance are based on the course description as approved by the appropriate course committee.

Academic Plans
If students are required to submit an academic plan as a condition of their approved appeal, their financial aid cannot be disbursed until Financial Aid and Scholarships confirms that they are adhering to their academic plan. Students on an academic plan are evaluated each term. Their ability to adhere to the units and courses specified in their academic plan is closely monitored. Failure to adhere to their academic plan causes delays in students’ aid being disbursed, and may result in suspension of their financial aid eligibility.

Grade Complaints
A grade may be appealed, on any reasonable grounds, to the instructor, the chair of the department, and the dean of the division or school.

If the student believes that the instructor has violated the Faculty Code of Conduct by assigning the grade on any basis other than academic grounds, the matter should first be taken up with the instructor. If the matter is not resolved, the student may go for counsel to the Office of Ombuds Services, or may follow the procedures for the formal filing of charges. If a charge is sustained by the Academic Senate committees on Charges and on Privilege and Tenure, an ad hoc committee is appointed within two weeks to review the disputed grade, and any warranted change is made within four weeks.

Correction of Grades
All grades, except DR, I, and IP, are final when filed by the instructor in the end-of-term course report. However, the Registrar’s Office is authorized to change a final grade (1) on written request of an instructor, provided that a clerical or procedural error is the reason for the change; or (2) on written request of the chair of the UCLA Academic Senate, in cases where it has been determined by the Committee on Privilege and Tenure that an instructor has assigned a grade on any basis other than academic grounds. No change of grade may be made on the basis of re-examination or, with the exception of I and IP grades, the completion of additional work. Any grade change request made more than one year after the original filing must be validated for authenticity of the instructor’s signature by the department chair. Any grade change request made by an instructor who has left UCLA must be countersigned by the department chair. No grade change may be made once a student has graduated. All grade changes are recorded on the transcript.

Alternate Examination Dates Policy
In compliance with Section 92640(a) of the California Education Code, UCLA must accommodate requests for alternate examination dates for any test or examination at a time when that activity would not violate a student’s religious creed. This requirement does not apply in the event that administering the test or examination at an alternate time would impose an undue hardship that could not reasonably be avoided. Accommodation for alternate examination dates is worked out directly and on an individual basis between the student and the faculty member involved.

In general, students should make such requests of the instructor during the first two weeks of any given academic term, or as soon as possible after a particular examination date is announced by the instructor.

Students unable to reach a satisfactory arrangement with their instructor should contact the Office of Ombuds Services, 105 Strathmore Building; or the Office of Student Conduct, 1206 Murphy Hall, for assistance.
Instructors who have questions or who wish to verify the nature of the religious event or practice involved should contact the Office of Ombuds Services or the Office of Student Conduct for assistance.

Undergraduate Final Examinations

No student shall be excused from assigned final examinations, except as provided above in the policy on alternate examination dates and as provided in the following three paragraphs.

The instructor in charge of an undergraduate course is responsible for assigning the final grade in the course. The final grade shall reflect the student’s achievement in the course and shall be based on an adequate evaluation of that achievement. The instructor’s method of evaluation must be announced at the beginning of the course. The methods may include a final written examination, a term paper, a final oral examination, a take-home examination, or other evaluation device. Evaluation methods must be of reasonable duration and difficulty and must be in accord with applicable departmental policies. Final written examinations may not exceed three hours’ duration, and are given only at the times and places established and published by the department chair and the Registrar’s Office.

At the end of the term in which a student is expected to graduate, the major department may examine the student in the field of the major and, with the approval of the Undergraduate Council, assign a credit value to such general examination. The department may also excuse the student from final examinations in courses offered by the department during that term.

An instructor may release to individual students their original final examinations (or copies). This may be done by any method that ensures the students’ right to privacy. Otherwise, the instructor shall retain final examination materials, or a copy thereof, until the end of the next succeeding regular term of instruction, during which period students shall have access to their examinations.

Disclosure of Student Records

Pursuant to the Federal Family Educational Rights and Privacy Act (FERPA), the California Information Practices Act, and the University of California Policies Applying to the Disclosure of Information from Student Records, students at UCLA have the right to (1) inspect and review records pertaining to themselves in their capacity as students, except as the right may be waived or qualified under federal and state laws and University policies; (2) have withheld from disclosure, absent their prior written consent for release, personally identifiable information from their student records, except as provided by federal and state laws and University policies; (3) inspect records maintained by UCLA of disclosures of personally identifiable information from their student records; (4) seek correction of their student records through a request to amend the records; or, if such request is denied, through a hearing; and (5) file complaints with the U.S. Department of Education regarding alleged violations of the rights accorded them by FERPA.

UCLA, in accordance with federal and state laws and University policies, has designated the following categories of personally identifiable information as public information that UCLA may release and publish without the student’s prior consent: name, e-mail address, telephone numbers, major field of study, dates of attendance, number of course units in which enrolled, degrees and honors received, the most recent previous educational institution attended, participation in officially recognized activities (including intercollegiate athletics), and the name, weight, and height of participants on intercollegiate athletic teams.

As a matter of practice, UCLA does not publish student telephone numbers in the campus online directory unless released by the student. The term public information in this policy is synonymous with the term directory information in FERPA.

Students who do not wish certain items (i.e., name, e-mail address, telephone numbers, major field of study, dates of attendance, number of course units in which enrolled, and degrees and honors received) of this public information released and published may so indicate through MyUCLA. To restrict the release and publication of additional items in the category of public informations, complete the UCLA FERPA Restriction Request form available from the Registrar’s Office, 1113 Murphy Hall.

Student records that are the subject of federal and state laws and University policies may be maintained in a variety of offices, including the Registrar’s Office, Office of Student Conduct, Career Center, Graduate Division, External Affairs Department, and offices of a student’s College or school and major department. Students are referred to the online UCLA Campus Directory, which lists all the offices that may maintain student records, together with each office campus address and telephone number. Students have the right to inspect their student records in any such office, subject to the terms of federal and state laws and University policies. Inspection of student records maintained by the Registrar’s Office is by appointment only and must be arranged three working days in advance. Call 310-825-1099, option 6; or inquire at the Registrar’s Office, 1113 Murphy Hall.

Copies of applicable federal and state laws and University policies may be requested from the Information Practices office. For copies, send e-mail or call 310-794-8741. Information concerning students’ hearing rights may be obtained from that office and from the Office of Student Conduct, 1206 Murphy Hall.

Policy on Maintaining Student Work

During their academic careers at UCLA, undergraduate students create evidence of their learning, which includes but is not limited to course projects, papers, and assignments; student responses on examinations; and documentation of student performance and creative expression. Regularly, and on an ongoing basis, faculty may choose to store a sample of this evidence in digital archives maintained by the Division of Undergraduate Education. All information stored, created, or derived by this archival function is governed by the faculty and the leadership of UCLA academic departments and interdepartmental degree programs. The purpose of maintaining this archive is to make this evidence available exclusively for departmental research studies conducted to inform academic program improvement and to ensure institutional effectiveness.

In the event an academic department or interdepartmental program chooses to conduct a program improvement research study, it may opt to use a sample of evidence that it has chosen to archive, and it may grant permission for the Undergraduate Education Division, the Graduate Division, or other collaborators from the UCLA academic community to evaluate and analyze the student learning. The evidence of student learning is stored anonymously, with no identifiers of individual students attached to the records in the archive. Assessment of student performance in program improvement research studies is not connected with any academic record of the individual student’s performance. Assessment reports may be created for internal departmental improvement purposes only, and they may include an aggregation of student characteristics associated with learning achievement. Evidence of student learning is purged from the digital archive after being stored for a period of 12 years, to ensure it can be made available for analysis of departments and programs in support of the Academic Senate program review requirements. Students can designate that materials they created, which have been sampled by the faculty, be excluded from the Undergraduate Education Division digital archive by expressing their wishes by e-mail.

Campus Security Information

UCLA Police Department

The UCLA Police Department (UCPD), 310-825-1491, is located at 601 Westwood Plaza. The sworn UCPD officers are empowered by the state of California with the authority to enforce all state and local laws. UCPD officers patrol the campus 24 hours a day, 365 days a year. They enforce all applicable local, state, and federal laws; arrest violators; investigate and suppress crime; and provide a full range of police services and community safety programs.

The department is linked by computer to city, state, and federal criminal justice agencies that provide access to information concerning criminal records, wanted persons, stolen property, and vehicle identification. The detective unit handles criminal investigations, and detectives conduct interviews, arrest violators, execute search warrants, and file cases with the Los Angeles District and City Attorney offices.

UCPD police officers have primary jurisdiction over the UCLA campus, Reagan UCLA Medical Center, Center for the Health Sciences, Santa Monica-UCLA Medical Center, and University Apartments South. The city of Los Angeles Police Department does not routinely handle calls for service on campus or on most UCLA properties.

Incident Reporting

All requests for police service should be made to UCPD. All crime occurring on campus, the Center
for the Health Sciences, and other UCLA properties should be reported immediately to UCPD to ensure appropriate action is taken. Crimes occurring off campus should be reported immediately to the local law enforcement agency. UCPD does take reports from students, faculty, and staff for incidents occurring in the Westwood area.

Police, fire, or medical emergencies can be reported by calling 911 from any telephone on campus. All landline telephones (UCLA, private, public) located on UCLA grounds are tied into the 911 emergency system. Emergencies can also be reported by using the blue-hooded or yellow Emergency Reporting Telephones located throughout the campus.

Calls made to 911 from a cell phone may not go directly to UCPD depending on the tower used by the cell phone at the time of the call. Callers should advise the dispatcher and ask if they are speaking with UCPD. If not, and time permits, callers may ask to be transferred to UCPD 911.

Nonemergency calls for service can be made by contacting the department at 310-825-1491. Campus community members are encouraged to program the department number into their cell phones and report on suspicious circumstances.

Crime Prevention

An involved community is one of the best defenses against crime. Therefore, the department is committed to a community policing philosophy and supports a proactive Crime Prevention Unit that works closely with community members to make UCLA a safer place to work, live, and learn. The unit gives presentations on vehicle and residential security, personal safety, office and equipment security, sexual assault prevention, and active shooter situations. Other programs are developed to meet the special needs of the campus community. Brochures and literature on crime prevention and personal safety are available online.

Counseling and Psychological Services (CAPS) and the Crime Prevention Unit offer presentations on sexual assault issues. Topics include acquaintance rape education and prevention, personal safety and prevention techniques, recovery from sexual assault, clear communications, and the continuum of violence and rape in society. The educational programs, tailored to meet the needs of individual audiences, include films, discussion groups, lectures, role-plays, and communication exercises.

CAPS reaches students through the residence halls, sororities, fraternities, athletic teams, student clubs, and various student functions. Services include crisis intervention and advocacy for victims of sexual assault; short-term counseling and referrals for survivors, their families, and friends; support groups for rape survivors; and self-defense classes and a lending library.

CAPS works closely with the student housing offices and the police department to increase campus safety.

Several programs have been designed to increase the level of crime awareness and campus safety at UCLA. Incidents of criminal activity that pose a potential threat to the campus are brought to the attention of the community through campus crime alert bulletins. Additionally, those interested in receiving public safety bulletins and news briefs can sign up for the public safety listserv.

Emergency Medical Services

UCPD provides emergency medical response for the campus community through the Emergency Medical Services (EMS) unit. The EMS unit is staffed by full-time UCLA students certified as emergency medical technicians (EMTs). Emergency medical services are available 24 hours a day, 365 days of the year. As in all emergencies, call 911 for this service.

Alcohol and Substance Abuse Education

Students with alcohol or substance abuse problems create safety and health risks for themselves and others. Such abuses can result in a wide range of emotional and behavioral problems. Therefore, UCLA makes available to every student a variety of alcohol and substance abuse awareness programs that are designed to discourage the use of illicit substances and to educate students on the merits of legal and responsible alcohol consumption.

Counseling and Psychological Services (310-825-0768) provides counseling and referral assistance to students who are troubled by alcohol or substance abuse problems. The service is completely confidential and free to regularly enrolled students. All information and counseling is treated in accordance with UCLA and UC policies and state and federal laws. Any decision to seek assistance is not used in connection with any academic determination or as a basis for disciplinary proceedings.

Alcohol and Substance Policies

UCLA is designated as a drug-free environment, and only under certain conditions is alcohol consumption permitted (none is permitted at athletic events). In keeping with its educational mission, the University assumes the responsibility to better inform the UCLA community about alcohol and substance abuse.

The sale, manufacture, distribution, or possession of any controlled substance without a prescription is illegal under both state and federal laws. Such laws are strictly enforced by UCPD police officers. Student violators are subject to University disciplinary action, criminal prosecution, fine, and imprisonment. Refer to the UCLA policies on substance abuse for further information.

Residential Housing

UCLA is the size of a small city, and provides residential housing to approximately 16,000 students. Housing facilities range from apartments designed for students with children to multi-student apartment complexes to high-rise student residence halls. UCPD and student housing staff work in hand to create a safe and comfortable living and learning environment.

Campuswide security and safety programs for residents are held throughout the year to increase awareness of potential crime and improve campus safety. To keep residents immediately informed of major crime or threats to the campus, crime alert bulletins are posted in residential areas by the housing staff. However, residents must take an active role to ensure their own safety by exercising simple commonsense crime prevention techniques. Because the campus is open 24 hours a day, visitation to residence halls and apartments is not restricted.

All residence halls have 24-hour access control on entrance doors, and during the evening hours access control monitors are stationed at each entrance. UCPD police officers and CSOs are also signed to the residence halls.

UCLA-affiliated organizations that maintain off-campus facilities are under the shared jurisdiction of their local police department and the UCLA Police Department, which provides assistance to students, faculty, and staff, and/or referrals to neighboring police departments.

Safety Tips

The nature of the studies and research done at UCLA requires many campus buildings to be open 24 hours a day. Because the campus is so large and adjacent to the greater Los Angeles community, in-
individually with criminal intent are able to access UCLA grounds.

Regardless of the time of day or night, and no mat-
ter where persons are on campus, they should be
alert, aware of their surroundings, and exercise
common-sense safety precautions. Anyone parking
on campus should remember to lock their vehicle
and consider investing in a locking device and/or
alarm. Use CSO escorts when walking at night. Keep
room and apartment doors locked at all times. Most
important, anyone needing assistance should not
hesitate to contact the department.

Take advantage of the safety services provided by
UCLA and UCPD. See the Campus Safety Tips web
page for more information.

APPENDIX B: UNIVERSITY ADMINISTRATIVE OFFICERS

Terms of Regents appointed by the Governor ex-pire March 1 of the year in parentheses. The student
Regent and alumni Regents serve a one-year term
beginning July 1 and ending June 30 of the year
listed.

Regents Ex Officio

Governer of California
Gavin C. Newsom
Lieutenant Governor of California
Eleni T. Kounalakis
Speaker of the Assembly
Anthony Rendon
State Superintendent of Public Instruction
Tony K. Thurmond
President of the Alumni Associations of the University of California
William Um (2020)
Vice President—Alumni Associations of the University of California
Christine Simmons (2020)
President of the University
Michael V. Drake

Appointed Regents

Maria Anguiano (2028)
Richard C. Blum (2026)
Laphonzia Butler (2030)
Michael Cohen (2030)
Gareth Elliott (2025)
Cecilia Estolano (2022)
Howard Peter Guber (2029)
George Kieffer (2021)
Sherry L. Lansing (2022)
Richard Leib (2026)
Hadi Makarechian (2032)
Eloy Ortiz Oakley (2024)
Lark Park (2023)
John A. Pérez (2024)
Janet Reilly (2028)
Richard Sherman (2025)
Jonathan Jay Sures (2032)
Charlene Zettel (2021)

Jamaal Muwwakkil, Student Regent (2021)

Faculty Representatives to the Board of Regents
Mary Gauvain, Senate Chair (2019-2021)
Robert B. Horwitz, Senate Vice Chair (2020-2022)

Staff Advisers to the Board of Regents
Ann Jeffrey, UC Berkeley (2020-21)
Lucy Tseng, UCLA (2020-21)

Officers of the Regents

President, Board of Regents
Gavin C. Newsom
Chair, Board of Regents
John A. Pérez
Vice Chair, Board of Regents
Cecilia Estolano
Chief Investment Officer
Jagdeep Singh Bachher
General Counsel
Charles F. Robinson
Secretary and Chief of Staff
Anne Shaw
Senior Vice President—Chief Compliance and Audit Officer
Alexander Bustamante

Office of the President

President of the University
Michael V. Drake
Provost and Executive Vice President—Academic Affairs
Michael Brown
Executive Vice President—Chief Financial Officer
Paul Jenny, Interim
Executive Vice President—Chief Operating Officer and Chief of Staff to the President
Rachael Nava
Executive Vice President—UC Health
Carrie Blyeington
Senior Vice President—Ethics, Compliance, and Audit Services
Alexander Bustamante
Senior Vice President—External Relations and Communications
Claire Holmes
Vice President—Agriculture and Natural Resources
Glenda Humiston
Vice President—General Counsel
Charles F. Robinson
Vice President—Human Resources
Cheryl Lloyd, Interim
Vice President—Information Technology Services and Chief Information Officer
Mark Cianca, Interim
Vice President—Institutional Research and Academic Planning
Pamela Brown
Vice President—Investments and Chief Investment Officer
Jagdeep Singh Bachher
Vice President—National Laboratories
Craig Leasure
Vice President—Research and Innovation
Theresa A. Maldonado

Vice President—Student Affairs
Yvette Guillatt, Interim
Associate Vice President—Federal Government Relations
Christopher Harrington
Associate Vice President—State Government Relations
Kieran Flaherty

Campus Chancellors

Chancellor at Berkeley
Carol T. Christ
Chancellor at Davis
Gary S. May
Chancellor at Irvine
Howard Gillman
Chancellor at Los Angeles
Gene D. Block
Chancellor at Merced
Nathan Brostrom, Interim
Chancellor at Riverside
Kim A. Wilcox
Chancellor at San Diego
Pradeep K. Khosla
Chancellor at San Francisco
Sam Hawgood
Chancellor at Santa Barbara
Henry T. Yang
Chancellor at Santa Cruz
Cynthia K. Larive

UCLA Administrative Officers

Chancellor
Gene D. Block, PhD
Executive Vice Chancellor and Provost
Emily A. Carter, PhD
Administrative Vice Chancellor
Michael J. Beck, MBA
Vice Chancellor—Academic Personnel
Michael S. Levine, PhD
Vice Chancellor and Chief Financial Officer
Gregg B. Goldman, MBA
Vice Chancellor—Equity, Diversity, and Inclusion
Anna Sprain Bradley, JD
Vice Chancellor—External Affairs
Rhea Turtteltaub, BA
Vice Chancellor—Health Sciences
John C. Mazziotta, MD, PhD
Vice Chancellor—Legal Affairs
Louise C. Nelson, JD
Vice Chancellor—Research
Roger M. Wakimoto, PhD
Vice Chancellor—Strategic Communications
Mary Osako, BA
Vice Chancellor—Student Affairs
Monroe Gorden, Jr., JD
Vice Provost—Enrollment Management
Yoolonda Copeland-Morgan, MBA
Vice Provost—Information Technology
James F. Davis, PhD
Vice Provost—Institute of American Cultures
David K. Yoo, PhD
Vice Provost—Interdisciplinary and Cross-Campus Affairs
Timothy F. Brewer, MD, MPH
Vice Provost—International Studies and Global Engagement
C. Cindy Fan, PhD
chairs, which support the educational and research activities of distinguished members of the faculty. As this catalog is published, UCLA has 531 endowed chairs that have been approved by the Office of the President of the University of California, as follows:

**School of the Arts and Architecture**

Alma M. Hawkins Memorial Chair
S. Charles Lee Chair in Architecture and Urban Design
Harvey S. Perloff Chair
Lynda and Stewart Resnick Endowed Chair in Art

**School of Dentistry**

Alumni and Friends Oral and Maxillofacial Surgery Endowed Chair
Alumni and Friends Presidential Endowed Chair
Thomas R. Bales Chair in Orthodontics
Thomas K. Barber Endowed Chair in Pediatric Dentistry
Naomi and Jim Ellison Endowed Chair
Nobel Biocare Endowed Chair in Surgical Implant Dentistry
Dr. No-Hee Park Chair in Dentistry
Tarrson Family Endowed Chair in Periodontics
United Cerebral Palsy of Los Angeles Endowed Chair in Special Patient Care
Jack A. Weichman Chair in Endodontics
Bob and Marion Wilson Endowed Chair
Felix and Mildred Yip Endowed Professorship in Dentistry

**Graduate School of Education and Information Studies**

Martin and Bernard Breslauer Professorship in Bibliography
Allan Murray Carter Chair in Higher Education
George F. Kneller Chair in Education and Anthropology
George F. Kneller Chair in Education and Philosophy
Presidential Chair in Education and Diversity
Presidential Chair in Information Studies
Pritzker Family Endowed Chair in Education to Strengthen Families
UNESCO Chair on Global Learning and Global Citizenship Education
Wasserman Endowed Deanship of Education and Information Studies

**Henry Samueli School of Engineering and Applied Science**

L.M.K. Boelter Chair in Engineering
Vijay K. Dhir Chair in Engineering
Englekirk Presidential Endowed Chair in Structural Engineering

**School of Law**

Norman Abrams Endowed Chair in Law
Omar and Azemeralda Alfi Chair in Islamic Law
Harry Graham Balter Chair in Law
Barrall Family Endowed Chair in Tax Law and Policy
David A. Binder Endowed Chair in Clinical Law
Connell Professorship of Law
Jesse Dukeminier Professorship in Law
Dan and Rae Emett Endowed Chair in Environmental Law
Rosalinde and Arthur Gilbert Foundation Endowed Chair in Civil Rights and Civil Liberties
Paul Hastings Endowed Chair in Business Law

Traugott and Dorothea Frederking Endowed Chair in Cryogenics
Norman E. Friedmann Chair in Knowledge Sciences
Armond and Elena Hairapetian Chair in Engineering and Medicine
Leonard Kleinrock Chair in Computer Science
Evalyn Knight Chair in Engineering
Levi James Knight, Jr., Chair in Engineering
Fang Lu Endowed Chair in Engineering
Richard G. Newman AECOM Endowed Chair in Civil Engineering
Nippon Sheet Glass Company Chair in Materials Science
Northrop Grumman Chair in Electrical Engineering
Northrop Grumman Chair in Electrical Engineering/Electromagnetics
Northrop Grumman Opto-Electronic Chair in Electrical Engineering
Ralph M. Parsons Foundation Chair in Chemical Engineering
Jonathan B. Postel Chair in Computer Systems
Jonathan B. Postel Chair in Networking
Raytheon Company Chair in Electrical Engineering
Raytheon Company Chair in Mechanical Engineering
Charles P. Reames Endowed Chair in Electrical Engineering
Ben Rich Lockheed Martin Chair in Aeronautics
Rockwell Collins Chair in Engineering
John P. and Claudia H. Schauerman Endowed Chair in Engineering
William Frederick Seyer Chair in Materials Electrochemistry
Ronald and Valerie Sugar Dean of Henry Samueli School of Engineering and Applied Science
Ronald and Valerie Sugar Endowed Chair in Engineering
Symantec Term Chair in Computer Science
Carol and Lawrence E. Tannas, Jr., Endowed Chair in Engineering
Carol and Lawrence E. Tannas, Jr., Endowed Term Chair in Engineering
William D. Van Vorst Chair in Chemical Engineering Education
Volgenau Chair for Engineering Excellence
Volgenau Chair for Engineering Innovation
Volgenau Endowed Chair in Engineering
Wintek Endowed Chair in Electrical Engineering
Neria and Manizheh Yomtoubian Endowed Chair in Cancer and Risk Sciences

**University Librarian**
Virginia Steel, MA
University Registrar
Frank Y. Wada, PhD
Dean of Continuing Education and University Extension
Eric A. Bullard, PhD
Dean of Graduate Education, Graduate Division
Susan L. Ettner, PhD, Interim

**Deans of the UCLA College and Schools**

School of the Arts and Architecture
Brett B. Steele, AA Dipl

School of Dentistry
Paul H. Krebsbach, DDS, PhD

Graduate School of Education and Information Studies
Christina A. Christie, PhD, Interim

Henry Samueli School of Engineering and Applied Science
Jayathi Y. Murthy, PhD

School of Law
Jennifer L. Mnookin, JD, PhD

College of Letters and Science
Senior Dean
David C. Schaberg, PhD

Humanities Division
David C. Schaberg, PhD

Life Sciences Division
Tracy L. Johnson, PhD

Physical Sciences Division
Miguel A. Garcia-Garibay, PhD

Social Sciences Division
Darnell M. Hunt, PhD

Undergraduate Education Division
Adriana Galván, PhD

John E. Anderson Graduate School of Management
Antonio E. Bernardo, PhD

David Geffen School of Medicine
Kelsey C. Martin, MD, PhD

Herb Alpert School of Music
Eileen L. Strempel, DM

School of Nursing
Linda P. Sarna, RN, PhD, FAAN

Meyer and Renee Luskin School of Public Affairs
Gary M. Segura, PhD

Jonathan and Karin Fielding School of Public Health
Ronald S. Brookmeyer, PhD

School of Theater, Film, and Television
Brian E. Kite, MFA, Interim

**Appendix C: Endowed Chairs**

Although UCLA is a public institution, private gifts are increasingly important in maintaining the quality of the three missions of teaching, research, and community service. Among the principal forms of private support are endowed professorships, or
Appendix C: Endowed Chairs

Robert Henigson Endowed Chair in Legal Ethics
Pete Kameron Endowed Chair in Law
Pete Kameron Chair in Law and Social Justice
Michael J. Klein Chair in Law
Richard C. Maxwell Chair in Law
McDonald/Wright Chair in Law
Arjay and Frances Fearing Miller Chair in Law
Rachel F. Moran Endowed Chair in Law
Susan Westerberg Prager Endowed Chair in Law
Honorable Harry Pregerson Endowed Chair in Law
David G. and Dallas P. Price Chair in Law
Promise Institute Chair in Comparative and International Law
Promise Institute Chair in Human Rights
David Sanders Professorship in Law and Medicine
Michael H. Schill Endowed Chair in Law
Gary T. Schwartz Endowed Chair in Law
Security Pacific Bank Chair
Ralph and Shirley Shapiro Chair in Law
Shirley and Ralph Shapiro Endowed Chair in Environmental Law
Jonathan D. Varat Endowed Chair in Law
William D. Warren Chair in Law
Frank G. Wells Endowed Chair in Environmental Law
Stephen Yeazell Endowed Chair in Law
Eric M. Zolt Chair in Tax Law and Policy

De Logi Chair in Biological Sciences
Donald R. Dickey Chair in Vertebrate Biology
Edward A. Dickson Emeriti Professorship
A. Richard Diebold, Jr., Endowed Chair
Distinguished Chair in Environment and Sustainability
Nalin and Pratima Doshi Chair in Indian Studies
Dubchansky Endowed Chair in Economics
Dunn Family Endowed Chair in Data Theory
Mr. and Mrs. C. N. Flint Professorship in Philosophy
Christopher S. Foote Term Chair
Evan Frankel Endowed Chair
Gloria and Paul Griffin Chair in Philosophy
Haruhsa Handa Professorship in Shinoto Studies
John Charles Hills Chair in Literature
Marvin Hoffenberg Chair in American Politics and Public Policy
Dr. Myung Ki Hong Endowed Chair in Materials Innovation
Dr. Myung Ki Hong Endowed Chair in Polymer Science
Walter Hopps Chair in Modern and Contemporary Art
Richard Havannissian Chair in Modern Armenian History
Marcia H. Howard Term Chair in Literary Studies
Wendell Jeffrey and Bernice Wenzel Term Chair in Behavioral Neuroscience
Michael and Alice Jung Endowed Chair in Medicinal Chemistry and Drug Discovery
Sady and Ludwig Kahn Chair in Jewish History
Penny Kanner Endowed Chair in Women's Studies
Renée and David Kaplan Presidential Endowed Chair in Philosophy
Fred Kavli Chair in Nanosystems Sciences
Kershaw Chair in Ancient Eastern Mediterranean Studies
Ibn Khaldun Endowed Chair in World History
Leon and Joanne V.C. Knopoff Chair in Physics and Geophysics
Alexander and Renée Kolin Endowed Professorship in Molecular Biology and Biophysics
George P. Kolovos Family Centennial Term Chair in Hellenic Studies
Venu and Ana Kotamraju Endowed Chair in Economics
Lauren B. Leichtman and Arthur E. Levine Astrophysics Endowed Chair
Madeleine L. Letessier Chair in French and Francophone Studies
Thomas E. Lifka Chair in History
Vladimir and Lydia Markov Chair in Russian Literature
John McTague Career Development Chair
Dorothy L. Meier Social Equities Chair
Anne K. Mellor Presidential Chair in Women's Writing
Ronald J. Mellor Chair in Ancient History
Sherie and Donald Morrison Chair in Immunology
Sherie L. Morrison Chair in Microbiology, Immunology, and Molecular Genetics
Morrison Family Endowed Chair
John Muir Memorial Endowed Chair
Franklin D. Murphy Chair in Italian Renaissance Studies
Narekatsi Chair in Armenian Studies
Gary B. Nash Endowed Chair in United States History
Waldo W. Neikirk Term Chair
LeRoy Neiman Term Chair
Nickoll Family Endowed Chair in History
1939 Society Samuel Goetz Chair in Holocaust Studies
Joan Palevsky Chair in Classics
Poubdavoud Endowed Director's Chair
Presidential Chair in Chemistry
Presidential Chair in Institute of the Environment
Presidential Chair in Medicinal Chemistry
Presidential Chair in Modern European History
Presidential Chair in Molecular Cell Biology
President's Chair in Developmental Immunology
Howard and Astrid Preston Term Chair in Astrophysics
Pritzker Chair in Environment and Sustainability I
Pritzker Chair in Environment and Sustainability II
Ramanujan Visiting Professorship
Hans Reichenbach Chair in Scientific Philosophy
Peter Reill Chair in European History (1450 to Modern)
Howard Reiss Career Development Chair
John D. and Edith M. Roberts Term Chair in Organic Chemistry
Maria Rowena Ross Term Chair in Biological Sciences
Michael and Irene Ross Endowed Chair in Yiddish Studies
Marcie H. Rothman Presidential Chair in Food Studies
Musa Sabi Chair in Iranian Studies
Edward W. Said Professorship in Comparative Literature
David Saxton Presidential Term Chair in Mathematics
David Saxton Presidential Term Chair in Physics
David S. Saxton Presidential Chair in Physics
David O. Sears Presidential Endowed Chair in Division of Social Sciences
Johanna F. and Joseph H. Shaper Family Chair in Microbiology
Shapiro Family Endowed Chair in Modern Political Theory
Joan Silsbee Chair in African Cultural Archaeology
Louis B. Slichter Chair in Geophysics and Planetary Physics
Louis B. and Martha B. Slichter Endowed Chair in Geosciences
Kenneth L. Sokoloff Chair in Economic History
Charles Speroni Chair in Italian Literature and Culture
Staglin Family Chair in Psychology
Steinmetz Chair in Classical Archaeology and Material Culture
Irving and Jean Stone Endowed Chair I
Irving and Jean Stone Endowed Chair II
Irving and Jean Stone Endowed Chair III
Jean Stone Chair
Keith and Cecilia Terasaki Presidential Endowed Chair in Division of Life Sciences
Kenneth N. Trueblood Endowed Chair in Chemistry and Biochemistry
UCLA Foundation Chair
Wetib Family Endowed Chair in Mediterranean Jewish Studies
Alexander von Humboldt Endowed Chair in Geography
Scott Waugh Endowed Chair in Division of Social Sciences  
Eugen Weber Chair in Modern European History  
Robert and Dorothy Wellman Chair in Medieval History  
Bernice Wenzel and Wendell Jeffrey Term Endowed Chair in Behavioral Neuroscience  
Bernice Wenzel and Wendell Jeffrey Term Endowed Chair in Cognitive Neuroscience  
Bernice Wenzel and Wendell Jeffrey Term Endowed Chair in Developmental Neuroscience  
Dean M. Willard Chair in Chemistry  
Saul Winstine Chair in Organic Chemistry  
Linda and Fred Wuddell Term Chair  
Tadashi Yanai Term Chair in Japanese Literature  
Kyoko Yuki and Masamichi Takesaki Endowed Chair in Operator Algebras  
Stanley M. Zimmerman Endowed Chair in Economics and Finance  
Jeffrey and Helo Zink Endowed Professional Development Term Chair in Chemistry

John E. Anderson Graduate School of Management

Allstate Chair in Insurance and Finance  
Andersens Worldwide Chair in Management  
John E. Anderson Chair in Management  
Marion Anderson Chair in Management  
Arden Realty Chair  
Donnalisa ’86 and Bill Barnum Endowed Term Chair in Management  
Robert D. Beyer ’83 Chair in Management  
California Chair in Real Estate and Land Economics  
Edward W. Carter Chair in Business Administration  
William M. Cockrum III Presidential Term Chair in Entrepreneurship  
William M. Cockrum Professorship in Entrepreneurial Finance  
James A. Collins Chair in Management  
Warren C. Corder Chair in Money and Financial Markets  
Ernst and Young Chair in Accounting  
Laurence D. and Lori W. Fink Endowed Chair in Finance  
Ford II Chair in International Management  
Joel Fried Chair in Applied Finance  
Lee and Seymour Graff Endowed Professorship  
Goldyne and Irwin Hearsh Chair in Money and Banking  
Hans Hufschmid Chair in Management  
IBM Chair in Management  
Joseph Jacobs Chair in Entrepreneurial Studies  
Neil Jacoby Chair in Management  
Japan Alumni Chair in International Finance  
Bud Knapp Marketing Professorship  
Harry and Elsa Kunin Chair in Business and Society  
J. Clayburn La Force Chair in Management  
William E. Leonard Chair in Management  
Los Angeles Times Professor of Management and Policy  
Justice Elwood Lui Endowed Term Chair in Management  
Chauncey J. Medberry Chair in Management  
Peter W. Mullin Chair in Management  
Howard Noble Chair in Management  
Paine Chair in Management  
George Robbins Chair in Management  
Sanford and Betty Sigalloff Chair in Corporate Renewal  
Term Chair in Teaching Excellence  
Term Chair in Management  
UCLA Anderson Board of Visitors Term Chair in Management  
UCLA Anderson Dean’s Term Chair in Management  
UCLA Anderson Faculty Term Chair in Management  
J. Fred Weston Chair in Finance  
Harold Williams Chair in Management  
Ho-Su Wu Chair in Management  
Bing ’86 and Alice Liu Yang Endowed Term Chair in Management  
Bing ’86 and Alice Liu Yang Endowed Term Chair in Teaching Excellence  

David Geffen School of Medicine

William S. Adams, MD, Chair in Medicine  
Ahmanson Chair in Ophthalmology  
Mary D. Allen Chair in Vision Research  
Lori Altschuler Endowed Chair in Mood Disorders  
Wallis Annenberg Endowed Chair in Integrative East-West Medicine  
Leonard Apt Endowed Chair in Pediatric Ophthalmology  
Archstone Foundation Endowed Chair in Geriatrics  
Stephen J. Ryan–Arnold and Mabel Beckman Foundation Chair  
Casey Lee Bell Endowed Chair in Pediatric Nephrology  
Wiley F. Barker Chair in Vascular Surgery  
Dena Bat-Yacov Endowed Chair in Childhood Psychiatry and Biobehavioral Sciences  
Ulrich Batsford, MD, Chair in Spinal Neurosurgery  
Louis D. Beaumont Chair in Surgery  
Donald P. Becker, MD, Term Chair in Neurosurgery  
Jerome L. Belzer Chair in Medical Research  
Lillian and Alvin L. Bergman Chair in Vascular Research  
Bing Professorship in Urologic Research  
Anna and Harry Borun Chair in Geriatrics/Gerontology  
Bowyer Professorship in Medical Oncology  
Saul Brandman Endowed Chair in Pulmonary Arterial Hypertension  
Judson Braun Chair in Biological Psychiatry  
Geri and Richard Brawerman Chair in Pediatric Neurosurgery  
Gary L. Brinderson Family Chair in Neuro-Intensive Care  
Eli and Edythe L. Broad Foundation Chair in Inflammatory Bowel Disease Research  
Rubin Brown Chair in Pediatric Neurology  
Burnett Family Chair  
Thomas C. Calcaterra, MD, Chair in Head and Neck Surgery  
Joseph Campbell Chair of Child Psychiatry  
Iris Cantor Chair in Breast Imaging  
Iris Cantor Endowed Chair in Women’s Health  
Edward W. Carter Chair in Internal Medicine  
Castera Chair in Cardiology  
Vincent and Stella Coates Chair in Molecular Neurobiology  
Tony Coelho Chair in Neurology  
Ronald and Susan Cohen Term Chair in Childhood Development and Cerebral Palsy  
Carol and James Collins Chair  
Carol and James Collins Chair in Geriatric Medicine  
William E. Connor Chair in Cardiothoracic Transplantation  
Elliot Corday Chair in Cardiovascular Medicine and Science  
Norman Cousins Chair in Psychoneuroimmunology  
Crump Chair in Medical Engineering  
Karen and Frank Dabby Endowed Chair in Ophthalmology  
Dr. Alfonso Q. Davies Endowed Chair in Honor of Paul Crandall, MD, for Epilepsy Research  
M. Philip Davis Chair in Microbiology and Immunology  
Robert and Kelly Day Chair in Cardiothoracic Surgery  
Robert and Kelly Day Chair in General Surgery  
Robert and Kelly Day Chair in Surgical Outcomes  
Robert and Kelly Day Chair in Transplantation  
Jean B. deKernion, MD, Endowed Chair in Urology  
Wini and William J. Dignam, MD, Endowed Chair in Obstetrics and Gynecology  
Diller-von Furstenberg Family Endowed Chair in Human Genetics  
Diller-von Furstenberg Family Endowed Chair in Precision Clinical Genomics  
John Bartley Dillon, MD, Endowed Chair in Anesthesiology  
Roy and Carol Dourami Chair  
Roy and Carol Dourami Chair in Urological Oncology  
Robert and Patricia Draine Endowed Chair in Geriatric Medicine  
Dumont-UCLA Chair in Transplantation Surgery  
Jeffrey J. Eckardt, MD, Term Chair in Orthopaedic Surgery  
Max Factor Family Foundation Chair in Nephrology  
Charles Kenneth Feldman Chair in Ophthalmology  
Marjorie Fine, MD, Endowed Chair in Clinical General Surgery  
Elise and Isaac Fogelman Endowed Chair in Pediatric Neurology  
Dr. Daniel X. Freedman Administrative Chair in Academic Psychiatry  
John Douglas French Alzheimer’s Foundation Endowed Chair  
Joaquin M. Fuster Chair in Cognitive Neuroscience  
David Geffen Chair in Informatics  
David Geffen Chair in Medical Research  
David Geffen School of Medicine Chair in Neuroscience
Laraine and David Gerber Chair in Ophthalmology
Maggie C. Gilbert Endowed Chair in Bipolar Disorders
Rosalinde and Arthur Gilbert Foundation Endowed Chair in Health Care Delivery
Joan S. and Ralph N. Goldwyn Endowed Chair in Immunobiology and Transplantation Research
Victor Goodhill, MD, Chair in Head and Neck Surgery
Steven C. Gordon Family Chair in Parkinson’s Disease Research
Dolly Green Chair in Ophthalmology
Thomas N. Grove Chair in Anesthesiology
Dolly Green Chair in Ophthalmology
Steven C. Gordon Family Chair in Parkinson’s Disease Research
Joan S. and Ralph N. Goldwyn Endowed Chair in Biobehavioral Sciences
Sofia and Arthur Gilbert Foundation Chair in Health Care Delivery
Lincy Foundation Distinguished Service Chair
William P. Longmire, Jr., Chair in Surgery
Meyer and Renee Luskin Chair in Migraine and Headache Studies
Gordon and Virginia MacDonald Distinguished Chair in Human Genetics
Charles H. Markham Chair in Neurology
Della Martin Chair in Psychiatry
Mattel Executive Endowed Chair in Pediatrics
David May II Chair in Ophthalmology
John Mazzotti Endowed Chair in Neurology
John Mazzotti, MD, PhD, Term Chair in Medicine
Henry Alvin and Carrie L. Meinhardt Chair in Kidney Cancer Research
Sherman M. Mellinkoff Distinguished Professor in Medicine Chair
Joanne and George Miller and Family Endowed Chair
Timothy A. Miller Chair in Plastic Surgery
Jeffrey Modell/Sidney Sheldon Chair in Immunology
Wesley S. Moore, MD, Endowed Chair in Endovascular Surgery
Moss Foundation Chair in Gastrointestinal and Personalized Surgery
Dr. Walter and Mrs. Kathryn Mullikin Chair in Orthopaedic Surgery
Jane and Marc Nathanson Endowed Chair
James H. Nicholson Chair in Pediatric Cardiology
Mary Oakley Foundation Chair in Neurodegenerative Diseases
Frances M. O’Malley Administrative Chair in Neuroscience History
William and Patricia Oppenheim Presidential Chair in Pediatric Orthopaedics
Oppenheimer Brothers Chair
Hela and Walter Oppenheim Endowed Chair in Orthopaedic Oncology
Philip L. Palumbo Chair in Clinical Hepatology
Albert F. Parlow and David H. Solomon Chair for UCLA Program on Aging
Gail Patrick Endowed Administrative Chair in Brain Research
Samuel J. Pearlman, MD, and Della Z. Pearlman Chair in Head and Neck Surgery
Carl M. Pearson, MD, Endowed Chair in Rheumatology
Pennington Family Foundation Endowed Term Chair in Pediatrics
Frances and Albert Piansky Chair in Anatomy
Gutiara Pierpoint Endowed Chair in Intestinal Pulmonary Fibrosis
Thomas P. and Katherine K. Pike Chair in Addictive Studies
Elizabeth R. and Thomas E. Plott Chair in Gerontology
Edith Agnes Plumb Endowed Chair in Neurobiology
Harold and Pauline Price Chair in Ophthalmology
Pritzker Family Endowed Chair in Pathology
Shlomo Raz, MD, Chair in Urology
Resnick Chair in Eating Disorders
Lynda and Stewart Resnick Endowed Chair in Human Nutrition
Revlon Chair in Women’s Health
Leo G. Rigler Chair in Radiological Sciences
Sidney Roberts and Clara Szego Roberts Endowed Chair in Molecular/Cellular Endocrinology
Augustus S. Rose Chair in Neurology
Arthur L. Rosenbaum, MD, Chair in Pediatric Ophthalmology
Maxine and Eugene Rosenfeld Endowed Chair in Computational Genetics
Maxine and Eugene Rosenfeld Endowed Chair in Medical Education
Carol and Saul Rosenzweig Endowed Chair in Cancer Therapies Development
Stephen J. Ryan Arnold and Mabel Beckman Foundation Chair
Estelle, Abe, and Marjorie Sanders Chair in Cancer Research
Daljit S. and Elaine Sarkaria Endowed Chair in Diagnostic Medicine
Bernard G. Sarnat, MD, Endowed Chair in Craniofacial Biology
Arnold B. Scheibel, MD, Chair for Brain Research
Ethereal Scheibel Chair in Neuroscience
William Scheibel Chair in Neuroscience
Terry Semel Chair in Alzheimer’s Disease Research and Treatment
Garry Shandling Chair in Pancreatic Diseases
Garry Shandling Chair in Pancreatic Surgery
Alison Shapiro Term Chair for Children’s Cognitive Development
Shapiro Family Term Chair in Developmental and Behavioral Pediatrics and Cerebral Palsy
Peter Shapiro Term Chair for Enhancing Children’s Developmental and Behavioral Health
Peter William Shapiro Chair for Center for Cerebral Palsy
W. Donald and Ginny M. Shields Term Chair in Child Neurology
Fred Silton Family Chair in Movement Disorders
Simms/Mann Family Foundation Chair in Integrative Oncology
Jennifer Jones Simon Chair in Radiation Oncology
Norton Simon Chair in Biophysics
Jonathan Sinay Chair in Epilepsy
Henry E. Singleton Chair in Urology
Jack H. Skirball Chair in Multiple Sclerosis Research
Jack H. Skirball Chair in Ocular Inflammatory Diseases
Jack H. Skirball Chair in Pediatrics
P. Gene and Elaine Smith Endowed Chair in Alzheimer’s Disease Research
Rebecca Smith Chair in Molecular and Cellular Pathology
Rory Smith, MD, and Family Endowed Chair
Smoctric Family Optometric Clinician-Scientist Chair
Jerome and Joan Snyder Chair in Ophthalmology
Joan and Jerome Snyder Chair in Cornea Diseases
Joan and Jerome Snyder Chair in Vision Science
George F. Solomon Professorship in Psychobiology
Spiegel Family Chair in Uroglogic Oncology
A. Norman Sprague Chair in Molecular Oncology
Frances and Arthur Stoekl Chair in Neurology
Fran and Ray Stark Foundation Chair in Digestive Diseases
Fran and Ray Stark Foundation Chair in Ophthalmology
Peter Starrett Term Chair in Medical Education
Rupert and Gertrude Steiger Vision Research Chair
Jules Stein Chair in Ophthalmology
Michael and Sue Steinberg Endowed Chair in Pediatric Allergy, Immunology, and Rheumatology
Ruth and Raymond H. Stotter Chair in Neurosurgery
Bradley R. Straatsma, MD, Endowed Chair in Ophthalmology
Dorothy and Leonard Stras Endowed Chair in Gastroenterology in Memory of Gussie Borun Streisand Chair in Cardiology
Kelly Lee Tarantello Endowed Term Chair in Integrative Liver Transplantation
Dr. George Tarjan Chair in Intellectual and Developmental Disabilities Research
Michael E. Tennenbaum Family Endowed Chair in Creativity Research
Paul I. Terasaki Chair in Surgery
Flora L. Thornton Chair in Vision Research
Leon J. Tiber, MD, and David S. Alpert, MD, Chair in Medicine
Vernon O. Underwood Family Chair in Ophthalmology
Philo Woodrow Van Wagoner Professorship
Variety Club-D. Barry Reardon Endowed Chair in Pediatric Hematology/Oncology
Richard D. and Ruth P. Walter Chair in Neurology
Richard D. and Ruth P. Walter Chair in Psychiatry
Charles Stewart Warren and Hildegard Warren Endowed Research Chair
Wasserman Professor of Ophthalmology
David Weil Chair in Psychiatry and Biobehavioral Sciences
Dr. Louis Jolyon West Chair in Psychiatry
Wildrich Chair in Psychiatry and Neuroscience
Susan and David Wilstein Endowed Chair in Medicine
Susan and David Wilstein Endowed Chair in Rehabilitation Medicine
Judith and Robert Winston Chair in Pediatric Urology

**School of Nursing**

Lulu Wolf Hassenplug Chair in Nursing Audrienne H. Moseley Chair in Biological Nursing Science Audrienne H. Moseley Chair in Community Health Research Audrienne H. Moseley Chair in Nursing Audrienne H. Moseley Chair in Women's Health Research Shapiro Family Endowed Chair in Developmental Disability Studies

**Meyer and Renee Luskin School of Public Affairs**

Marjorie Crump Chair in Social Welfare Meyer and Renee Luskin Chair in Inequality and Democracy Luskin Endowed Chair for Dean of the School of Public Affairs

**Jonathan and Karin Fielding School of Public Health**

Fred H. Bixby Chair in Population Policy Jonathan and Karin Fielding Presidential Chair in Health and Equity Paul Torrens Chair in Healthcare Management
Fred W. and Pamela K. Wasserman Chair in Health Policy and Management

**School of Theater, Film, and Television**

David C. Copley Chair for Study of Costume Design
Lew and Pamela Hunter/Jonathan and Janice Zakin Chair in Screenwriting
Rouben Mamoulian Visiting Chair in Film Directing
Rouben Mamoulian Visiting Chair in Theater Directing

**UCLA Chancellor’s Office**

James S. Coleman Chair in International Development Studies
Betsy Wood Knapp Chair for Innovation and Creativity

**UCLA Institute of American Cultures**

George and Sakaye Aratani Chair in Japanese American Incarceration, Redress, and Community Ralph Bunche Chair in International Studies
Morgan and Helen Chu Endowed Chair in Asian American Studies
Helen and Morgan Chu Endowed Director’s Chair of the Asian American Studies Center
Korea Times--Hankook Ilbo Endowed Chair in Korean American Studies and Law

**UCLA Alumni and Friends of Japanese Ancestry**

Chair in Japanese American Studies Walter and Shirley Wang Chair in U.S./China Relations and Communications

**UCLA International Institute**

Rosalinde and Arthur Gilbert Foundation Endowed Chair in Israel Studies
Dong Soon Im and Mi Ja Im Endowed Chair in Korean Christianity
Paul I. and Hisako Terasaki Chair in Contemporary Japanese Studies
Terasaki Chair in U.S.–Japanese Relations

**APPENDIX D: FACULTY HONORS**

**Distinguished Teaching Awards**

Academic Senate Recipients

Each year the UCLA Alumni Association presents Distinguished Teaching Awards to Academic Senate faculty members. The highly prized awards are presented at the annual Andrea L. Rich Night to Honor Teaching, and selection of recipients is based on recommendations of the Academic Senate Committee on Teaching. Nominations are solicited from academic departments during fall quarter.

The Luckman Distinguished Teaching Awards Program was established in late 1991 after receipt of a generous gift from Harriet and Charles Luckman. Awards given for 1992 through 1997 were named the Luckman Distinguished Teaching Awards.

1961

John F. Barron (Economics)
Hector E. Hall (Physiology)
Kenneth N. Trueblood (Chemistry and Biochemistry)

1962

Charles W. Hoffman (Germanic Languages)
Thomas P. Jenkin (Political Science)
Ken Nobe (Chemical Engineering)

1963

Carl W. Hagge (Germanic Languages)
Wendell P. Jones (Education)
Robert H. Sorgenfrey (Mathematics)
Saul Weinstein (Chemistry and Biochemistry)

1964

Mostafa A. El-Sayed (Chemistry and Biochemistry)
Leon Howard (English)
Moshe F. Rubinstein (Civil and Environmental Engineering)

1965

E.A. Carlson (Biology)

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Saul Weinstein (Chemistry and Biochemistry)

1964

Mostafa A. El-Sayed (Chemistry and Biochemistry)
Leon Howard (English)
Moshe F. Rubinstein (Civil and Environmental Engineering)

1965

E.A. Carlson (Biology)
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W.R. Hitchcock (History)
Allen Parducci (Psychology)
William R. Romig (Microbiology and Molecular Genetics)

1966
George A. Bartholomew (Biology)
William P. Gerberding (Political Science)
Hans Meyerhoff (Philosophy)
Joseph E. Spencer (Geography)

1967
Basil Gordon (Mathematics)
J.A.C. Grant (Political Science)
William Matthews (English)
David S. Saxon (Physics and Astronomy)
E.K.L. Upton (Physics and Astronomy)

1968
Edward W. Graham (Chemistry and Biochemistry)
W. James Popham (Education)
Sydney C. Rittenberg (Microbiology and Molecular Genetics)
Robert P. Stockwell (Linguistics)
Fred N. White (Physiology)

1969
Robert J. Finkelstein (Physics and Astronomy)
Douglas S. Hobbs (Political Science)
J.E. Phillips (English)
Raymond M. Redheffer (Mathematics)
Margret I. Sellers (Microbiology and Immunology)

1970
Ehhrad Bahr (Germanic Languages)
Joseph Cascarano (Biology)
B. Lamar Johnson (Education)
Daniel Kivelson (Chemistry and Biochemistry)
Richard D. Lehan (English)

1971
Vernon E. Denny (Chemical Engineering)
Peter N. Ladefoged (Linguistics)
Arthur D. Schwabe (Medicine)
Duane E. Smith (Political Science)
Andreas Tietze (Near Eastern Languages and Cultures)

1972
Barbara K. Keogh (Education)
James N. Miller (Microbiology and Immunology)
David S. Rodes (English)
Ned A. Shearer (Speech)
Charles A. West (Chemistry and Biochemistry)

1973
Kirby A. Baker (Mathematics)
David Evans (Chemistry and Biochemistry)
Albert Hoxie (History)
Nhan Levan (Electrical Engineering)
Judith L. Smith (Physiological Science)

1974
Robert B. Edgerton (Anthropology, Psychiatry and Biobehavioral Sciences)
David S. Eisenberg (Chemistry and Biochemistry)

Victoria A. Fromkin (Linguistics)
Robert C. Neerhout (Pediatrics)
Andrea L. Rich (Speech)

1975
Alma M. Hawkins (World Arts and Cultures)
Morris Holland (Psychology)
Paul M. Schachter (Linguistics)
Stanley A. Wolpert (History)
Richard W. Young (Neurobiology)

1976
Marianne Celce-Murcia (Teaching English as a Second Language and Applied Linguistics)
Jesse J. Dukeminier (Law)
George R. Guffey (English)
Marlyn L. Kourilsky (Education)
Chand R. Viswanathan (Electrical Engineering)

1977
Michael J.B. Allen (English)
Henry M. Cherrick (Dentistry)
Richard C. Maxwell (Law)
J. William Schoff (Earth and Space Sciences)
Verne N. Schumaker (Chemistry and Biochemistry)

1978
William R. Allen (Economics)
Michael E. Jung (Chemistry and Biochemistry)
J. Fred Weston (Management)
Thomas D. Wickens (Psychology)
Johannes Wilbert (Anthropology)

1979
Steven Krantz (Mathematics)
Paul I. Rosenthal (Communication Studies)
Christopher Salter (Geography)
James H. White (Mathematics)
Stephen C. Yeazell (Law)

1980
A.R. Braunmuller (English)
Fredi Chiappelli (Italian)
Kenneth L. Karst (Law)
Richard F. Logan (Geography)
Ronald F. Zernicke (Physiological Science)

1981
Arnold J. Band (Near Eastern Languages and Cultures)
Charles L. Batten, Jr. (English)
Lucien B. Guze (Medicine)
Gerald Lopez (Law)
Andy Wong (Dentistry)

1982
Dean Bok (Neurobiology)
Robin S. Liggert (Architecture and Urban Design, Urban Planning)
William Melnitz (Theater)
Joseph K. Perloff (Medicine)
Karen E. Rowe (English)

1983
Claude Bernard (Physics and Astronomy)
Bryan C. Ellickson (Economics)
Robert S. Elliott (Electrical Engineering)
Albert D. Hutter (English)

1984
Charles M. Knobler (Chemistry and Biochemistry)

1985
Robert Dallek (History)
Hooshang Kangerloo (Radiological Sciences)
Jeffrey Prager (Sociology)
Stanley Siegel (Law)

1986
Patricia M. Greenfield (Psychology)
David F. Martin (Computer Science)
Mark W. Plant (Economics)
Ross F. Shideler (Comparative Literature, Scandinavian Section)
William D. Warren (Law)

1987
Lawrence W. Bassett (Radiological Sciences)
E. Bradford Burns (History)
Kenneth W. Graham, Jr. (Law)
Howard Suber (Film and Television)
Richard A. Yarborough (English)

1988
Alison G. Anderson (Law)
Ann L.T. Bergren (Classics)
Charles A. Berst (English)
Michael J. Goldstein (Psychology)
Richard L. Sklar (Political Science)

1989
John B. Garnett (Mathematics)
Kathleen L. Komar (Comparative Literature, Germanic Languages)
William G. Roy (Sociology)
Stephen Yenser (English)
Eric M. Zolt (Law)

1990
Peter M. Narins (Physiological Science)
Gary B. Nash (History)
John S. Wiley (Law)
Merlin C. Wittrock (Education)
Ruth Yeazell (English)

1991
Michael R. Asimow (Law)
Edward G. Berenson (History)
Robert A. Bjork (Psychology)
Margaret FitzSimmons (Urban Planning)
Kenneth R. Lincoln (English)

1992
Bruce L. Baker (Psychology)
Paul B. Bergman (Law)
Robert B. Goldberg (Molecular, Cell, and Developmental Biology)
Peter E. Kollock (Sociology)
Eugen Weber (History)
1993
Calvin B. Bedient (English)
Richard B. Kaner (Chemistry and Biochemistry)
Katherine C. King ( Classics)
William G. Ouchi (Management)
Bruce Schulman (History)

1994
David A. Binder (Law)
Jon P. Davidsen ( Earth and Space Sciences)
Melvin Oliver (Sociology)
Barbara L. Packer (English)
E. Victor Wolfenstein ( Political Science)

1995
Noriko Akatsuka (East Asian Languages and Cultures)
Douglas Hollan (Anthropology)
V.A. Kolve (English)
Jerome Rabow (Sociology)
Paul V. Reale (Music)

1996
Walter Allen (Sociology)
Judith A. Carney (Geography)
William M. Gelbart (Chemistry and Biochemistry)
Phyllis A. Guzé (Medicine)
Peter B. Hammond (Anthropology)

1997
Uptal Banerjee (Molecular, Cell, and Developmental Biology)
Christine D. Gutierrez (Education)
Susan McClary (Musicology)
Arnold B. Scheibel (Neurobiology, Psychiatry and Biobehavioral Sciences)
Ivan Szelenyi (Sociology)

1998
George W. Bernard (Dentistry)
Verónica Cortínez (Spanish and Portuguese)
Wayne A. Dollase (Earth and Space Sciences)
Jayne E. Lewis (English)
Joshua S.S. Muldavin (Geography)

1999
Grace Ganz Blumberg (Law)
Alessandro Duranti (Anthropology)
Richard H. Gold (Radiological Sciences)
N. Katherine Hayles (English)
Bernard Weiner (Psychology)

2000
Scott H. Chandler (Physiological Science)
Efrain Kristal (Spanish and Portuguese)
Hector F. Myers (Psychology)
David Sklaneky (Law)
Robert N. Watson (English)

2001
Michael J. Colacurcio (English)
Glen M. MacDonald (Geography)
Kevin Terraciano (History)
James W. Trent (Education)
Brian Walker (Political Science)

2002
Christopher R. Anderson (Mathematics)
Steven G. Clarke (Chemistry and Biochemistry)
Anne K. Mellor (English)
Lee Todd Miller (Pediatrics)
Grant S. Nelson (Law)

2003
Joseph J. DiStefano III (Computer Science, Medicine)
Robin L. Garrell (Chemistry and Biochemistry)
A.P. Gonzalez (Film, Television, and Digital Media)
Mitchell B. Morris (Musicology)
Kirk J. Stark (Law)

2004
David B. Kaplan (Philosophy)
Kathryn A. Morgan (Classics)
Mark R. Morris (Physics and Astronomy)
Jesús Torrecilla (Spanish and Portuguese)
Joan Waugh (History)

2005
Roger Bourland (Music)
Robert G. Fovell (Atmospheric and Oceanic Sciences)
Elma González (Ecology and Evolutionary Biology)
Elizabeth A. Marchant (Spanish and Portuguese)
Mike Rose (Education)
Keith D. Stolzenbach (Civil and Environmental Engineering)

2006
Robert A. Gurval (Classics)
Patricia M. McDonough (Education)
Albert J. Moore (Law)
Kenneth A. Nagy (Ecology and Evolutionary Biology)
David L. Rigby (Geography)
Geoffrey W. Symcox (History)

2007
John A. Agnew (Geography)
Devon Carbado (Law)
Valerie J. Matsumoto (Asian American Studies, History)
Behzad Razavi (Electrical Engineering)
Daniel G. Solórzano (Education)
Blaire Van Valkenburgh (Ecology and Evolutionary Biology)

2008
Elizabeth L. Bjork (Psychology)
Peggy M. Fong (Ecology and Evolutionary Biology)
Linda C. Garro (Anthropology)
Teofilo F. Ruiz (History)
Benjamin J. Schwartz (Chemistry and Biochemistry)
Robert S. Winter (Music)

2009
Roger Detels (Epidemiology)
Luisa M. Iruela-Arispe (Molecular, Cell, and Developmental Biology)
Yung-Ya Lin (Chemistry and Biochemistry)
Mark B. Moldwin (Earth and Space Sciences)
Susan J. Plann (Applied Linguistics, Spanish and Portuguese)
Janice L. Reiff (History)

2010
Katsushi Arisaka (Physics and Astronomy)
Daniel T. Blumstein (Ecology and Evolutionary Biology)
John T. Caldwell (Film, Television, and Digital Media)
Albert J. Courey (Chemistry and Biochemistry)
Jerry Kang (Law)
Steven P. Reise (Psychology)

2011
Ann E. Carlson (Law)
Andrew Christensen (Psychology)
Ian Krouse (Music)
Patricia E. Phelps (Integrative Biology and Physiology)
Yahya Rahmat-Samii (Electrical Engineering)
Philip W. Rundel (Ecology and Evolutionary Biology)

2012
C. Cindy Fan (Geography)
Brandon Koretz (Geriatric Medicine)
Mignon R. Moore (Sociology)
Claudia Parodi-Lewin (Spanish and Portuguese)
Jonathan P. Stewart (Civil and Environmental Engineering)
Christopher S. Tang (Management)

2013
Michael F. Carey (Biological Chemistry)
John J. Colicelli (Biological Chemistry)
Rachelle H. Crosbie-Watson (Integrative Biology and Physiology)
Jonathan H. Grossman (English)
Lynn A. Hunt (History)
David Delgado Shorter (World Arts and Cultures/Dance)
Megan McDonnell Sweeney (Sociology)

2014
Paul H. Barber (Ecology and Evolutionary Biology)
Earl G. Freymiller (Dentistry)
Neil K. Garg (Chemistry and Biochemistry)
Hilary A. Godwin (Environmental Health Sciences)
Hiroshi Motomura (Law)
Felicity A. Nussbaum (English)

2015
Robert W. Fink (Musicology)
Alan Garfinkel (Integrative Biology and Physiology, Medicine)
Thomas W. Gillespie (Geography)
Tyrone C. Howard (Education)
Daniel T. Kamei (Biological Chemistry)
Joanna C. Schwartz (Law)

2016
Joseph E. Bristow (English)
Mark S. Goorsky (Materials Science and Engineering)
Frank A. Laske (Molecular, Cell, and Developmental Biology)
Elisabeth C. Le Guin (Musicology)
James O. Lloyd-Smith (Ecology and Evolutionary Biology)
Non-Academic Senate Recipients

In spring of 1985, the Office of Instructional Development sponsored an award to three instructors who are not members of the Academic Senate. This category includes lecturers, and adjunct and clinical faculty members. All non-Academic Senate faculty members who are nominated by their departments are eligible. Recipients are selected by the Academic Senate Committee on Teaching, using the same criteria as those used for Academic Senate members.

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1985
L. Geoffrey Cowan (Communication Studies)
Mary Elizabeth Perry (History)
Linda Diane Venis (English)

1986
David Cohen (Mathematics)
Johanna Harris-Heggie (Music)
Paul Von Blum (Interdisciplinary)

1987
Carol D. Berkowitz (Pediatrics)
Jeffrey I. Cole (Communication Studies)
Cheryl Giuliano (Writing Programs)

1988
Jeanne Gunner (Writing Programs)
Art Huffman (Physics and Astronomy)
David G. Kay (Computer Science)

1989
S. Scott Barchy (History)
Bonnie Lisle (Writing Programs)
Kenneth R. Pfeiffer (Civil Engineering, Psychology)

1990
Lisa Gerrard (Writing Programs)
Andres Durstenfeld (Biology)
Dorothy Phillips (Physiological Science)

1991
Marde S. Gregory (Speech)
Betsy A. Luceigh (Chemistry and Biochemistry)
Cheryl Pfoff (Writing Programs)

1992
Janet Goodwin (Applied Linguistics, Teaching English as a Second Language)
Janette Lewis (Writing Programs)
Yihua Wang (East Asian Languages and Cultures)

1993
Stephen Dickey (English)
Sondra Hale (Anthropology)
Jutta Landa (Germanic Languages)

1994
Steven K. Derian (Law)
Linda Jensen (Applied Linguistics, Teaching English as a Second Language)
Shelby Popham (Writing Programs)

1995
Nicholas Collaros (French)
Kristine S. Knaplund (Law)
Christopher Mott (English)

1996
Scott Bowman (Political Science)
Timothy Tangerlini (Scandinavian Section)
G. Jennifer Wilson (Honors, Undergraduate Programs)

1997
William McDonald (Film and Television)
Stuart Slavin (Pediatrics)
Sung-Ock Sohn (East Asian Languages and Cultures)

1998
Paul Frymer (Political Science)
George Gadda (Writing Programs)
Julie Giese (English)

1999
Patricia Gilmore-Jaffe (Writing Programs)
Emily Schiller (English)
Scott Votey (Emergency Medicine)

2000
Nicole Dufresne (French)
Thomas Holm (Law)
Richard P. Usatine (Family Medicine)

2001
George Leddy (Geography, International Development Studies)
Sandra Mano (Writing Programs)
L. Jean Perry (Molecular, Cell, and Developmental Biology)

2002
Steven Hardinger (Chemistry and Biochemistry)
Colleen K. Keenan (Nursing)
Cynthia Merrill (Writing Programs)

2003
Marjorie A. Bates (Chemistry and Biochemistry)
Anita McCormick (Writing Programs)
Richard Stevenson III (Dentistry)

2004
Andrew Hsu (Philosophy)
Kimberly Jansma (French and Francophone Studies)
Jennifer Westbay (Writing Programs)

2005
Susan Griffin (Writing Programs)
William Grisham (Psychology)
AnaDah Keshishian (Near Eastern Languages and Cultures)

2006
Roger E. Bohman (Molecular, Cell, and Developmental Biology)
Jo Ann Damron-Rodriguez (Social Welfare)
Gerald Wilson (Ethnomusicology)

2007
Nancy Ezer (Near Eastern Languages and Cultures)
Fred A. Hagiji (Health Services)
Eric Marin (Film, Television, and Digital Media)

2008
Leigh C. Harris (Writing Programs)
Chi Li (Ethnomusicology)
Robert B. Trelease (Pathology and Laboratory Medicine)

2009
Brent Corbin (Physics and Astronomy)
Laurence Lavelle (Chemistry and Biochemistry)
Fariba Younai (Dentistry)

2010
Patrick D. Goodman (Law)
Amy H. Kagi (Medicine)
Rory M. Kelly (Film, Television, and Digital Media)

2011
Latifeh E. Hagiji (Near Eastern Languages and Cultures)
Dario Nardi (Anthropology)
John (Jay) Phelan (Life Sciences Core Curriculum)
Guidelines provide that the prize “recognize and reward UCLA faculty members who have demonstrated extraordinary accomplishment in teaching and in research or creative activity...and who have made a significant contribution to undergraduate education.” Preference for recipients is given to faculty members in mid-career, who do not often receive the extra professional incentives available to distinguished senior faculty.

The Gold Shield Faculty Prize is awarded to each recipient for scholarly use. The awardee is selected every year by a committee of peers appointed by the Academic Senate. Student and Gold Shield representatives are included. Recipients must come from fields that have undergraduate programs at UCLA.

1986-88
Michael E. Jung (Chemistry and Biochemistry)

1988-90
Patricia M. Greenfield (Psychology)

1990-92
Jeffrey C. Alexander (Sociology)

1992-94
J. William Schopf (Earth and Space Sciences)

1994-96
Albert R. Braunmuller (English)

1996-98
Peter M. Narins (Physiological Science)

1998-00
Robert B. Goldberg (Molecular, Cell, and Developmental Biology)

2000-02
Utpal Banerjee (Molecular, Cell, and Developmental Biology)

2002-04
Richard B. Kaner (Chemistry and Biochemistry)

2004-06
Andrea M. Ghez (Physics and Astronomy)

2006-08
Robert N. Watson (English)

2007-09
William J. Kaiser (Electrical Engineering)

2008-10
Alicia Gaspar de Alba (Chicana and Chicano Studies)

2009-11
Robin L. Garrell (Chemistry and Biochemistry)

2010-12
David H. Gere (World Arts and Cultures)

2011-13
Matthew D. Lieberman (Psychology)

2012-14
Kevin B. Terraciano (History)

2013-15
Luisa M. Iruela-Arispe (Molecular, Cell, and Developmental Biology)

2014-16
Brenda Stevenson (History)

2015-17
Neil K. Garg (Chemistry and Biochemistry)

2016-18
Charlene Villaseñor Black (Art History)

2017-19
Daniel T. Blumstein (Ecology and Evolutionary Biology)

2018-20
Daniel M.T. Fessler (Anthropology)

2019-21
Paul H. Barber (Ecology and Evolutionary Biology, Environment and Sustainability)

2020-22
Janet M. O’Shea (World Arts and Cultures/Dance)

UCLA University Professors

The title University Professor is reserved for scholars of international distinction, who are recognized and respected as teachers of exceptional ability. Appointments may be made from distinguished tenured faculty. University Professors are appointed by the Regents, at the recommendation of the president after consultation with the chancellor and Academic Senate of the appointee’s home campus.

Two UCLA faculty have been appointed University Professors.

M. Frederick Hawthorne, PhD, Emeritus
(Chemistry and Biochemistry)

Owen N. Witte, MD (Microbiology, Immunology, and Molecular Genetics)
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