A Word from the Chancellor...

If, as Alexander Pope suggested, a little learning is a dangerous thing, those who use this publication wisely should be in no jeopardy, for it contains not just a few but literally thousands of avenues to knowledge.

The catalog, in a very real sense, offers the most accurate guide to the University, for it provides a detailed map of the full academic landscape, including both the highways and byways of scholarly pursuit.

UCLA, aided by funding from the state, the nation and private individuals, has assembled an unusually gifted faculty and provided it with a modern research and teaching facility. The catalog offers the key not only to the standard curriculum but to the hundreds of special courses made possible by the faculty's widely varied expertise.

I wish you well as you explore these many possibilities and chart your academic journey. May you find your expedition intellectually stimulating and rewarding.

Charles E. Young
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<td>November 1, 1980</td>
<td>July 1, 1981</td>
<td>October 3, 1981</td>
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<td>1147 Murphy Hall (last day will depend on number of applications</td>
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<td>received)</td>
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<td>First day to obtain &quot;Student Parking Request&quot; for campus parking</td>
<td>May 1</td>
<td>not applicable</td>
<td>not applicable</td>
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<td>permit at Campus Parking Service</td>
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<td>*Distribution of registration materials by letter groups for</td>
<td>June 8</td>
<td>November 12</td>
<td>February 11</td>
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<td>continuing students</td>
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<td>Schedule of Classes goes on sale at Main Cashier’s Office, 1125</td>
<td>June 10</td>
<td>November 12</td>
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<td>Murphy Hall, and Students’ Store, Ackerman Union</td>
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<td>Eligibility date for new and reentrant student registration by</td>
<td>July 1</td>
<td>November 2</td>
<td>January 15</td>
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<td>mail</td>
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<td>First day for UCLA Student Health Insurance enrollment (purchase</td>
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<td>December 1</td>
<td>March 22</td>
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<td>August 14</td>
<td>December 4</td>
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<td>payment and enrollment in classes</td>
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<td>processed during &quot;By Mail&quot; period and undergraduate enrollment-</td>
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<td>Subject A English Placement Test</td>
<td>September 15</td>
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Fall 1981 | Winter 1982 | Spring 1982
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**Last day:**
1. For UCLA Student Health Insurance enrollment
2. To change Study List (add, drop courses) without fee
3. To file Study List card without fee

Registrar mails Official Study List to all registered students

Last day for continuing students to file applications for undergraduate scholarships for 1982-83

Last day to file (without fee) bachelor’s Degree Candidate card for current quarter with Registrar, Window A, Murphy Hall

WITH APPROVAL OF ACADEMIC DEAN:
1. Last day for undergraduates to add or drop courses on Official Study List with $3 petition fee
2. Last day for undergraduates to file Late Study List card with $10 fee

Last day to file removal of incomplete petition ($5 fee) with Registrar, Window A, Murphy Hall

Last day for undergraduates to change GRADING BASIS (optional P/NP) with $3 petition fee and APPROVAL OF ACADEMIC DEAN

Last day to file (with $3 fee) bachelor’s Degree Candidate card with Registrar, Window A, Murphy Hall

INSTRUCTION ENDS
Final examinations
QUARTER ENDS
Unofficial copy of previous quarter’s grades available at Registrar’s Office, Window A, Murphy Hall

Academic and Administrative Holidays:

*Commencement

*Tentative dates—consult quarterly Schedule of Classes

Note: Anything submitted or requested as an exception to a published deadline will be subject to an additional penalty fee of $10.00
A Mutual Obligation

The UCLA Undergraduate Catalog has one basic purpose—communication—but it works in two directions. These pages describe the workings of an undergraduate education at UCLA and your responsibilities toward the rules, regulations and requirements. At the same time, the catalog spells out the responsibilities which UCLA has towards you. Thus, the UCLA Undergraduate Catalog is a guidebook to the details of a mutual obligation for undergraduate UCLA students. (Graduate students or undergraduates interested in graduate study at UCLA can get a copy of the UCLA Graduate Catalog at the ASUCLA Students' Store.)

Every attempt has been made to provide complete information within this guidebook, and careful study of its contents should answer most questions. Counselors in the College of Letters and Science report that nearly half of the people asking for help have never read the catalog.

How To Use This Book

Basically, the UCLA Undergraduate Catalog is split into four sections. The first section explains the requirements to get into the University. The second section is concerned with presenting the different Colleges, Schools and programs available to students. The third deals with how to survive at the University. Finally, the last section outlines alphabetically the different departments with their majors and requirements and gives detailed course descriptions.

The catalog's first section deals with the application process and eligibility requirements to attend UCLA. It also explains how to register and enroll in courses.

The second section deals with the various Colleges and Schools that comprise UCLA. The entrance and academic requirements and major fields of study within each College and School are explained in detail.

The third section of the catalog explores the social and economic aspects of UCLA. This section covers financial aid, parking information, on- and off-campus housing, general University life such as clubs, fraternities, sororities and athletics, and the other numerous services and activities offered by the University.

The final and most lengthy part of the book contains alphabetically arranged course descriptions. A thorough investigation into a specific College, School or major would not be complete until an examination of course content is made.

To best utilize this catalog, see the detailed index in the back.

About UCLA

UCLA has come a long way in the 52 years since it moved from its first home on Vermont Avenue to a campus in the middle of what had once been a beanfield on the western outskirts of Los Angeles. Back in 1919, when UCLA had its beginnings at the State Normal School on Vermont Avenue, they called it "The Southern Branch" of the University of California at Berkeley. By the time the University moved to Westwood in 1929, it was already known as "University of California at Los Angeles" (the "at" became a comma in 1958). Starting a new life in Westwood with four buildings surrounding the main quadrangle, UCLA began the phenomenal growth which would in time bring full use of its 411 acres.

The current numbers alone are impressive: 13 Schools and Colleges, 70 departments of instruction, 23 research centers and institutes, 18 libraries, 20,000 undergraduates, 11,000 graduate students.

However, there is another kind of growth that is even more important than mere size. It's a growth in excellence, not only in facilities but in people. UCLA is consistently ranked among the leading universities in the country. UCLA professors have won Nobel Prizes, National Academy of Science memberships, and many Guggenheim and Fulbright awards. In athletics UCLA's teams have won a collection of national collegiate championships in almost every field of men's and women's competition. And UCLA has done more than meet the complex challenge of offering excellence in instruction. As a public University—a public trust—UCLA also meets a daily commitment to public service. The spectrum of contributions UCLA has made is unique in scholarship, research, science and the arts touches the lives of people every day.

Part of a Plan

UCLA is part of the University of California statewide system, a network of resources for knowledge that literally spans the state with its nine campuses plus its field stations, extension centers and other facilities in more than 80 locations throughout California.

The system as a whole is governed by the Board of Regents. Among its powers is the appointment of the President of the University, its chief executive officer. Currently the President is David S. Saxon, a former UCLA faculty member who also held the post of Executive Vice Chancellor here. In addition to setting broad general policy for the University of California system, including budgetary decisions, the Board of Regents also appoints (with the advice of Dr. Saxon) the top administrative officers of the various campuses. The Academic Senate, made up of the faculty and designated administrators, sets the conditions for admission, authorizes courses and curricula and makes rules for the granting of degrees and certificates.

A City Within a City

Another factor that contributes to the climate of excellence at UCLA is diversity.

The location of UCLA offers a collection of contrasts. Set in an urban environment, the University is ten minutes away by car from either the Santa Monica Mountains or the Pacific Ocean. On campus, concrete coexists with open green areas.

Our faculty and student body represent a diversity of backgrounds and personal experience, a blend which helps to support an institutional attitude of personal exploration and individual growth.

UCLA and You

You will find that the combination of size and diversity at UCLA presents a final set of mutual obligations. UCLA offers unmatched opportunities, but the responsibility to seek out those opportunities rests with you.
Admission,
Registration &
Enrollment

Nondiscrimination
The University of California, in compliance with Titles VI and VII of the Civil Rights Act of 1964, Title IX of the Education Amendments of 1972 (45 CFR 86), and Sections 503 and 504 of the Rehabilitation Act of 1973, does not discriminate on the basis of race, color, national origin, religion, sex or handicap in any of its policies, procedures or practices; nor does the University, in compliance with the Age Discrimination in Employment Act of 1967 and Section 402 of the Vietnam Era Veterans Readjustment Act of 1974, discriminate against any employees or applicants for employment on the basis of their age or because they are disabled veterans or veterans of the Vietnam era. This nondiscrimination policy covers admission, access and treatment in University programs and activities, and application for and treatment in University employment.

In conformance with University policy and pursuant to Executive Orders 11246 and 11375, Section 503 of the Rehabilitation Act of 1973, and Section 402 of the Vietnam Era Veterans Readjustment Act of 1974, the University of California is an affirmative action/equal opportunity employer.

Inquiries regarding the University’s equal opportunity policies may be directed to the Campus Council, 2241 Murphy Hall, UCLA, or the director of the office for Civil Rights, Department of Health, Education & Welfare.

Students may complain of any action which they believe discriminates against them on the ground of race, color, national origin, religion, sex or handicap and may contact the Dean of Student Relations, 2224 Murphy Hall, for further information and procedures.

Undergraduate Admission
The admission requirements of the University of California are founded on two basic principles: first, that the best assurance of success in the University is shown by the high quality of scholarship in previous work, and second, that the study of certain specific subjects will provide students not only with sound preparation for the range of University courses but also with reasonable freedom in choosing their field of specialization.

Fulfilling the requirements stated below, however, may not necessarily assure admission to the campus of your first choice. On some University of California campuses, limits have had to be set for the enrollment of new students; thus, not everyone who meets the minimum requirements can be admitted. At UCLA, for example, students who are or who would be college seniors are discouraged from applying.

Admission to Freshman Standing—Residents
An applicant for admission to freshman standing is one who has not enrolled in any college-level institution since graduation from high school (except for a summer session immediately following high school graduation).

The requirements listed below apply to California residents; if you are a nonresident, please see the “Special Requirements for Nonresidents” discussion later in this section of the catalog.

High School Subject Requirements
Courses offered in satisfaction of the following subject requirements must be included on a list of courses from each California high school and be certified by the University. If the high school is not located in California but is regionally or state accredited, appropriate courses will be considered acceptable.

(A) History—1 Year
This must consist of a year course in United States history or one-half year of United States history and one-half year of civics or American government.

(B) English—4 Years
These must be university preparatory courses in English composition and/or literature with no more than one year taken in the ninth grade.

(C) Mathematics—2 Years
These must consist of university preparatory courses in such subjects as algebra, geometry, trigonometry, calculus, elementary functions and mathematical analysis.

(D) Laboratory Science—1 Year, completed after the ninth grade
This must be a year course in one laboratory science.

(E) Foreign Language—2 Years
These must be in one language. Any foreign language with a written literature is acceptable.

(F) Advanced Course—1 or 2 Years
This must be chosen from one of the following:

Mathematics—A total of 1 year of mathematics beyond the 2 years offered toward the mathematics requirement.

Foreign Language—Either an additional year in the same language offered toward the foreign language requirement or 2 years of another foreign language.

Scholarship and Examination Requirements
Eligibility for admission is based on a combination of your grade-point average in the “A-F” subject requirements listed above (grades received in courses taken in the ninth grade or earlier are not used in determining your scholarship average) and the scores on either the SAT examination given by the College Entrance Examination Board or the ACT test given by the American College Testing Program.

In addition, you are required to submit scores for three achievement tests of the College Entrance Examination Board, which must be taken in the following areas:

(1) English composition
(2) Mathematics
(3) Social studies or a foreign language

Eligibility Table
The following Eligibility Index Table may be used by California high school graduates and residents to determine their eligibility for freshman admission to the University:

<table>
<thead>
<tr>
<th>GPA</th>
<th>ACT Composite</th>
<th>SAT Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.78</td>
<td>35</td>
<td>1600</td>
</tr>
<tr>
<td>2.79</td>
<td>35</td>
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<tr>
<td>3.02</td>
<td>24</td>
<td>1040</td>
</tr>
</tbody>
</table>
To qualify, you must achieve high scores in the examinations required of all eligible applicants. Your total score on the Scholastic Aptitude Test must be at least 1100; the scores on the three Achievement Tests must total at least 1650 with no score less than 500 on an individual achievement test.

Taking the Tests
You can obtain information about the tests or make arrangements for taking them by applying to the Educational Testing Service, 1947 Center Street, Berkeley, CA 94704 or the American College Testing Program, Registration Unit, PO Box 168, Iowa City, IA 52240. Scores will be regarded as official only if they are sent to the Undergraduate Admissions Office directly from these testing services.

High School Proficiency Exam
The University of California will accept the Certificate of Proficiency, awarded by the State Department of Education upon successful completion of the California High School Proficiency Examination, proficiency tests from other states and the General Educational Development Certificate (GED) in lieu of the regular high school diploma. However, all other University entrance requirements (subject pattern, grades, tests) must be met. The date of graduation on University records will be the date of the certificate. Entrance by CEEB scores will remain an option for the student ineligible on the basis of high school record.

Admission to Advanced Standing—Residents
The University defines an advanced standing applicant as a high school graduate who has been a registered student in another college or university or in college-level extension classes other than a summer session immediately following high school graduation. An advanced standing applicant may not disregard the college record and apply for admission as a freshman.

Requirements
As you will see below, the requirements for admission in advanced standing vary according to your high school record and when you graduated from high school (for further details, see the "Undergraduate Application Packet" available at any UC campus). If you are a non-resident applicant, you must also meet the additional requirements described under "Special Requirements for Nonresidents" later in this section. If you have completed less than twelve quarter or semester units of transferrable college credit since high school graduation, you must also satisfy the examination requirement for freshman applicants.

The transcript you submit from the last college you attended must show, as a minimum, that you were in good standing and that you had earned a grade-point average of 2.0 or better. If your grade-point average fell below 2.0 at any one college you attended, you may have to meet additional requirements in order to qualify for admission.

Your grade-point average is determined by dividing the total number of acceptable units you have attempted into the number of grade points you earned on those units. You may repeat courses that you completed with a grade lower than "C" up to a maximum of 16 quarter units without penalty.

The scholarship standard is expressed by a system of grade points and grade-point averages earned in courses accepted by the University for advanced standing credit. Grade points are assigned as follows: each unit of "A"—4 points, "B"—3 points, "C"—2 points, "D"—1 point, "I" and "F"—no points.

As an advanced standing applicant you must also meet one of the following conditions:

1. If you were eligible for admission to the University as a freshman, you may be admitted in advanced standing at any time after you have established an overall grade-point average of 2.0 or better at another college or university.
2. If you were not eligible for admission as a freshman because you had not studied one or more of the required high school subjects, you may be admitted after you have:
   a. Established an overall grade-point average of 2.0 or better at another college or university.
   b. Completed, with a grade of "C" or better, appropriate college courses in the high school subjects that you lacked.
   c. Completed twelve or more quarter or semester units of transferrable college credit since high school graduation or have successfully passed the examinations required of freshman applicants.
3. If you were not eligible for admission as a freshman because of low scholarship or a combination of low scholarship and a lack of required subjects, you may be admitted after you have:
   a. Established an overall grade-point average of 2.4 or better at another college or university.
   b. Completed, with a grade of "C" or better, appropriate college courses in high school subjects that you lacked. Up to two units (a unit is equal to a year's course) of credit may be waived, or as an alternative, you must complete one college course in mathematics, one in English and one in either U.S. history, a laboratory science or a foreign language. You must pass these courses with a grade of "C" or better. Courses other than mathematics must be transferrable to the University. The course in mathematics must complete a sequence of...
courses at least as advanced as the equivalent of two years of high school algebra (elementary and intermediate) or one year of algebra (elementary) and one year of high school geometry and

(c) Completed 84 quarter units (56 semester units) of college credit in courses accepted by the University for transfer.

Credit for Work Taken at Other Colleges and by Examination

The University grants unit credit for courses appropriate to its curriculum which have been completed in other regionally accredited colleges and universities. This credit is subject to the restrictions of the senior residence requirement of the University (you can find this requirement under the “Undergraduate Degree Requirements” section of this catalog).

As an integral part of the system of public education in California, the University accepts, usually at full unit value, approved transfer courses completed with satisfactory grades in the public junior colleges of the State. Such transfer courses are limited, however, to a maximum of 70 semester units or 105 quarter units. Individual Colleges and Schools should be consulted concerning additional credit limitations.

Extension courses taken at an institution other than the University may not necessarily be acceptable. The decision regarding their acceptability rests with the Office of Undergraduate Admissions.

In addition, credit may be allowed for having completed with high scores, certain tests of the College Entrance Examination Board. These include Advanced Placement Tests. You should be sure to contact the Undergraduate Admissions Office before taking any examinations to determine whether they are acceptable.

Special Requirements for Nonresidents

The regulations discussed below are designed to admit out-of-state applicants whose standing, as measured by scholastic records, is in the upper half of those who would be eligible under the rules for California residents.

You can find a full definition of residence and nonresidence in the “Money” section of this catalog.

Freshman Standing

(See also the requirements for “Admission to Freshman Standing—Residents” discussed earlier in this section.)

Graduation from High School—The acceptability of records from high schools outside California will be determined by the Office of Undergraduate Admissions.

Subject Requirements—The same subject pattern as for California residents is required.

Scholarship Requirements—You must have maintained a grade-point average of 3.4 or higher in the required high school subjects (grade points are assigned as follows: each unit of “A” = 4 points, “B” = 3 points, “C” = 2 points, “D” = 1 point, “I” and “F” = no points).

Examination Requirements—A nonresident applicant must take the same SAT or ACT tests as those required of a resident applicant, however, the Eligibility Index applies to California residents only.

Admission By Examination Alone

A nonresident applicant who is not thus eligible for admission and who has not registered at any college-level institution (except to a summer session immediately following high school graduation) may qualify for admission by examination alone. The requirements for a nonresident applicant are the same as those for a resident (discussed earlier) except that the scores on the three Achievement Tests must total at least 1730 with a score of at least 500 on each test.

Advanced Standing

If you met the admission requirements for freshman admission as a nonresident, you must have a GPA of 2.8 or higher in college courses that are accepted by the University for transfer credit.

If you are a nonresident applicant who graduated from high school with less than a 3.4 GPA in the subjects required for freshman admission, you must complete at least 84 quarter units (56 semester units) of transferable work with a GPA of 2.8 or higher. If you lacked any of the required subjects in high school, you must have completed college courses in those subjects with a grade of “C” or higher. Up to two units (a unit is equal to a year’s course) of credit may be waived, or as an alternative, you must complete one college course in mathematics, one in English and one in either U.S. history, a laboratory science or a foreign language. You must pass these courses with a grade of “C” or better. Courses other than mathematics must be transferable to the University. The course in mathematics must complete a sequence of courses at least as advanced as the equivalent of two years of high school algebra (elementary and intermediate) or one year of algebra (elementary) and one year of high school geometry.

Applicants from Other Countries

The credentials of an applicant for admission from another country are evaluated in accordance with the general regulations governing admissions. An application, official certificates and detailed transcripts of record should be submitted to the Office of Undergraduate Admissions early in the appropriate filing period (see the “Applying for Undergraduate Admission” section which follows). Doing so will allow time for exchange of necessary correspondence and, if the applicant is admitted, will help in obtaining the necessary passport visa.

Proficiency in English

As an applicant from another country whose mother tongue is not English, you may be admitted only after demonstrating a command of English sufficient to permit you to profit by instruction at the University. Your knowledge of English will be tested by an examination upon your arrival at the University. Admission of an applicant who fails to pass this examination will be deferred until proficiency in the use of English has been acquired. The student held for the English as a Second Language requirement who fails to take the test on the date specified will not be permitted to register for the quarter for which admission is approved. If you are an applicant from a non-English-speaking country, you are urged to take the Test of English as a Foreign Language as a preliminary means of testing your ability. Arrangements to take the test may be made by writing directly to TOEFL, Educational Testing Service, 1947 Center Street, Berkeley, CA 94704. Results of the test should be forwarded to the University.

Language Credit

As a student from a country where the mother tongue is not English, you will be given college credit in your own language and its literature only for courses satisfactorily completed. Such credit will be allowed only for courses taken in your country at college-level institutions or for advanced level upper division or graduate courses taken at this University or at another English-speaking institution of approved standing.

Health Insurance

The University requires, as a condition of registration, that all foreign students attending UCLA on nonimmigrant visas supply written proof of adequate health insurance to the Student Health Service annually at the beginning of Fall Quarter. Additionally, all new and reentering foreign students are required to be cleared by Student Health for freedom from communicable disease. These students must have a chest X ray performed at Student Health Service.

Engineering

A freshman applicant seeking a bachelor’s degree in engineering whose entire secondary schooling was outside the United States must pass, with satisfactory scores, the College Entrance Examination Board Scholastic Aptitude Test (verbal and mathematics sections) and Achievement Examinations in English composition, physics and advanced mathematics before a letter of admission to engineering can be issued. Arrangements to take the tests in another country should be made directly with the Educational Testing Service, 1947 Center
Street, Berkeley, CA 94704. You should request that your scores for the tests be forwarded to the University.

**Applying for Undergraduate Admission**

An application form may be obtained at the Office of Undergraduate Admissions, 1147 Murphy Hall, University of California, Los Angeles, CA 90024, in person or by mail. The opening dates for filing applications for the year 1981-1982 are as follows: Fall Quarter 1981—November 1, 1980; Winter Quarter 1982—July 1, 1981; Spring Quarter 1982—October 1, 1981. Applications for the Fall 1982 Quarter should be filed during the month of November 1981.

A fee of $25 must accompany each application.

You are responsible for requesting the graduating high school (and each college attended if you apply in advanced standing) to send official transcripts of your record directly to the Office of Undergraduate Admissions. If admitted, you must return a “Statement of Intention to Register” and a “Statement of Legal Residence,” together with a nonrefundable fee of $50 which will be applied to the University Registration Fee if you register in the quarter for which you applied. Registration materials will be prepared only after you submit these forms.

**Subject A: English Composition**

Every undergraduate entrant must demonstrate an acceptable ability in English composition. There are several ways in which this requirement may be met before the first quarter in residence (see “Subject A: English Composition” in the “Undergraduate Degree Requirements” section of this catalog). Students who have not already fulfilled the requirement must, during their first quarter, enroll in either English Composition (or equivalent). Assignment in one of these courses is determined by performance on the Subject A Placement Test.

**Registration**

Registration is the payment of fees, enrollment in classes and the filing of various informational forms. Your name is not entered on official rolls of the University unless the registration process is completed as published by the Registrar in the Registration Circular and the Schedule of Classes. Failure to complete and file all forms by established deadlines may delay or prevent you from receiving credit for work undertaken.

Registration is divided into two equal, but separate processes. Registration materials (the “Registration Packet”) are issued by the Registrar and include cards for payment of the quarterly fees and a Study List card for requesting enrollment in classes. When both processes are completed, you are considered a duly registered and enrolled student for the quarter.

**Registration by Mail**

In advance of the quarter, the registration processes may be completed entirely through the mail. All eligible students are encouraged to register by mail. Currently registered students may obtain their “Registration Packet” for registration by mail at the time (approximately the fifth week of the preceding quarter) and place announced in the quarterly Schedule of Classes and on official campus bulletin boards. New and reentering students eligible to register by mail (see “Calendar”) will receive the “Registration Packet” in the mail from the Registrar approximately six weeks before the quarter begins. Complete instructions and envelopes for return of the cards are included with the registration materials. Each student is responsible for purchasing the quarterly Schedule of Classes, available in the Students’ Stores and at the Main Cashier’s Office, 1125 Murphy Hall.

The Registrar and the Main Cashier process enrollment and fee payment separately—date of payment does not affect enrollment provided such date is “on time” as published in the Schedule of Classes. At the completion of the by-mail process, materials are returned by first class postage to all students who participated. Students who requested enrollment will receive the results of the enrollment processing (see “Enrollment in Classes”), while students who paid their quarterly fees will receive the valid Registration Card (proof of student status for University services). These separate mailings are made approximately ten days prior to the beginning of the quarter.

**In Person**

At the beginning of the quarter, in-person processing of fee payment and enrollment in classes is available for all students not processed by mail. Dates and location of registration-in-person processing are announced in the Schedule of Classes, the Registration Circular and on official campus bulletin boards. Students eligible to register by mail are not issued specific times for registration in person, but are advised to observe the registration time recommended in the Registrar’s publications. By observing this suggested time schedule for reporting to register, you can complete the registration procedure with a minimal delay. New and reentering students processed for registration in person will be issued an “Appointment to Register in Person” by the admitting (or readmitting) officer within 10 days of receipt of their “Statement of Intention to Register” and classification of residence for tuition based on information provided on the accompanying “Statement of Legal Residence.” The appointment is your notice of the date, time and location that the Registrar will be prepared to issue individualized materials for your registration process.

While you may use a combination of both processes (by mail/in person) to pay fees and enroll in classes, the University requires that the full amount of fees be paid by the Friday before instruction begins. If fees are not paid by that date, all course enrollment is dropped.

Any student allowed to register on or after the first day of instruction is subject to a late fee and may request classes only after payment of fees is completed. Late registration with payment of a late fee is accepted during the first ten days of classes; enrollment in classes, however, may be difficult. No student may register after the tenth day of classes without prior written approval of the academic Dean and payment of all regular and late fees.

**Enrollment in Classes**

A student’s name is entered on official rolls of the University only after the registration process is completed as published in the Schedule of Classes. This quarterly publication is available in June for the Fall Quarter, in November for Winter Quarter and in February for Spring Quarter at the Students’ Stores and the Main Cashier’s Office (1125 Murphy Hall). To obtain a copy by mail, send $1.50 to ASUCLA Students’ Store, 306 Westwood Plaza, Los Angeles, CA 90024, ATTN: Mail Out.

The Schedule lists courses, enrollment restrictions, final examination groups, names of instructors, class times and meeting locations, a detailed calendar of deadlines, samples of registration materials and full instructions for registration (payment of fees and enrollment in classes). From the Schedule and with the aid of academic counseling, you can assemble a program of courses. Two or three alternate programs should be planned in case your first choice of courses is not available. You may not choose two courses in the same final examination group and should not choose classes which conflict in the class meeting times. If conflicts are unavoidable, you should consult with the instructor of each course at the first meeting of the class.

Enrollment requests are processed by the Registrar’s Office from the completed Study List card contained in the “Registration Packet” issued to each prospective student.

All continuing students (who are eligible to register in the same status without filing applications for readmission) have the opportunity and are encouraged to request their classes by mail.

New and reentering students who have completed the admission/readmission process by the eligibility date to register by mail (see “Calendar”) will receive registration materials from the Registrar approximately six weeks prior to the beginning of their first quarter.

Results of enrollment by mail are printed on a Tentative Study List mailed by the Registrar approximately ten days prior to the beginning of the quarter.
For the convenience of undergraduates who wish to enroll in person at computer terminals, an appointment to enroll is printed on the Tentative Study List. This appointment should be kept only if you want to make changes in enrollment and must be shown with the valid current quarter Registration Card and UCLA Student Photo ID Card. Students who did not participate in the by-mail process and those eligible for in-person processing will receive an enrollment appointment time as part of the registration (fee payment) process.

Study List
Your Official Study List is the list of courses in which you are officially enrolled at the end of the second week of classes (at which time a copy is mailed to you). You are responsible for every course listed and can receive no credit for courses not entered on it. Unapproved withdrawal from or neglect of a course entered on the Study List will result in a failing grade.

Changes in the Official Study List require approval of the Dean of your College, School or Graduate Division. Forms for this purpose may be obtained at the office of your Dean or department. The approved petition must be filed with the Registrar. There is a fee for such changes. See the calendar in the Schedule of Classes for the last day to add or drop courses or change grading basis.

Study List Limits
The minimal program for an undergraduate student to be considered full-time is three courses (12 units).

The normal program for an undergraduate student is four courses. A student on scholastic probation, except in the School of Engineering and Applied Science, is limited to a program of probation, except in the School of Engineering and Applied Science, is limited to a program of that goes into selecting a major are determined by the person who is doing the selecting—you. Additionally, carefully consider and evaluate general College or School requirements, the description of the set of courses offered in the major (you can find those descriptions in the “Courses” section of this catalog) and the requirements each department has for completing the program of study.

Lastly, all of these factors should be evaluated against the background of other time commitments—job, personal responsibilities—if you are to make an intelligent decision.

Exploring Majors
It is not necessary to declare your major in your freshman year—unless you are in the College of Fine Arts.

Many students prefer to explore the diversity of subjects and study areas at UCLA, many of which you may never have had a chance to investigate before.
But, keep in mind that certain majors, especially in the sciences, require early declaration. Some have enrollment quotas and will allow application by new majors only during a specified quarter.

Don’t lose sight of the fact, either, that each UCLA undergraduate student is limited to a total of 208 units—unless you are in the School of Engineering and Applied Science—to complete the academic program. So, if you want to declare a major, don’t wait too long.

A good way to explore majors is to check out introductory courses. In most departments, these are the classes with the course number designations under 100. They are a general introduction to the field of study, and they give an idea of the vocabulary of the major, and they preview the kind of questions studied in the field.

If You’ve Already Chosen

Naturally, if you have already decided on a major, you will begin taking the courses that are required to complete that major.

A Final First Word

Again, the specific major requirements are discussed in two sections in this book: under each College or School and in the description of each major in the “Courses” section. The College or School makes the rules governing your major; those rules vary with each School or College.

Undergraduate Degree Requirements

In working toward a degree, you should keep in mind the various levels on which you must satisfy requirements. College or School and department requirements are discussed fully in this section and in the “Courses” section of this catalog. The following are general University requirements for the bachelor’s degree.

Course Credit

The grades “A,” “A−”, “B+”, “B”, “B−”, “C+”, “C” and “P” in acceptable courses denote satisfactory progress toward a bachelor’s degree. The grades “C−”, “D+”, “D” and “D−” give unit credit toward the degree, but must be offset by grades of “C+” or better in other courses.

Scholarship

In order to qualify for a bachelor’s degree you must earn at least a “C” (2.0) average in all courses undertaken at the University of California—all campuses.

Subject A: English Composition

Every undergraduate entrant must demonstrate an acceptable ability in English composition. This requirement may be met by:

1. Achieving a grade of 5, 4 or 3 on the College Entrance Examination Board (CEEB) Advanced Placement Test in English or
2. Achieving a satisfactory score (600 or better) on the CEEB Achievement Test in English Composition or
3. Being exempted from the requirement by the Office of Admissions because of completion at another institution of an acceptable college-level course in English composition or
4. Passing a Subject A Placement Test required of all students who have not met the Subject A requirement in one of the ways described above.

Any student who does not meet the requirement in one of the ways described above must, during the first quarter of residence at the University, enroll in either English A or English 1. Assignment to one of these courses is determined by performance on the Subject A Placement Test. Should you fail in either course you will be required to repeat the course in the next succeeding quarter of your residence at the University.

Students from other countries whose native language is not English will be instructed by the Office of Admissions into the English as a Second Language program. Native English-speaking students from other countries whose native language is not English will be instructed by the English as a Second Language Program. Discussions of the requirement for American history and of the principles of American institutions under the federal and state constitutions. This requirement may be met by one of the following methods:


Equivalent courses completed in University Extension may be used to fulfill the requirement. Equivalent courses taken at other collegiate institutions and accepted by the Board of Admissions may also be used to fulfill the requirement.

2. By presentation of a certificate of satisfaction of the present California requirement as administered in another collegiate institution within the State.

3. Satisfactory completion with an average grade of “B” or better of a year’s course in high school of American history or American government or a one-year combination of the two effective with the student entering UCLA in Spring 1972 or later.

Candidates for a teaching credential, but not for a degree, must take one of the following courses: History 7A, 7B, 151A or 151B or Political Science 172A or 172B.

An alien attending the University on an “F-1 or J-1” student visa may, by showing proof of temporary residence in the United States, petition for exemption from this State requirement.

More information regarding the requirement is available from the Undergraduate History Counselor, 6248 Bunche Hall.

Senior Residence

Of the last 48 units you complete for a bachelor’s degree 36 must be earned in residence in the College or School of the University of California in which the degree is to be taken. When translated to the course structure at UCLA this normally implies that nine of the last 12 courses a student offers for a bachelor’s degree must be earned in the College or School in which the degree is to be taken. Not more than 16 of the 36 units may be completed in Summer Session on the campus of residence.

Candidacy for Degree

You should notify the Registrar at least three quarters before you expect to receive the bachelor’s degree by completing and filing the Degree Candidate (DC) card in the quarterly “Registration Packet.” The completed DC card must be filed (even though one or more DC cards were filed at earlier registrations) no later than the tenth day of classes in the quarter in which you expect to complete work for the degree.

Degree Candidate cards accepted after the twenty-fifth day of classes are subject to a late fee. See the calendar in the Schedule of Classes for the late filing dates.

Change of College or Major

A change of College (or major) by an undergraduate student requires the approval of the College (or department) to which admission is sought. Applications are made by petition, which may be obtained from the College or School office. No student is permitted to change majors after the opening of the last quarter of the senior year.
College of Letters and Science

The College of Letters and Science is the largest college at UCLA. It ranges over more than 70 majors in the humanities, social sciences, life sciences and physical sciences. Its curricula lead to a degree of Bachelor of Arts or Bachelor of Science, normally awarded at the end of the twelfth quarter.

The degree programs are designed to expose students to a variety of intellectual possibilities by combining a reasonably wide distribution of courses and the opportunity to specialize in one particular field. To this end, students are required to select courses in the lower division that deal with general fundamentals of human knowledge. In the more diverse offerings of the upper division students are relatively free to concentrate attention upon one field of interest: their major.

Each student is expected to choose a major as soon as possible. This may be a program of related upper division courses within a single department (departmental major) or a group of coordinated courses involving a number of departments (interdepartmental major) or, under certain circumstances, an organized group of courses chosen to meet a student's special need (individual major). The pursuit of such definite courses of study often requires knowledge of courses known as prerequisites. With the assistance of a departmental advisor, students are expected to select lower division courses related to the advanced studies they propose to follow.

The office of the Dean of the College of Letters and Science is located in 1312 Murphy Hall. Members of the Dean's staff are readily available to assist students with questions pertaining to academic regulations and procedures, selection of courses, etc. Many questions can be answered at the College Information Window or by phoning the Information Desk at 825-1887 or 825-1965. Students in the College who would like to confer with a counselor (regarding overall degree requirements, academic difficulty, program planning or assistance in selecting a major) can arrange an appointment by phoning 825-3382.

College Honors

College Honors recognizes the needs of highly qualified and motivated students for a challenging education. Its flexible provisions for superior students are designed to stimulate critical, imaginative and self-reliant thinking. The program of College Honors under the direction of the Dean, Division of Honors, provides the exceptional UCLA undergraduate the organization and environment within which to pursue individual excellence.

College Honors will be awarded by the Dean of the College of Letters and Science to graduating seniors who have completed approximately 48 hours in honors-designated courses as approved by the Dean, Division of Honors. Such courses will include, among others, courses in the Honors Collegium, courses designated by the departments as honors courses, honors-contract courses, Freshman-Sophomore Seminars, Senior Seminars, Graduate Colloquia and Seminars, and research and thesis preparation courses. Students admitted to the program are encouraged at the lower division level to pursue the breadth of interdisciplinary approaches to learning and at the upper division level to engage in the depth of research in a specific discipline.

Students in the College Honors program pursue individualized curricula which emphasize the colloquium, seminar and tutorial experiences. They have access to graduate courses and seminars. They enjoy the same library privileges as graduate students, preferential preenrollment, eligibility for honors research awards and special counseling within the Division of Honors. Admission to the program facilitates taking exceptionally heavy course loads if the student so desires, receiving credit for courses pursued by independent study ("Credit by Examination"), and applying for concurrent work for both undergraduate and graduate degrees in the Departmental Scholar Program. The Dean will maintain a progress file on each student which can be used to support applications for graduate study, professional schools, jobs, etc., and will write appropriate letters of recommendation outlining the student's achievement in College Honors. Further, College Honors will be recorded on the student's transcript and a Certificate of College Honors awarded upon graduation. The Certificate of College Honors as well as any letters of recommendation will state that College Honors is the highest academic recognition the College of Letters and Science confers on its undergraduates. Other honors with the bachelor's degree will be awarded as appropriate.

Entering freshmen with both an exceptional grade-point average (3.5 or above) and SAT scores (a combined 1275 score) are invited by the Dean, Division of Honors, to participate in the College Honors program. Other students with at least 15 or more graded units at UCLA with a cumulative grade-point average of 3.5 or above are encouraged to apply. Interested students with a lower grade-point average, who feel they could benefit from and contribute to the program, are invited to discuss admission with the Dean, Division of Honors.

Honors Status

A student in the College of Letters and Science who has demonstrated superior academic achievement is eligible to apply for admission to Honors Status, which is recorded on the student's transcript. Admission may be granted by the Dean, Division of Honors, after completion of 16 or more graded units at UCLA with a cumulative grade-point average of not less than 3.5. Continued superior academic achievement is requisite for remaining in Honors Status.

Application for admission may be made at the Division of Honors Office, 1331 Murphy Hall, Window 10.

Honors Status students are under the immediate jurisdiction of the Division of Honors Office, receiving their counseling and other student services there. Admission facilitates taking exceptionally heavy course loads (see "Study List Limits" in the "Admission" section of this catalog) and receiving credit for courses pursued by independent study (see "Credit by Examination" later in this description of the College).

Students with Honors Status are usually eligible for admission to the honors programs offered by a number of the departments in the College, including honors sections of regular courses, honors courses of a seminar type, honors thesis programs, and supplementary and advanced directed study. The departments are responsible for admitting students to their separate honors programs. For details of these programs, consult the Dean of the Division of Honors or the department of your major. (For the possibility of concurrently working for both undergraduate and graduate degrees, see the "Departmental Scholar Program" later in this section.)

Honors with the Bachelor's Degree

(1) Departmental Honors and Departmental Highest Honors may be awarded at graduation upon the recommendation of your major department. The recommendation will be based on successful completion of a departmental honors program. For the requirements of the various departments, consult the department concerned.

(2) Honors with the Bachelor's Degree will be awarded according to your overall grade-point average at the beginning of the last quarter of academic work, or, if not then eligible, at graduation. To be eligible for Honors with the Bachelor's Degree, a student must have completed at least 20 graded courses (80 units) at the University of California. Course work taken on the Education Abroad Program will not count towards Honors with the Bachelor's Degree, effective Fall 1979. The College Committee on Honors is responsible for awarding Honors. Students eligible for the award shall have a GPA which places them in the following rankings: Highest Honors, top 5%; High Honors, next 5%; Honors, next 10%. Marginal cases will be decided by the Committee on Honors. Students should be aware that the Committee grants petitions for waiver of these requirements only in extraordinary cases.
(3) A list of students who have graduated with Honors with the Bachelor’s Degree, Departmental Honors, or both, shall be published yearly. Each honors student will be awarded a certificate of honors at graduation indicating both the Departmental Honors and the Honors with the Bachelor’s Degree.

Dean’s Honor List
The Dean’s Honor List recognizes high scholastic achievement in any one quarter. The following criteria are used to note Dean’s Honor List on the student records: (1) all students who have achieved a 3.75 GPA in any one quarter with at least twelve graded units and no grade of “NP”, “NR” or “I” or (2) all students who have achieved a 3.66 GPA and have earned at least 56 grade points during the quarter, with no grade of “NP”, “NR” or “I”.

Dean’s Honor List is automatically recorded on the student’s transcript. This notation cannot be retroactively posted nor can a student become retroactively eligible for the Dean’s Honor List by removal of an incomplete. Any student who wishes to receive a personal acknowledgment of appearance on the Dean’s Honor List for the fifth and tenth time may receive a letter to that effect upon request to the Dean, Division of Honors, accompanied by the appropriate evidence.

Division of Honors Office
(Letters and Science)

The Division of Honors Office provides academic counseling and services for approximately one-fourth of the undergraduates in the College of Letters and Science. Under its jurisdiction are Regents’ Scholars, National Merit Scholars, Alumni Scholars and students on the High School Special Program, the Education Abroad Program, the Departmental Scholar Program, and those students who have qualified for Honors Status and College Honors by demonstrating superior academic achievement at UCLA. Services offered include academic counseling, informal degree checks, petitions and letters of recommendation to graduate and professional schools. In addition, admission to Honors Status and College Honors facilitates taking exceptionally heavy course loads and receiving credit for courses pursued by independent study.

Departmental Scholar Program

Departments may nominate exceptionally promising undergraduate students (juniors and seniors) as Departmental Scholars to pursue bachelor’s and master’s degree programs simultaneously.

Qualifications include the completion of 24 courses (96 quarter units) at UCLA or the equivalent at a similar institution, completion of the requirements in preparation for the major and eligibility for Honors Status in the College of Letters and Science. To obtain both the bachelor’s and master’s degrees, the Departmental Scholars must be provisionally admitted to the Graduate Division, must fulfill requirements for each program and must maintain a minimum average of “B”. No course may be used to fulfill requirements for both degrees.

The department chairperson submits the student’s nomination to the Dean of the Division of Honors for recommendation to the Dean of the Graduate Division on or before the application dates for admission to graduate standing (see the UCLA Graduate Catalog calendar). Interested students should consult their departments well in advance of these dates for admission to graduate standing.

Requirements for the Bachelor’s Degree

The degree of Bachelor of Arts or Bachelor of Science will be granted upon the following conditions:

(a) After completing 26 and 1/4 courses (105 units) toward the degree (in all institutions attended), the student will be allowed no further unit credit for courses completed at a community college.

(b) Not more than 4 units in physical education activities courses may be counted toward the bachelor’s degree (transfer students with credit for more than 4 units of physical education activities courses should be aware of the 4-unit limit on this credit).

(c) Not more than two courses (8 units) in 300 and 400 courses may be counted toward the bachelor’s degree. Credit is not granted for X300 and X400 courses taken in University Extension unless the approval of the Dean has been obtained by petition prior to enrollment. Such petitions are rarely granted.

(d) Not more than 12 units of Dance 70, 71, 170 and 171 and Music 80 and 81 taken at UCLA may be counted toward the bachelor’s degree. Letters and Science students electing to take these courses must enroll in these courses Passed/Not Passed. The music courses are limited to one per student per quarter. These courses will not be counted in the limits on Passed/Not Passed enrollment (such courses are excluded from the Letters and Science List). For further information on these limits, see “Courses Taken Passed/Not Passed” under the “UCLA Grading Regulations” section of this catalog.

(e) Credit earned through the College Level Examination Program (CLEP) after June 30, 1974, will not be counted toward the bachelor’s degree in the College.

(f) Advanced Placement Test credit (AP) earned after June 30, 1974, will not apply toward a degree in the College, except for students at the freshman level with not more than 36 quarter units of credit already earned toward the bachelor’s degree at the time of the examination. Students with Advanced Placement credit may exceed the 210-unit maximum by the amount of this credit.

(g) Not more than 24 units of credit in aerospace studies, military science or naval science may be applied to the 180/182-unit minimum required for the bachelor’s degree.

(h) Senate regulations limit the undergraduate student to two courses (8 units) of credit per quarter in special independent study courses. The total number of units allowed in such courses for a letter grade is 16. Also, see specific restrictions under each departmental listing.

(i) For students entering Fall 1978 and thereafter and effective with Chemistry 2 taken Fall Quarter 1978 or thereafter (at UCLA or another institution), no credit will be granted toward the bachelor’s degree for college foreign language courses equivalent to quarter level 1 and/or 2 if the equivalent of 2 years of the same language was completed with a grade of “C” or better.

Students enrolled in UCLA prior to Fall 1978 may take Chemistry 2 with full unit and grade-point credit, without petition.

(j) For students entering Fall 1978 and thereafter and effective with foreign language courses taken Fall Quarter 1978 or thereafter (at UCLA or another institution), no credit will be granted toward the bachelor’s degree for college foreign language courses equivalent to quarter level 1 and/or 2 if the equivalent of 2 years of the same language was completed with satisfactory grades in high school. The maximum deduction will be eight units (4 units per course).

Students enrolled in UCLA prior to Fall 1978 may repeat high school language with full unit and grade-point credit, without petition.

(k) A student in Letters and Science who is enrolled in fewer than 12 units may not elect the Passed/Not Passed option for that term.

(l) No credit will be allowed for more than one lower division course in statistics or for more than one sequence of such courses.

(m) A student participating in the Education Abroad Program may receive toward the bachelor’s degree a maximum of 48 units of credit in addition to the 8 units maximum allowable for the Intensive Language Program.

(2) The candidate shall have attained at least a “C” (2.0) grade-point average in all courses undertaken at this University. A student is required to satisfactorily complete a minimum of 180 units for the bachelor’s degree. A maximum of 208 units is allowed. After
having credit for 208 units, he will not be permitted to continue, except in rare cases approved by the Dean. A student with credit for English 1 taken Fall 1978 or later will be required to satisfactorily complete 182 units. A maximum of 210 units is then allowed. Students with Advanced Placement credit may exceed the 210-unit maximum by the amount of this credit.

(3) The candidate shall have completed the general University and College requirements.

(4) The candidate shall have met the University requirement in American History and Institutions.

(5) The candidate shall have satisfied the requirements of a major (including preparation for the major) in the College of Letters and Science. Before the degree is granted, the department or committee in charge of the student's major must certify that the student has completed the requirements for the major.

(6) Of the last 48 units completed for the bachelor's degree, 36 must be earned in residence in the College of Letters and Science on this campus. Not more than 16 of the 36 units may be completed in Summer Session at the Los Angeles campus. While registered in this College, you must complete at least six upper division courses (24 units), including four courses (16 units) in the major. In departmental majors, the department will specify how many of these four required courses shall be taken in the department. This residence regulation applies to all students, including those entering this University from other institutions or from University Extension and those transferring from other Colleges of this University. Students transferring from a College of Letters and Science at another campus of the University may petition for an exception to this rule.

Concurrent enrollment in courses offered by University Extension (including correspondence courses) or at other institutions is not permitted except in extraordinary circumstances, and no credit will be given for such courses unless the approval of the Dean has been obtained by petition prior to enrollment.

The degree of Bachelor of Arts shall be granted to all candidates who qualify for the bachelor's degree, except that the degree of Bachelor of Science shall instead be granted to candidates who have completed such majors as the Executive Committee of the College may designate as leading to that degree.

Minimum Progress

Effective Fall 1974, any undergraduate student in the College of Letters and Science who does not pass at least 36 units during any three consecutive terms shall be placed on probation, and any undergraduate student who does not pass at least 32 units during any three consecutive terms shall be subject to disqualifica-

tion from further registration at the University. Courses bearing solely a letter designation may be used to meet this requirement only during the first three quarters of residence. Petitions for exception to these requirements must be approved by the Dean and may be granted only on account of poor health or of regular outside occupation requiring half-time or more. Consult the College of Letters and Science (Window 4, 1312 Murphy Hall) before attempting to remove unit shortages.

Letters and Science Course List Requirement

Beginning Fall 1978 at least 160 units, including 52 units in upper division courses offered for the bachelor's degree, must be selected from the Letters and Science List of Courses. Any course not included on this list, but required or accepted as part of a major shall, for students offering that major at graduation, be treated as if it were on the list. This regulation applies to all students who have successfully completed less than 36 quarter units prior to Fall Quarter 1978.

For students with 35 or fewer quarter units, credit completed prior to Fall 1978 will be accepted as Letters and Science credit. Thereafter, courses are applicable only if taken during a year in which they appear on the list. Courses offered for "no credit" and those numbered above 199 are automatically excluded. All undergraduate courses in the College of Letters and Science may be applied except for courses bearing solely a letter designation.

Aerospace Studies 1A, 1C, 130A-130B-130C

English 136A-136B-136C

English as a Second Language Placement Examination (Subject A). Students from other countries whose native language is not English will be instructed by the Office of Admissions to take the English as a Second Language Placement Exam and therefore are not required to meet the regular Subject A requirement. For further regulations concerning Subject A, see "Undergraduate Degree Requirements" earlier in this section of the catalog.

American History and Institutions

You can find details about this requirement under "Undergraduate Degree Requirements" earlier in this section of the catalog.

Foreign Language

The College of Letters and Science does not have a collegewide requirement for foreign language. Students should consult this catalog and departments or committees administering curricula concerning the requirement of specific majors. Credit will not be allowed for completion of a less advanced course in grammar and/or composition after completion of a more advanced course.

For students entering Fall 1978 and thereafter and effective with foreign language courses taken Fall Quarter 1978 or thereafter (at UCLA or another institution), no credit will be granted toward the bachelor's degree for college foreign language courses equivalent to quarter level 1 and/or 2 if the equivalent of 2 years of the same language was completed with satisfactory grades in high school. The maximum deduction will be eight units (4 units per course). Students enrolled in UCLA prior to Fall
English Composition

You may satisfy this requirement with one course from English 3, 4, Humanities 2A, 2B or CED 3 (students may not receive credit for both English 3 and CED 3). A grade of "C-" or better is required; a grade of "C-" is not acceptable. A course in English composition taken for a Passed grade does not satisfy this requirement. Courses in the above group may be applied on the humanities breadth requirement if they are not used to satisfy the English composition requirement.

The composition requirement may also be satisfied with a score of 4 or 5 on the CEEB Advanced Placement Test in English or by passing a proficiency examination in English composition set and administered by the Department of English. To be eligible for this proficiency examination an entering student must have a score of 660 on the CEEB Achievement Test. Each student should satisfy the composition requirement before having completed 90 quarter units. Students who fail to do so must have their Study Lists approved by the Dean.

Breadth Requirements

Breadth requirements are designed to acquaint you with areas of inquiry outside your own major. They provide a unique educational opportunity to bring perspectives from many fields together in a unified approach to learning.

Students who completed less than 36 quarter units before the Fall 1978 term must meet the requirements which follow. Those who completed 36 or more quarter units before Fall 1978 may fulfill either these requirements or those described in the 1977-78 UCLA General Catalog.

You will satisfactorily complete nine courses (36 quarter units) distributed among the three divisions outside the division of your major with at least two courses in each division. Acceptability of courses for these requirements are subject to the following general conditions:

1. All language courses level 4 or above may be applied as humanities courses. Level 1, 2 and 3 courses may be used, provided that you have completed the level 4 course in the same language. For students entering Fall 1978 and thereafter and effective with foreign language courses taken Fall Quarter 1978 and thereafter (at UCLA or another institution), no credit will be granted toward the bachelor's degree or toward satisfaction of the breadth requirements for college foreign language courses equivalent to quarter level 1 and/or 2 if the equivalent of 2 years of the same language was completed with satisfactory grades in high school. The maximum deduction will be eight units (4 units per course). Conversational courses may not be used to satisfy the humanities requirements. Breadth requirement credit for courses in languages which do not offer level 4 courses is contingent on the approval of the Dean.

2. The course used to satisfy the English composition requirement may not also apply on the breadth requirements.

3. Courses required to satisfy the major or other courses taken in the major department may not be used to satisfy breadth requirements. However, courses outside the division of the major which are required as preparation for a major may be used to satisfy these requirements. For information on satisfying breadth requirements if you are following a double major, see the section on "Double Majors" later in this description of the College.

4. Courses in other Colleges and Schools at UCLA may be used to satisfy the breadth requirements, if so designated by the Executive Committee of the College.

5. Freshmen and sophomore seminars taught in departments in the College of Letters and Science apply. Seminars taught in other Colleges and Professional Schools may apply only by petition.

Transfer students should consult the College of Letters and Science concerning application of advanced standing courses on the breadth requirements.

Consult individual course descriptions to avoid possible duplication of courses.

Courses numbered in the 300 and 400 series may not be applied on the breadth requirements. Courses numbered 199 and in the 200 series may be applied on breadth requirements only by petition approved by the Dean of the College of Letters and Science.

You can determine which—and how—UCLA courses apply to your breadth requirements by studying the list of courses ("A-D") below.

For the purposes of these requirements, departmental and interdepartmental majors are classified in the following divisions:

Humanities

- African Languages
- Ancient Near Eastern Civilizations
- Arabic
- Chinese
- Classical Civilization
- Classics
- English
- English/Greek
- English/Latin
- Ethnic Arts
- French
- French and Linguistics
- German
- Greek
- Hebrew
- Italian
- Italian and Special Fields
- Japanese
Physical Sciences

Astronomy
Atmospheric Sciences
Biochemistry
Chemistry
Chemistry/Materials Science
Cybertech
Economics/System Science
General Chemistry
General Physics
Geology
Geology (Engineering Geology)
Geology (Geochemistry)
Geology (Nonrenewable Natural Resources)
Geology (Paleobiology)
Geophysics (Applied Geophysics)
Geophysics (Geophysics and Space Physics)
Mathematics
Mathematics/Applied Science
Mathematics/Computer Science
Mathematics/System Science
Physics

Social Sciences

Afro-American Studies
Anthropology
Business/Economics
Chicano Studies
Communication Studies
East/Asian Studies

Economics
Geography
Geography/Ecosystems
History
Latin American Studies
Political Science
Sociology

Life Sciences

Biology
Kinesiology
Microbiology
Psychobiology
Psychology

Quantitative Psychology


(A) Physical Sciences

Any courses for which you are eligible in astronomy, atmospheric sciences, chemistry, earth and space sciences (except Earth and Space Sciences 20 if used on life science, 115, M117 and M118), mathematics (except Mathematics 1A, 38A-38B, 104) and physics. Also applicable: Computer Science 20, Engineering 11, Geography 1, M102, 104, 105, 106, Economics 141, 144, 145, 146, 147, Linguistics 145, Philosophy 125, 128A, 128B, 134, 135. Also, either History 3A or History 3B if not applied on the social science breadth requirements. (NOTE: no more than one of History 3A, 3B or Physics 10 may count towards the breadth requirement in the physical sciences.)

(B) Life Sciences

Any courses for which you are eligible in biology (except Biology 30), kinesiology (except physical education activities courses, 7, 106, 170A-170B) and microbiology. Also applicable: Anthropology 1, 2, 11, 125A-125B, Earth and Space Sciences 20 (if not applied as physical science), 115, M117, M118, Geography 2, 5, 108, 109, 110, 112, Psychology 15, 110, 111, 115, 116, 117, 118A, 118B, 118C, 118D, 118E, 118F, 119, 120, 121. Also applicable: History 3C; course may also apply on the social science breadth requirements, but not on both.

(C) Social Sciences

Any courses for which you are eligible in anthropology (except Anthropology 1, 2, 11, 125A-125B, 186), Asian American studies, communication studies (except Communication Studies 142 and 175), economics (except Economics 40, 141, 144, 145, 146, 147), geography (except Geography 1, 2, 5, M102, 104, 105, 106, 108, 109, 110, 112, 171), history (History 3A or 3B may apply on the social science or physical science breadth requirements, but not on both; History 3C may apply on the social science or life science breadth requirements, but not on both), Indo-European Studies 131, 132, political science, psychology (except Psychology 15, 41, 110, 111, 115, 116, 117, 118A, 118B, 118C, 118D, 118E, 118F, 119, 120, 121, 131A-131B, 142), sociology (except Sociology 18). Also applicable: journalism—UCLA courses only (except Journalism 101A, 101B, 180, 182A, 182B), Kinesiology 106, 170A-170B, Linguistics 100, 103, 170, Music 149, Women's Studies 100, M148.

(D) Humanities

Any courses for which you are eligible in classics, Communication Studies 142 and 175, English (except English 136A-136B-136C), English as a second language (except English as a Second Language 33A, 33B, 33C, 34, 103J, 103K, 106K, 107K, 109K, 111K, 122K), folklore, French, Germanic languages, humanities, Indo-European Studies M150, Italian, linguistics (except 100, 103, 145, 170), Near Eastern languages, Oriental languages, philosophy (except 125, 128A, 128B, 134, 135), Slavic languages, Spanish and Portuguese, speech, Women's Studies M158. (Foreign language conversation courses may be applied under the old requirements to Plan A breadth only.)

Acceptable courses in the College of Fine Arts are:


Dance 140A-140B-140C, 151A, 151B


Old Requirements

Students who have completed 36 or more quarter units prior to the beginning of Fall Quarter 1978 may choose to complete the new requirements, or Plan A or Plan B as described below.

Courses taken prior to Fall Quarter 1978 may be applied according to the list in the catalog of the year in which the course was taken.
Courses sponsored by the Council on Educational Development and cross-listed with a department may apply in the division of that department.

Option 2: You must satisfactorily complete three courses, excluding elementary and intermediate foreign language, in each of two divisions outside the division of your own major, and in addition complete course 5 in one foreign language.

Successful completion of a proficiency examination that is administered by a foreign language department (at UCLA) certifying proficiency at the level of course 5 is acceptable on this option. Courses authorized by the Academic Senate Council on Educational Development and cross-listed with a department may apply in the division of that department.

For the purposes of both options, courses in your major division may not be used to satisfy any of these requirements. In no case may courses in your major department or courses required for the major be used to satisfy these requirements. Courses in other divisions required in preparation for the major may be used to satisfy these requirements. Courses used exclusively to satisfy College breadth requirements may be taken on a Passed/Not Passed basis. Acceptable courses in the College of Fine Arts applicable on the humanities breadth requirements are listed above under "D".

Plan B
You must satisfactorily complete seven courses in any division outside the division of your own major, and either one course in each of the two remaining divisions or two courses in one of the remaining divisions. The divisional requirements may be satisfied according to "A-D" above. Acceptable courses in the College of Fine Arts applicable on the humanities breadth requirements are listed under "D".

No courses in foreign language will apply on Plan B unless you have passed course 5 in one foreign language at the college level or have successfully completed a foreign language proficiency examination at level 5 (the examination must be administered by a UCLA foreign language department). If you have completed course 5 in one foreign language, then all elementary and intermediate foreign language courses taken at the college level are acceptable for satisfaction of this requirement under the division of humanities.

Courses required for the major or in preparation for the major may not also be used to satisfy the Plan B requirements. In no case may courses in your major department be used to satisfy these requirements. Courses used to satisfy College breadth requirements may be taken on a Passed/Not Passed basis.

Credit for Advanced Placement Tests
You may fulfill a part of the College requirements with credit allowed at the time of admission for College Entrance Examination Board Advanced Placement Tests with scores of 5, 4 or 3. Students with Advanced Placement credit may exceed the 210-unit maximum by the amount of this credit. Advanced Placement Test credit will fulfill requirements in the College of Letters and Science as follows:

<table>
<thead>
<tr>
<th>TEST</th>
<th>CREDIT ALLOWED ON COLLEGE REQUIREMENTS</th>
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<tbody>
<tr>
<td>Art</td>
<td>Art history: 10 units</td>
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<tr>
<td>History</td>
<td>(humanities)</td>
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<tr>
<td>Biology</td>
<td>Biology 2: 4 units; unassigned: 6 units (life science)</td>
</tr>
<tr>
<td>Chemistry</td>
<td>Chemistry General: 10 units (physical science)</td>
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<tr>
<td>English</td>
<td>Composition and Literature (Score 5): 10 units (Subject A and 10 units humanities)</td>
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<tr>
<td></td>
<td>(Score 4 or 5) English 3: 4 units; English 4: 6 units</td>
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<td></td>
<td>Language and Composition (Score 3): 10 units (Subject A and 10 units humanities)</td>
</tr>
<tr>
<td></td>
<td>(Score 4 or 5) English 3: 5 units; Language and Composition: 5 units (Subject A and 5 units humanities)</td>
</tr>
<tr>
<td>Foreign</td>
<td>Course 5: 10 units</td>
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<tr>
<td>Language</td>
<td>(humanities)</td>
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<tr>
<td>Literature</td>
<td>Literature: 10 units (humanities)</td>
</tr>
<tr>
<td>History</td>
<td>History 7A-7B: 10 units (social science and American History and Institutions)</td>
</tr>
<tr>
<td>History</td>
<td>History 1C: 4 units; (humanities)</td>
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<tr>
<td>European</td>
<td>European History: 6 units (social science)</td>
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<tr>
<td>Mathematics</td>
<td>Mathematics 31A: 5 units (physical science)</td>
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<tr>
<td>Mathematics</td>
<td>Mathematics 31A, 31B: 10 units (physical science)</td>
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<tr>
<td>Mathematics</td>
<td>Mathematics 31A, 31B: 10 units (physical science)</td>
</tr>
<tr>
<td>Music</td>
<td>Survey of Music: 10</td>
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<tr>
<td>Literature</td>
<td>units (humanities)</td>
</tr>
<tr>
<td>Physics</td>
<td>Physics General: 10 units (physical science)</td>
</tr>
<tr>
<td>Physics</td>
<td>Physics General: 5 or 10 units (physical science)</td>
</tr>
</tbody>
</table>

Some portions of Advanced Placement Test credit are evaluated by corresponding UCLA course number. If a student takes the equivalent UCLA course, a deduction of UCLA unit credit will be made prior to graduation.

1 Students who pass the Mathematics AB examination with a score of 3, 4 or 5 receive 5 units of credit for Mathematics 31A. Students who score 3, 4 or 5 on the Mathematics BC examination will receive 10 units of credit for Mathematics 31A, 31B. Students who take both examinations will receive a maximum of 10 units of credit.

2 Students who pass the Physics B examination with a score of 3, 4 or 5 will receive 10 units of credit for General Physics. Students who score 3, 4 or 5 on the Physics C, part I, examination will receive 5 units of credit for General Physics. Students who take Physics C, parts I and II, will receive 10 units of credit for General Physics. Students who take both the Physics B and C examinations will receive a maximum of 10 units of credit.

Any student who has completed 36 quarter units at the time of the examination will receive no Advanced Placement Test credit.

Credit by Examination
Within the College of Letters and Science, eligibility for credit by examination is for the most part limited to students who have established their superiority by being approved as Departmental Scholars or by their participation in a departmental honors program or by their admission to the Division of Honors.

Students may petition for credit by examination for one course at a time. The examination for that course must be taken successfully before a student may petition again for credit by examination in another course. Petitions for credit by examination are available only through an interview with a College counselor. A $5 fee will be charged for each petition. Approval is given or withheld by the Dean of the Division of Honors who may limit the number of such petitions any student presents.

About A Major in the College of Letters and Science
Choosing an area of academic specialization from the long list of majors offered by the College of Letters and Science is one of the most important decisions you will make at UCLA.

Any student with 90 or more units towards a degree must declare a major. If you have already declared your major—or are about to declare it—you can skip this section, picking up again at “Regulations Governing the Major.”
Entering Students
If you are a freshman, you may be a bit uncertain about your specific academic goals. Many entering students do not specify a major, preferring instead the "undeclared major" route. Students who have not declared a major often take introductory courses in the natural sciences, social sciences and the humanities as a way to search for the area that most excites their interest.

Then, once you change to a major you will probably find that some of the courses you have sampled will count toward fulfilling breadth requirements.

Continuing Students
If you are heading for the 90-unit limit and have not yet declared a major, you should file a "Petition for Declaration of Major" with the College Office after receiving a favorable recommendation from either the department or committee which governs the major.

Help
You can get a variety of help with academic planning—setting goals and getting to them—from the College of Letters and Science Office in 1312 Murphy Hall (825-1965 or 825-1687), Psychological and Counseling Services in 4223 Math Sciences (825-7057) and the Placement and Career Planning Center located just south of Powell Library (825-2981).

Also, most departments have faculty members and counselors who are available to discuss in detail the offerings in their specialization(s). Printed resources to help you are listed at the end of this section; you will also find sources of academic assistance in the "Resources to Help You" section of this catalog.

Regulations Governing the Major
A major shall consist of not less than nine (36 units) nor more than 15 (60 units) upper division courses, except that a departmental major may be increased by three more upper division courses (12 units) in other departments, with the approval of the Executive Committee of the College.

There are three categories of majors in the College of Letters and Science: departmental, interdepartmental or individual.

Departmental and Interdepartmental Majors
A departmental major consists of a group of coordinated upper division courses, of which at least six courses are in one department, set up and supervised by a department.

An interdepartmental major consists of at least 13 coordinated upper division courses, of which not more than eight are in one department, set up and supervised by a committee appointed by the Executive Committee of the College.

A student who has been away from the University for several terms should consult with his major department or curriculum advisor concerning the major requirements under which he will graduate.

Individual Major
A student who has some unusual but definite academic interest for which no suitable major is offered at the University of California and who has completed at least three quarters of work (a minimum of nine courses) at the University with a grade-point average of 3.4 or higher may, with the consent of the Dean of the College and with the assistance of a faculty advisor appointed by the Dean, plan an individual major.

The individual major must be submitted to and approved by the Dean of the College no later than the first week of classes of the third quarter before intended graduation. Your request should be accompanied by a statement defining the purposes of the major and its relation to your goals, and explaining the reasons why the program cannot be accommodated within some existing major. There must be an accompanying statement from a faculty advisor indicating that there has been significant faculty consultation in devising the program. The faculty advisor should be a regular member of the faculty of the College of Letters and Science, with a professorial title in a department that offers a major in the College.

Each request for an individual major should list the course numbers and titles in the preparation for the major and in the major itself, including an indication of the relevance of each course or group of courses to the program. The major should consist of at least twelve and not more than fifteen upper division courses, a majority of which are in departments offering a major in the College.

The major may not include any courses taken on a P/NP basis. CED and other experimental courses may not be used as part of a major.

A senior thesis is required of each student with an individual major. An outline of the thesis, worked out with the help of the faculty advisor, should be submitted to the Division of Honors Office no later than the first week of the second quarter before graduation. The faculty advisor will pass final judgment on the quality of the thesis; a copy of the thesis must be filed in the Division of Honors Office. The Dean must certify that you have completed the requirements of your major, including completion of the thesis, before the degree is granted. The title of the major will not appear on the diploma, but will be entered in the memoranda column on your official transcript. The major will be indicated on the diploma as Individual Field of Concentration. Further information about the individual major may be obtained at the Division of Honors Information Window or from one of the Division of Honors counselors.

Double Majors
Students in good standing are sometimes permitted to have a double major, consisting of two departmental majors in this College, provided they can be completed within the maximum limit of 208 units.

Double majors in the same department with very few exceptions are unacceptable. If the majors are not in the same division, the student will designate one of the two majors as the principal one, in order to identify the division for the purpose of satisfying the breadth requirements. Courses used to satisfy the requirements for the principal major may also be used to satisfy the requirements for the secondary one, but not more than five courses may be common to both majors.

For double majors, courses outside the department of the principal major which are required in preparation for that major may be used to satisfy the breadth requirements. Courses required for the secondary major (including preparation for the major) may be used to satisfy any set of breadth requirements.

Changing Your Major
A student in good standing who wishes to change a major may petition the department or committee in charge of the proposed new major, provided that the proposed new field of study can be completed without exceeding the 208-unit limit. Final action on the petition will be taken by the Dean of the College. Certain majors may be unavailable. A change of major may be denied if all preparatory courses have not been satisfactorily completed. Some departments have established specific grade requirements on courses taken in preparation for the major. A student on probation may not normally change his major. No change of major will be permitted after the opening of the student's last quarter.

Each student who has declared a major should be advised by a representative of the department or committee before enrolling in classes.

Students who fail to attain a grade-point average of at least "C" (2.0) in work taken in the prerequisites for the major or in courses in the major, may, at the option of the department or committee in charge, be denied the privilege of entering or of continuing in that major. You must attain an average grade of "C" (2.0) in all courses undertaken in your major.

Organized Majors in the College of Letters and Science
The College of Letters and Science offers the following departmental majors, which lead to a degree of Bachelor of Arts; those followed by an asterisk (*) lead to a degree of Bachelor of Science.

Departmental and Interdepartmental Majors
A departmental major consists of a group of coordinated upper division courses, of which at least six courses are in one department, set up and supervised by a department.

An interdepartmental major consists of at least 13 coordinated upper division courses, of which not more than eight are in one department, set up and supervised by a committee appointed by the Executive Committee of the College.

A student who has been away from the University for several terms should consult with his major department or curriculum advisor concerning the major requirements under which he will graduate.

Individual Major
A student who has some unusual but definite academic interest for which no suitable major is offered at the University of California and who has completed at least three quarters of work (a minimum of nine courses) at the University with a grade-point average of 3.4 or higher may, with the consent of the Dean of the College and with the assistance of a faculty advisor appointed by the Dean, plan an individual major.

The individual major must be submitted to and approved by the Dean of the College no later than the first week of classes of the third quarter before intended graduation. Your request should be accompanied by a statement defining the purposes of the major and its relation to your goals, and explaining the reasons why the program cannot be accommodated within some existing major. There must be an accompanying statement from a faculty advisor indicating that there has been significant faculty consultation in devising the program. The faculty advisor should be a regular member of the faculty of the College of Letters and Science, with a professorial title in a department that offers a major in the College.

Each request for an individual major should list the course numbers and titles in the preparation for the major and in the major itself, including an indication of the relevance of each course or group of courses to the program. The major should consist of at least twelve and not more than fifteen upper division courses, a majority of which are in departments offering a major in the College.

The major may not include any courses taken on a P/NP basis. CED and other experimental courses may not be used as part of a major.

A senior thesis is required of each student with an individual major. An outline of the thesis, worked out with the help of the faculty advisor, should be submitted to the Division of Honors Office no later than the first week of the second quarter before graduation. The faculty advisor will pass final judgment on the quality of the thesis; a copy of the thesis must be filed in the Division of Honors Office. The Dean must certify that you have completed the requirements of your major, including completion of the thesis, before the degree is granted. The title of the major will not appear on the diploma, but will be entered in the memoranda column on your official transcript. The major will be indicated on the diploma as Individual Field of Concentration. Further information about the individual major may be obtained at the Division of Honors Information Window or from one of the Division of Honors counselors.

Double Majors
Students in good standing are sometimes permitted to have a double major, consisting of two departmental majors in this College, provided they can be completed within the maximum limit of 208 units.

Double majors in the same department with very few exceptions are unacceptable. If the majors are not in the same division, the student will designate one of the two majors as the principal one, in order to identify the division for the purpose of satisfying the breadth requirements. Courses used to satisfy the requirements for the principal major may also be used to satisfy the requirements for the secondary one, but not more than five courses may be common to both majors.

For double majors, courses outside the department of the principal major which are required in preparation for that major may be used to satisfy the breadth requirements. Courses required for the secondary major (including preparation for the major) may be used to satisfy any set of breadth requirements.

Changing Your Major
A student in good standing who wishes to change a major may petition the department or committee in charge of the proposed new major, provided that the proposed new field of study can be completed without exceeding the 208-unit limit. Final action on the petition will be taken by the Dean of the College. Certain majors may be unavailable. A change of major may be denied if all preparatory courses have not been satisfactorily completed. Some departments have established specific grade requirements on courses taken in preparation for the major. A student on probation may not normally change his major. No change of major will be permitted after the opening of the student's last quarter. Each student who has declared a major should be advised by a representative of the department or committee before enrolling in classes.

Students who fail to attain a grade-point average of at least "C" (2.0) in work taken in the prerequisites for the major or in courses in the major, may, at the option of the department or committee in charge, be denied the privilege of entering or of continuing in that major. You must attain an average grade of "C" (2.0) in all courses undertaken in your major.

Organized Majors in the College of Letters and Science
The College of Letters and Science offers the following departmental majors, which lead to a degree of Bachelor of Arts; those followed by an asterisk (*) lead to a degree of Bachelor of Science.
African Languages  
Ancient Near Eastern Civilizations  
Anthropology  
Arabic  
Astronomy  
Atmospheric Sciences*  
Biochemistry*  
Biology  
Business/Economics  
Chemistry*  
Chinese  
Classical Civilization  
Classics  
Economics  
English  
English/Greek  
English/Latin  
French  
French and Linguistics  
General Chemistry*  
Geography  
Geography/Ecosystems  
Geology*  
Geology (Engineering Geology)*  
Geology (Geochemistry)*  
Geology (Nonrenewable Natural Resources)*  
Geology (Paleobiology)*  
Geophysics (Applied Geophysics)*  
Geophysics (Geophysics and Space Physics)*  
German  
Greek  
Hebrew  
History  
Italian  
Italian and Special Fields  
Japanese  
Jewish Studies  
Kinesiology*  
Latin  
Linguistics  
Linguistics and Computer Science  
Linguistics and English  
Linguistics and French  
Linguistics and Italian  
Linguistics and Oriental Languages  
Linguistics and Philosophy  
Linguistics and Psychology  
Linguistics and Scandinavian Languages  
Linguistics and Spanish  
Mathematics  
Mathematics/Applied Science  
Microbiology  
Philosophy  
Physics*  
Political Science  
Portuguese  
Psychobiology*  
Psychology, General  
Quantitative Psychology  
Russian Civilization  
Russian Linguistics  
Scandinavian Languages  
Slavic Languages and Literatures  
Sociology  
Spanish  
Spanish and Linguistics
You can find a detailed description of each of these majors under their headings in the "Courses" section of this catalog.

Interdepartmental Majors
In addition, the College offers some 13 majors which cross departmental boundaries in their field of inquiry. Each of the interdepartmental majors listed below leads to the degree of Bachelor of Arts; those marked with an asterisk (*) lead to the degree of Bachelor of Science.

Afro-American Studies  
Chemistry/Materials Science*  
Chicano Studies  
Communication Studies  
Cybernetics*  
East Asian Studies  
Economics/System Science*  
Ethnic Arts (Intercollege)  
Individual Field of Concentration  
Latin American Studies  
Mathematics/Computer Science*  
Mathematics/System Science*  
Near Eastern Studies  
Study of Religion  
You can find a detailed description of each of these majors under their headings in the "Courses" section of this catalog.

Special Program in African Studies
This program is designed primarily for (1) students who plan to live and work in Africa or who are interested in government and public service careers involving African affairs and (2) students who plan to pursue graduate work in one of the social sciences or Near Eastern and African languages with primary concentration on the African field.

For details of the program, see "African Studies" in the "Courses" section of this catalog. For more information, contact Joy Williams, African Studies Center, 10244 Bunche Hall (825-2944) or Professor Christopher Ehret, 6265 Bunche Hall (825-4093).

Special Program in Asian American Studies
The Program in Asian American Studies is intended to promote the study of Asian and Pacific peoples in the United States from several disciplines. It provides a general introduction to Asian American studies for those who anticipate advanced work at the graduate level or careers in research and community work related to the Asian American.

For details of the program, see "Asian American Studies" in the "Courses" section of this catalog. For further information, contact Tim Dong, Asian American Studies Center, 3232 Campbell Hall (825-2974).

Certificate Program in Diversified Liberal Arts
In order to earn a credential to teach in California elementary schools, a student must complete the Teacher Credential Program in the Graduate School of Education and either earn a satisfactory score on the Common Section of the National Teachers Examination or complete the Diversified Liberal Arts Program (DLAP) in the College of Letters and Science.

For details of the program, see "Diversified Liberal Arts" in the "Courses" section of this catalog. For further information, contact a counselor in the College of Letters and Science, Window 4, 1312 Murphy Hall (825-3382). For information regarding the Teacher Credential Program in the Graduate School of Education, students must see a counselor in 201 Moore Hall (825-8326).

Special Program in International Relations
This program can only be taken jointly with a major in Political Science, and all requirements for the Political Science major must be met by or in addition to meeting the requirements for this special program. The student completing this special program will receive a degree with a major in Political Science and specialization in International Relations.

For details of the program, see "International Relations" in the "Courses" section of this catalog. For further information, contact Professor David Wilkinson, 3280 Bunche Hall (825-3450).
Special Program in Urban Studies or Organizational Studies

Students may elect to combine one of these programs with a departmental major and may petition to have the area of specialization recognized with the bachelor's degree.

The option of completing an individual major in Urban Studies or Organizational Studies is also open to qualified students.

Students with departmental majors should seek advising in the appropriate department. Students interested in the individual major should consult a counselor in the College of Letters and Science.

For details of the programs, see "Urban Studies or Organizational Studies" in the "Courses" section of this catalog. For further information, contact Professor Robert Fried, 4289 Bunche Hall (825-4331).

Special Program in Women's Studies

Students completing a bachelor's degree may petition to receive a Women's Studies Specialization in addition to a major in their chosen discipline.

For details of the program, see "Women's Studies" in the "Courses" section of this catalog. For further information, contact Mary M. Smith, Women's Studies Program, 240 Kinsey Hall (206-8101).

Afro-American Studies Major

The major in Afro-American Studies is designed to provide students with a program of courses leading to a Bachelor of Arts degree in Afro-American Studies. The major offers an opportunity to systematically study the origins, experiences and conditions of people of African descent in the United States and elsewhere in the New World.

Majors are exposed to multidisciplinary approaches to Afro-American studies. In addition, majors must select a concentration within a department in the social sciences, humanities or fine arts.

Counseling is available in the department of concentration, in the College of Letters and Science and in the program office (3101 Campbell Hall).

For details of the curriculum leading to the degree of Bachelor of Arts, see "Afro-American Studies" in the "Courses" section of this catalog. For further information, contact Professor Halford Fairchild, 3101 Campbell Hall (825-7403, 825-2961).

Major in Chemistry/Materials Science

This major is designed for students who are interested in solid state chemistry, the preparation of engineering materials such as semiconductors, glasses, ceramics, metals and polymers, the reactivity of such materials in different environments and how chemical compositions affect properties. It provides appropriate preparation for graduate studies in many fields emphasizing interdisciplinary research involving chemistry, engineering and applied science.

For details of the curriculum leading to the Bachelor of Science degree, see "Chemistry/Materials Science" in the "Courses" section of this catalog. For further information, contact Professor John D. Mackenzie, 6531 Boelter Hall (825-3539).

Major in Chicano Studies

This multidisciplinary program leading to the Bachelor of Arts degree in Chicano Studies is designed to provide systematic instruction for liberal arts and professional majors who wish concentrated study of the Chicano experience.

For details of the curriculum leading to the Bachelor of Arts degree, see "Chicano Studies" in the "Courses" section of this catalog. For further information, contact Dr. Carlos Haro, Chicano Studies Research Center, 3121 Campbell Hall (825-2363).

Major in Communication Studies

The major in Communication Studies seeks to provide the student with a comprehensive knowledge of the nature of human communication, the symbol systems by which it functions, the environments in which it occurs, its media and its effects. The major draws its resources from the social sciences, humanities and fine arts.

For details of the curriculum leading to the Bachelor of Arts degree, see "Communication Studies" in the "Courses" section of this catalog. For an application and further information, contact Diane Simpson, 232 Royce Hall (825-3303).

Major in Cybernetics

This major provides an introduction to quantitative foundations of information processing, communication, control and system analysis, accompanied by complementary studies of models and phenomena arising in the life sciences, health sciences, bioengineering, etc. The major is appropriate preparation for employment or for graduate or professional studies emphasizing interdisciplinary activity.

For details of the curriculum leading to the Bachelor of Science degree, see "Cybernetics" in the "Courses" section of this catalog. For further information, contact Professor Jack W. Carlyle, 3532 Boelter Hall (825-8807, 825-1322).

Major in East Asian Studies

This major is designed to serve students who wish to study and/or reside in the Chinese- and Japanese-speaking areas of East Asia and the Asian American communities. It also prepares students for graduate study in one of the social science disciplines which customarily explore those areas.

For details of the curriculum leading to the Bachelor of Arts degree, see "East Asian Studies" in the "Courses" section of this catalog. For further information, contact Professor David M. Farquhar, 9381 Bunche Hall (825-3078).

Major in Economics/System Science

This major is an alternative to the regular departmental major in Economics and combines work in the Department of System Science (School of Engineering and Applied Science) with preparation in economic theory and in those aspects of mathematics and statistics that are necessary for the study of quantitative aspects of economics and systems theory.

For details of the curriculum leading to the Bachelor of Science degree, see "Economics/System Science" in the "Courses" section of this catalog. For further information, contact Professor Stephen Jacobsen, 4532 Boelter Hall (825-2327) or Professor Michael Intriligator, 2263 Bunche Hall (825-4144).

Intercollege Major in Ethnic Arts: Interdisciplinary Studies

This is an interdisciplinary major open to students in both the College of Fine Arts and the College of Letters and Science.

The student remains in the College of his choice and fulfills the breadth requirements of that College. The student will normally elect his area of concentration when accepted into the major.

Admission to the major will be by special application to the Committee in Charge. For details of the major, see "Ethnic Arts" in the "Courses" section of this catalog.

For further information, contact Wendy Urfrig, 205 Women's Gym (825-8537, 825-3951).

Major in Latin American Studies

For details of the curriculum leading to the degree of Bachelor of Arts, see "Latin American Studies" in the "Courses" section of this catalog. Students should see an advisor in the Latin American Center, 10343 Bunche Hall (206-6571).

Major in Mathematics/Computer Science

The Mathematics/Computer Science major, an alternate to the regular departmental major in
Preparing for a Professional School

The programs that follow are not degree programs in the College of Letters and Science. The purpose of each grouping of courses is to assist you if you plan to apply to a professional school at the end of your sophomore (90 units) or junior (135 units) year. If you are not accepted by a professional school, you must declare a major in the College of Letters and Science and be able to complete the requirements for a degree without exceeding 208 units. New students entering in these curricula will be listed as Undeclared Majors and will be advised in the College unless an advisor is named below in the presentation of the curriculum. Information and counseling on preparing for health care professional schools and assistance in putting together an application at the time of applying are available through the Prehealth Care Advising Office, College of Letters and Science. Open counseling sessions are held weekly for premeds, predents, prenurses and other prehealth students (time and place are announced in the "What's Bruin" section of the Daily Bruin and are posted outside 1332 Murphy Hall (Window 9). Students in the Division of Honors can make counseling appointments in 1331 Murphy Hall for general information concerning preparation for health care professional schools. ASK Counselors are on duty each weekday in the Court of Sciences by Young Hall. ASK Counselors can answer some basic prehealth care questions and give referrals. In addition, specific advisors in prehealth are listed in the "Resources to Help You" section of this catalog.

Predental Curriculum: Three Years

The College of Letters and Science offers a predental curriculum designed to fulfill the basic educational requirements for admission to several dental schools and the general educational requirements of the College of Letters and Science. It is advised that you determine and satisfy the specific requirements of the dental schools to which you expect to apply. You will be more adequately prepared for the predental curriculum if the following subjects are taken in high school: English, history, mathematics (algebra, geometry and trigonometry), chemistry, physics and foreign language. The 135 quarter units of work required for admission to the School of Dentistry include the following:

General University Requirements: (1) Subject A; (2) American History and Institutions.

Specific UCLA School of Dentistry Requirements**: (1) English 3 and 4; (2) sciences: Chemistry 11A, 11B, 11BL, 11C, 11CL, 21, 23, 25, Physics 3A, 3B, 3C or 8A, 6B, 6C or 8A, 8B, 8C, Biology 5, 7, 8, 8L, 138, Psychology 10. Social sciences and humanities should also be included in the 135 quarter units for which you may consider such courses as anthropology, history, economics, psychology, political science, appreciation of art and/or music and philosophy. For further information, consult Admissions Requirements of U.S. and Canadian Dental Schools, AADS, 1625 Massachusetts Avenue NW, Washington, DC 20036.

*School of Dentistry, see Predental Requirements.
**Other dental schools may have different requirements.

Predental Hygiene Curriculum: Two Years†

The University offers a four-year program in Dental Hygiene leading to the degree of Bachelor of Science. The first two years may be taken at Los Angeles; the last two years must be taken at the School of Dentistry in San Francisco. Admission to UCSF is by competitive application. The 90 quarter units of work required for admission to the School of Dentistry include general University requirements and additional specific requirements as follows (the courses referred to are UCLA courses which fulfill the requirements):

Curriculum Requirements: (1) Subject A; (2) American History and Institutions (the examination in American History and Institutions may be taken at the School of Dentistry, but it is preferable to satisfy the requirements in the predental program); (3) one year of English which includes English 3; (4) Chemistry 11A, 11B, 11BL, 11C, 11CL, 21, 23, 25; (5) Biology 5, 7, 8, 8L; (6) Physics 3A, 3B, 3C or 8A, 6B, 6C or 8A, 8B, 8C; (7) Psychology 10 and one additional psychology course; (8) 16 units in social sciences and humanities (including foreign language).

†The School of Dentistry reserves the right to limit enrollment if applications exceed available facilities and to require interviews and aptitude tests if they are necessary in the selection of the class. For further information, see the Announcement of the School of Dentistry, San Francisco.

Premedical Studies: Four Years

Students who intend to apply for admission to a medical school and who wish to complete the requirements for a bachelor's degree before such admission should select a major within the College. Medical schools have no preference as to major. You should choose the major in which you are most interested and can do best. In addition to fulfilling the requirements of the chosen major, you are advised to ascertain and satisfy the specific requirements for medical schools to which you expect to apply.

Mathematics, consists of an integrated program of courses offered by the Department of Mathematics and the Computer Science Department (School of Engineering and Applied Science). For details of the curriculum leading to the Bachelor of Science degree, see "Mathematics/Computer Science" in the "Courses" section of this catalog. For further information, contact Sally Yamashita, Counselor, 6356 Math Sciences (825-4701).

Major in Mathematics/ System Science

This major is an alternate to the regular departmental major in Mathematics and combines work in the Department of System Science (School of Engineering and Applied Science) with thorough preparation in mathematics, including those aspects significant in the theory of systems, information and control.

For details of the curriculum leading to the Bachelor of Science degree, see "Mathematics/System Science" in the "Courses" section of this catalog. For further information, contact Sally Yamashita, Counselor, 6356 Math Sciences (825-4701).

Major in Near Eastern Studies

This major is designed primarily for the following students: (1) those seeking a general education and desiring a special emphasis in this particular area, (2) those who plan to live and work in the Near East whose careers will be aided by a knowledge of its peoples, languages and institutions and (3) students preparing for academic study in the various disciplines pertaining to the Near East.

For details of the curriculum leading to the Bachelor of Arts degree, see "Near Eastern Studies" in the "Courses" section of this catalog. For further information, contact the Von Grunebaum Center for Near Eastern Studies, 10286 Bunche Hall (825-1181).

Major in Study of Religion

The UCLA major in the Study of Religion has a twofold purpose. In the first place it is designed to give students a broad humanistic perspective. It introduces students to several religious traditions of mankind and thus to an appreciation of the very nucleus of civilization in various periods of history and various parts of the world, as well as to an understanding of fundamental mental orientations. In the second place, the program asks the student to select one particular religious tradition for study at greater depth.

For details of the curriculum leading to the Bachelor of Arts degree, see "Study of Religion" in the "Courses" section of this catalog. For further information, contact Professor Jacques Maquet, 341 Haines Hall (825-3698).

For further information, contact Jacques Maquet, 341 Haines Hall (825-3698).
Prepharmacy Curriculum: Two Years

The University offers a four-year course leading to the Bachelor of Science degree in Nursing. The prenursing curriculum in the College of Letters and Science is designed to prepare students for the program in the School of Nursing. You should apply to the School of Nursing when you have completed or have in progress 84 quarter credits of liberal arts courses with a grade-point average of at least 2.8. Since you must apply during the Fall of the year prior to the year in which you wish to be enrolled, you must present your proposed curriculum for the remaining quarters.

The curriculum as set forth below includes the specific requirements for application to the School of Nursing. Enrollment in the School is limited.

Since students who have completed the two-year prenursing curriculum cannot be assured of admission to UCLA's School of Nursing, all prenursing students should become familiar with the admission requirements of other nursing programs. These requirements vary from school to school so it is imperative that prenursing students obtain this information as early in their college careers as possible. Contact schools of nursing directly and attend open counseling sessions in UCLA's School of Nursing (times are posted in the Office of Student Affairs, 2-137 Factor Building) and those given by the Prehealth Care Advising Office (posted by 1332 Murphy Hall, 825-1817). Students who are not accepted by the School of Nursing must declare a major in the College of Letters and Science to be admitted to the College.

New students admitted to the College in this curriculum will be counseled in the College as Undeclared Majors, but may seek additional advisement during posted open counseling sessions. Students in the College who do not transfer to the School of Nursing must declare a major and be able to complete all degree requirements within 208 units.

Prenursing Requirements: (1) Anthropology 5; (2) Biology 5, 7; (3) Chemistry 11A, 15, 15L; (4) English 3; (5) Kinesiology 13; (6) Microbiology 10; (7) Physics 10 or one year of high school physics; (8) Psychology 10, 15; (9) Public Health 160 or 161; (10) Sociology 1 or 101; (11) recommended electives in the social and biological sciences.

Preoptometry Curriculum: Three Years

A three-year program designed to prepare students for admission to optometric schools may be completed in the College of Letters and Science. Students planning to transfer to the School of Optometry at Berkeley are advised to contact the Dean of the School of Optometry, University of California, Berkeley, CA 94720, as early as in their preprofessional studies as possible.

You will be adequately prepared for preoptometric studies if you have taken the following subjects in high school: English, history, mathematics (algebra, geometry and trigonometry), chemistry, physics and two years of a single foreign language.

The 135 quarter units of work required for admission to the School of Optometry, Berkeley, include the following:

General University Requirements: (1) Subject A; (2) American History and Institutions.

Specific UCB School of Optometry Requirements: (1) English 3, 4; (2) Chemistry 11A, 11B, 11BL, 11C, 11CL, 21; (3) Physics 3A, 3B, 3C or 6A, 6B, 6C or 8A, 8B, 8C; (4) Biology 5, 6, 6L, 8L; (5) Psychology 10; (6) Mathematics 3A, 3B, 3C or 31A, 31B and 50A or Psychology 41; (7) Microbiology 10; (8) Kinesiology 12, 13; (9) two upper division courses in the biological sciences.

The balance of the 135 quarter units required for admission may be selected from the social sciences, foreign languages and the humanities.

Prephysical Therapy Curriculum: Three or Four Years

Students who intend to apply for admission to a physical therapy school should select a major (Kinesiology and Psychology are commonly selected) and complete the following prerequisite courses: one course in human anatomy (Kinesiology 13 or 14) and one course in physiology (Kinesiology 12); two courses in biology (Biology 5, 7); two courses in chemistry (Chemistry 11A, 15, 15L); Physics 10 or 3A, 3B; Psychology 10, 115, 127, 130. Recommended: one course in statistics. The prerequisite courses should be taken for a letter grade and not on a P/NP basis. GPAs for these courses should not be lower than 3.0, with no grade lower than a "C".
The School of Engineering and Applied Science

The undergraduate curriculum in the UCLA School of Engineering and Applied Science leads to a single degree, the Bachelor of Science in Engineering. The program provides a deep and broad education in the various fundamental branches of science and engineering while offering specialization in one of the major fields of engineering. The Bachelor of Science is intended to be a terminal, professional degree and/or to provide a basis for entering into graduate studies, not only in engineering but also in other professional schools such as medicine, law, dentistry and business management.

Fields of Instruction

Instruction is offered in: acoustical engineering, aerospace engineering, bioengineering, ceramic engineering, chemical engineering, civil engineering, computer engineering, control systems engineering, earthquake engineering, electrical and electronics engineering, general engineering, environmental engineering, fluid mechanics, geotechnical engineering, information and communications theory, materials science, mechanical engineering, metallurgy, nuclear engineering, plasma engineering, soil mechanics, solid mechanics, structural engineering, systems science, and water resources.

Admission

Applicants for admission to the School of Engineering and Applied Science must satisfy the general admission requirements of the University as outlined in the section entitled "Admission" earlier in this catalog. In the future, entrance to the School may be based on the results of a further examination of student grades and test scores.

Applicants are encouraged to apply either at the freshman or junior level. 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, mathematics, physics and the recommended engineering courses before transferring to the University. Experience indicates that transfer students who have completed the recommended lower division program in engineering at California community colleges are able to complete the remaining requirements for the bachelor’s degree in six quarters (two academic years) of normal full-time study.
Admission as a Freshman

While many students will take their first two years in engineering at a community college, an applicant may qualify for admission to the School of Engineering and Applied Science in freshman standing. It is anticipated that admission to the School will require that the following subjects be taken when satisfying the University admission requirements:

Algebra .......................... 2 years
Plane geometry ........................ 1 year
Trigonometry ........................ ½ year
Chemistry and physics with laboratory ...................... 2 years

It is also highly recommended that the student take a course in technical drafting while in high school.

Admission as a Junior

Applicants for admission to the School in junior standing should have completed 21 to 23 courses (84 to 92 quarter units) in good standing, including the following minimum subject requirements:

(1) Two and one-fourth courses in chemistry, equivalent to UCLA’s Chemistry 11A, 11B, 11BL; (2) six courses in mathematics, equivalent to UCLA’s Mathematics 31A, 31B, 32A-32B, 33A, 33B; (3) four courses in physics, equivalent to UCLA’s Physics 8A, 8B, 8C, 8D.

Students transferring to the School from institutions which offer instruction in engineering subjects in the first two years, in particular, California community colleges, will be given credit for certain of the degree requirements (see the upper division segment).

Students who have been admitted to senior standing in the School on the basis of credit from another institution, from University Extension or from another College or School of the University must complete, subsequent to such admission, eight upper division courses which shall be used to satisfy part of their approved major field elective sequence.

Requirements for the Bachelor of Science Degree

The School of Engineering and Applied Science at UCLA awards the Bachelor of Science degree to students who have satisfactorily completed a program of four years of engineering studies.

The curricular requirements for the Bachelor of Science degree consist of the lower division and upper division segments (46% courses, 185 units) and the University requirements in scholarship, Subject A (English composition), American History and Institutions, and senior residence. You can find these requirements discussed in detail in the “Undergraduate Degree Requirements” section earlier in this catalog. At least a 2.0 grade-point average must be achieved in all University courses of upper division level offered in satisfaction of the subject requirements and required electives of the curriculum. The lower division and upper division requirements are described below.

Study Lists require approval of the Dean of the School or a designated representative. It is the responsibility of the student to present Study Lists which reflect satisfactory progress towards the Bachelor of Science in Engineering degree according to standards set by the faculty. Study Lists or programs of study taken by students which do not comply with these standards render the student liable to enforced withdrawal from the University or other disciplinary action.

After 213 quarter units, enrollment may not normally be continued in the School. The Dean may be petitioned for special permission to continue work required to complete the degree. This regulation does not apply to Departmental Scholars.

Credit earned through the College Level Examination Program (CLEP) will not be counted toward the bachelor’s degree.

Admission as a Junior

No credit will be allowed toward the bachelor’s degree for Chemistry 2 after one year of high school chemistry has been completed with a grade of “C” or better.

No credit will be granted toward the bachelor’s degree for college foreign language courses equivalent to quarter level 1 and 2 if the equivalent of course level 2 of the same language was completed with satisfactory grades in high school.

The Curriculum

The Engineering Curriculum is accredited by the Engineers’ Council for Professional Development, the nationally recognized accrediting body for engineering programs.

Lower Division

<table>
<thead>
<tr>
<th>Units</th>
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<tbody>
<tr>
<td>Freshman Year</td>
<td>First</td>
<td>Second</td>
</tr>
<tr>
<td>Chemistry 11A, 11B, 11BL</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Mathematics 31A, 31B, 32A-32B</td>
<td>4</td>
<td>4</td>
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<tr>
<td>Physics 8A, 8B</td>
<td>—</td>
<td>4</td>
</tr>
<tr>
<td>English 3</td>
<td>4</td>
<td>—</td>
</tr>
<tr>
<td>Engineering 10*</td>
<td>—</td>
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</tr>
<tr>
<td>Electives**</td>
<td>—</td>
<td>4</td>
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<tr>
<td>12</td>
<td>17</td>
<td>16</td>
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</tbody>
</table>

*The Computer Science Department offers a placement examination each quarter during registration week to permit students to demonstrate proficiency in the subject area of Engineering 10 based on outside work experience and courses completed elsewhere. Satisfactory performance on the placement examination will exempt students from the Engineering 10 subject requirement and will allow them to select another technical or major field elective course of their choice to satisfy the unit requirement. Normally, Engineering 10S will not satisfy the Engineering 10 requirement.

**The lower division electives shall include the following: one course in the life sciences, three courses in the humanities-social sciences-fine arts area and one free elective.

Upper Division

Prerequisite for junior status: satisfactory completion of the minimum subject requirements specified under admission to the School at the junior level.

<table>
<thead>
<tr>
<th>Units</th>
<th>Units</th>
<th>Units</th>
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<tbody>
<tr>
<td>Freshman Year</td>
<td>First</td>
<td>Second</td>
</tr>
<tr>
<td>Chemistry 11A, 11B, 11BL</td>
<td>4</td>
<td>5</td>
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<tr>
<td>Mathematics 31A, 31B, 32A-32B</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>Physics 8A, 8B</td>
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<tr>
<td>English 3</td>
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<tr>
<td>Electives**</td>
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<td>4</td>
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<tr>
<td>12</td>
<td>17</td>
<td>16</td>
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</tbody>
</table>

*The SEAS core requirement consists of 8 courses (32 units) to be chosen from 5 subject areas. The core is described immediately following the upper division segment of the curriculum. For courses to be taken in the sophomore year, students should consult their major field advisors.

**The upper division elective courses shall include the following: one course in the life sciences, three courses in the humanities-social sciences-fine arts area (all chosen from an approved list) and one free elective.

SEAS Core

The student is to select 8 courses (32 units) from the 5 subject areas listed below. The minimum and maximum number of units allowed in each of the 5 subject areas is also given.

<table>
<thead>
<tr>
<th>Subject Areas</th>
<th>(5) Courses(12)</th>
<th>Min. Max.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Electrical Sciences</td>
<td>Engineering</td>
<td>100 — Electrical and Electronic Circuits (4)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>100B — Engineering Electromagnetics (4)</td>
</tr>
</tbody>
</table>
### Credit for Transfer Students

A course in digital computer programming, using a higher-level language such as Fortran IV or PL/I, will satisfy the Engineering 10 requirement.

Certain lower division technical courses such as surveying, engineering drawing, engineering measurements and descriptive geometry will be given credit as free electives (a maximum of three courses may be free electives). See “Electives” below.

Many sophomore courses in circuit analysis, strength of materials and properties of materials may satisfy Engineering 100, Engineering 108 and Engineering 14 respectively.

Check with the Undergraduate Office, 6426 Boelter Hall.

### Electives

The Engineering and Applied Science curriculum for the bachelor's degree includes provision for 24 elective courses to be chosen within the following categories.

1. **Free electives**, 3 courses, 12 units

   Any course yielding credit acceptable to the University of California except CLEP, certain remedial courses, and special courses designated by the School and posted in the Undergraduate Office, 6426 Boelter Hall, may be selected. It is, however, strongly recommended that you select additional technical courses for some of these units.

2. **Humanities**, social sciences and/or fine arts, 7 courses, 28 units; to be chosen from an approved list.

   Of the seven courses, at least three (12 units) must be upper division courses. Students from California community colleges (only) may reduce this to two upper division courses (8 units) provided they are in the same field; however, all students, including California community college transfers, must have a minimum total of 7 humanities courses.

   To provide some depth, at least three courses (12 units) must be in the same academic department or must otherwise reflect coherence in respect to subject matter. This group must contain at least two upper division courses.

   With few exceptions, courses intended primarily to develop specific skills should be avoided (e.g., dexterity in performance on a musical instrument, ability to manipulate people, grammatical and composition skills, etc.). An exception is effective when the particular “skill” course is prerequisite to another upper division course which is strictly in the humanities or social sciences (e.g., foreign language and literature courses taught in the language, etc.).

   A list of courses which are normally acceptable individually as humanities-social sciences-fine arts electives is available in the Undergraduate Office, 6426 Boelter Hall.

3. **Engineering and science in society**, 1 course, 4 units

   One of the seven humanities-social sciences-fine arts courses or one of the free electives shall be a course (4 units) dealing primarily with engineering and science in society in the 100, 200 or 596 series (to be chosen from an approved list).

4. **Life science**, 1 course, 4 units; to be chosen from an approved list.

5. **Mathematics**, 1 course, 4 units (upper division); to be chosen from an approved list and appropriate for the student's major field of study.

6. **Major field**, 48 units (upper division)

   The major field elective program shall be chosen so as to reflect coherence with respect to subject matter and to prepare the student for an area of specialization (including unified engineering). The twelve courses shall include (a) at least 8 units of laboratory experience to be satisfied by designated laboratory courses or a 4-unit laboratory course and two courses each including 2 units of laboratory experience and (b) one upper division course (4 units) in economics chosen from the SEAS approved list.

7. **The engineering design content of the student's program** (major field electives, core courses, technical electives, free electives, etc.) must total at least 23 units.

   Lists of courses approved to satisfy the elective categories specified above are posted on the bulletin board in the Undergraduate Office, 6426 Boelter Hall.

### Proposed Changes

**Effective 1981-82**

It is anticipated that the following proposed additions and changes in regulations and policies of the School of Engineering and Applied Science will be voted upon by the faculty. Subject to approval by the faculty and by the Academic Senate (if required), these revisions will be implemented in 1981-82:

1. Engineering undergraduate students having met all the other conditions will be allowed to take one course per quarter on a Passed/Not Passed basis provided they are enrolled in at least 12 units for the quarter (this includes the course taken Passed/Not Passed).

2. A student must pass English 3 with a grade of "C" or better. The English 3 requirement must be satisfied before completion of 90 quarter units.

3. After completing 26 and 14 courses (106 quarter units) in all institutions attended, including work completed at UCLA, students will be allowed no further unit credit or subject matter credit for courses completed at a community college.

4. Of the last 48 units completed for the bachelor's degree, 36 must be earned in residence in the School of Engineering and Applied Science on this campus. Not more than 16 of the 36 units may be completed in Summer Session on the Los Angeles campus.

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*Not open for credit to students who have had Engineering 107B*.
(5) For graduation, a minimum 2.0 grade-point average must be achieved in all University courses in the combined upper division SEAS core, major field electives and upper division mathematics elective.

Advising and Program Planning

It is mandatory for all students entering the undergraduate program to have their courses of study approved by an Engineering advisor. After the first quarter, curricular and career advising will be accomplished on a formal basis. Students will be assigned to faculty advisors matching their major fields of interest whenever possible. A specific advisor or an advisor in a particular Engineering Department may be requested by submission of a "Request for Change of Undergraduate Advisor" form available in the Undergraduate Office. A list of faculty members and their specialties is posted on the Undergraduate Office bulletin board located in 6426 Boelter Hall. Your regular faculty advisor is available to assist you in planning your electives for discussions regarding your objectives.

Choose the curriculum under which you wish to graduate. You will use the curriculum in effect when you begin full-time continuous study in engineering at UCLA. However, any student has the option of selecting the curriculum in the UCLA Undergraduate Catalog in effect at graduation. Community college transfers have the additional option of choosing the curriculum in the catalog in effect at the time they began their community college work in an engineering program, providing attendance has been continuous since that time.

Attend the Junior Conference conducted by the School of Engineering and Applied Science for the purpose of helping you to plan your curriculum. The conference usually is held during the fourth week of each quarter. For time and place consult the Undergraduate Office, 6426 Boelter Hall. Plan your electives. The "Elective Selection" form approved by the major field advisor must be submitted for approval by the Assistant Dean, Undergraduate Studies, Undergraduate Office, 6426 Boelter Hall, during the first quarter of the junior year. The deadline for juniors to submit their elective selections is announced each term in the Undergraduate Enrollment Instruction brochure, School of Engineering and Applied Science.

Members of the Undergraduate Office staff are available to assist you with University procedures and to answer any questions which you may have in regard to general requirements. Pay them a visit.

Passed/Not Passed

Engineering undergraduate students may take one course per quarter on a Passed/Not Passed basis if the following conditions are met:

1. You are in good academic standing, i.e., not on academic probation or subject to academic dismissal.
2. You are enrolled in at least 3½ courses (14 units) for the quarter including the course taken on a Passed/Not Passed basis.
3. Only humanities-social sciences-fine arts and free electives may be taken on a Passed/Not Passed basis.
4. If you have not elected the Passed/Not Passed option in the preceding quarter and you were eligible by virtue of units and scholastic criteria (items 1 and 2 above), you may take two courses Passed/Not Passed. You must submit a petition to the Dean for approval to take two courses on a Passed/Not Passed basis in one term.
5. A student who has received two Not Passed grades shall be excluded from electing Passed/Not Passed for the next term in residence. A grade of Passed shall be awarded only for work which would otherwise receive a grade of "C" or better.

Honors

Departmental Scholars

If you are an exceptionally promising junior or senior, you may be nominated as a Departmental Scholar to pursue 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 3.4 grade-point average and the requirements in preparation for the major. To obtain both the bachelor's degree programs, the Departmental Scholar will fulfill the requirements for each program and maintain a minimum average of 3.4. The student may not use any course to fulfill requirements for both degrees. Interested students should consult the Assistant Dean, Undergraduate Studies, 6426 Boelter Hall, well in advance of application dates for admission to graduate standing.

Dean's Honor List

Students following the engineering curriculum are eligible to be named to the Dean's Honor List each term. They must have carried a minimum load of 16 units, 12 units minimum of letter grade, with a grade-point average better than 3.7.

Honors with the Degree

Students who have achieved scholastic distinction in upper division studies may be awarded the bachelor's degree with the appropriate honors designation: Cum laude, Magna cum laude or Summa cum laude. Based on grades achieved in upper division courses, a student should have a 3.4 upper division grade-point average to qualify for Cum laude, a 3.6 for Magna cum laude and a 3.8 for Summa cum laude. For all designations of honors, students must have a minimum 3.25 grade-point average in their major field elective courses to qualify. To be eligible for an award, a student should have completed at least 80 units of upper division studies at the University of California.

Tau Beta Pi

The UCLA chapter of Tau Beta Pi, the national engineering honor society, encourages high scholarship, provides volunteer tutors, and offers many services and programs "to foster a spirit of liberal culture in engineering colleges."

Student Activities

You will find an abundance and variety of extracurricular activities at UCLA which provide many opportunities for valuable experiences in leadership, service, recreation and personal satisfaction. The faculty of the School strongly encourages students to participate in such activities, especially those of most relevance to engineering. Among the latter are the student engineering society (the Engineering Society, University of California), the student publications, and the student-oriented programs of the many 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, two for each of the faculty's three major policy committees.

Women in Engineering

Women make up 17 percent of the undergraduate and 12 percent of the graduate enrollment in the School of Engineering and Applied Science. 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 to provide for their interests. This student section of SWE sponsors field trips and engineering-related speakers (often professional women) to provide an introduction to the various options available to engineers. The UCLA chapter of SWE, in conjunction with other Los Angeles schools, also publishes an annual resume book to aid women students in finding jobs.

Continuing Education

The Department of Continuing Education in Engineering and Mathematics, UCLA Extension, maintains an Evening Information Center
in 6266 Boelter Hall which is open from 5 to 7 pm Monday through Thursday throughout the year (except for the month of August and during Christmas and New Year’s weeks).

Need to Know More?
The Announcement of the School of Engineering and Applied Science, available by writing to the Undergraduate Office, School of Engineering and Applied Science, University of California, Los Angeles, CA 90024, gives an expanded version of the program described in this section.

The College of Fine Arts

The UCLA College of Fine Arts is a young, dynamic center for higher education in the arts. Its goal is to educate the artist who is connectected to society, and the College is committed to educate society about the arts.

The College of Fine Arts consists of four departments: Art, Dance, Music and Theater Arts. The curriculum is designed to provide the fine arts student with intensive training in his major within the broader liberal arts education of the University. The creative or performing artist, as well as the historian or critic, is provided an outstanding academic program.

Fine arts majors explore, through research and practice, the unique creativity of world cultures. Nonmajors are offered an educational program intended to foster a better understanding of the visual and performing arts. The College continues to support extracurricular programs in the arts for the benefit not only of the University community, but for the public as well. Such efforts include art gallery and museum exhibits, plays, films, and music and dance concerts.

An informative brochure on the UCLA College of Fine Arts is published annually. To obtain a free copy, contact the Student Information Office, A239 Murphy Hall, UCLA, 405 Hilgard Avenue, Los Angeles, CA 90024.

Majors Offered
Majors leading to the degree of Bachelor of Arts are offered in the following areas:

Art
Art History
Dance
Design
Ethnic Arts: Interdisciplinary Studies
Motion Picture/Television (juniors and seniors only)
Music, with specialization in Composition and Theory, Ethnomusicology, History and Literature, Music Education, Applied Music, Systematic Musicology
Theater

Students interested in obtaining teaching credentials for California elementary and secondary schools should consult the Graduate School of Education.

Admission
In addition to the “University of California Undergraduate Admission Application,” some departments in the College of Fine Arts may require auditions, portfolios or evidence of creativity. Detailed information on departmental requirements will be mailed to the student upon receipt of the application. Deadline date for applications is November 30, 1981, for admission in Fall Quarter 1982.

The Study List
Each quarter the student Study List must include from twelve to seventeen units. Petitions for more than seventeen units must be filed and approved by the Dean of the College prior to the deadline dates published by the Registrar’s Office.

If you have not filed your Study List by the end of the second week of classes, you must secure the permission of the Dean of the College to continue for that quarter.

Concurrent Enrollment: Concurrent enrollment in courses at another institution or in University Extension (including correspondence courses) is permitted only in extraordinary circumstances, and no credit is given for such courses unless the approval of the Dean has been obtained by the petition prior to enrollment.

Passed/Not Passed Courses: See A-310 in the “UCLA Grading Regulations” section of this catalog.

Graduate Courses
Undergraduate students who wish to take courses numbered in the 200 series must petition for advance approval of the department chairperson and the Dean of the College prior to enrollment and must meet the specific qualifications. Courses numbered in the 400 and 500 series are not applicable toward the degree.

Requirements for the Bachelor’s Degree
Each student must meet the University, College and major requirements, and the unit, scholarship and residence requirements as follows:

University Requirements
For information on the Subject A: English Composition and American History and Institutions requirements, please consult the index.

College Requirements
The general requirements of the College of Fine Arts must be completed with a grade-point average of 2.0 or better.

For specific courses that will fulfill the general College requirements, students should consult the College Office before enrolling. Courses listed below are used only as a guideline for 1981-82.

English Grammar and Rhetoric (4 Units)

English 3 with a grade of “C” (2.0) or better; must be completed by the end of the freshman year. This course may not be taken on a Passed/Not Passed basis.
English Composition and Literature (4 Units)

English 4 with a grade of "C" (2.0) or better; must be completed by the end of the sophomore year. This course may not be taken on a Passed/Not Passed basis.

Foreign Language (12 Units)

(1) Three quarters of one college language other than high school language or (2) level 3 (4 units) of the same language taken in high school, with the other 8 units made up from courses below in science, social science or humanities. A student whose entire secondary education has been taken in a language other than English may petition to be exempt from the foreign language requirement.

Proficiency examinations may not be used to complete the foreign language requirement. Some majors may require completion of the language prior to entry into the major.

Science/Mathematics (8 Units)

One course in physical or biological science and one course in another natural science or in mathematics.

Physical and Biological Science Courses:

Astronomy
Atmospheric sciences
Biology (except 10, 11, 30)
Chemistry (except 2)
Earth & Space Sciences (except 8, 20)
Honors Collegium, Module III
Kinesiology 12, 13, 14 only
Microbiology
Physics (except 10)

Other Natural Science and Mathematics Courses:

Anthropology 1, 2, 11, 124 only
Biological 10
Earth & Space Sciences 8, 20
Geography 1, 2, 5 only
Mathematics (no remedial, historical or statistical)
Physics 10
Psychology 15, 115, 116 only

Social Science (12 Units)

Two courses from the Department of History, one in any period prior to 1600 and one in any period after 1600; one other social science course.

Other Social Science Courses:

Anthropology (except 1, 2, 11, 124, 156)
Economics (principles, history and theory only)
Geography (except 1, 2, 5)
History (except medical or geological)

Honors Collegium (4 units from Module I or 4 units from Module II)
Near Eastern languages (Ancient Near East 163A-163B, Jewish Studies 140A-140B, 141, 142)
Political science (except courses dealing with civil rights and law)
Psychology (except 15, 115, 116, education, counseling, family life or child care)
Sociology (except mass communications, civil rights, education, law, criminology, marriage, family life or child care)
Note: Survey courses in history which cover "antiquity to present" will be applied only on history after 1600 or on other social science courses.

Humanities (12 Units)

One course in the arts, one course in literature, one course in philosophy and/or religion. Performance, studio or movie/film courses do not meet this requirement. Courses in your major department may not apply on this requirement.

The Arts Courses:

Architecture 189, 191
Art 50 series or 101A to 122
Classics 151A, 151B, 151C (except Art History majors)
Dance 140-146, 151A, 151B
Folklore and Mythology 118, 124
Theater Arts 5A, 5B, 5C, 102-105, 189

Literature Courses:

Selected courses in English, ethnic, American or foreign literature, including works in translation
Classics 10, 20
Folklore and Mythology 15, 101, 108
Honors Collegium (4 units from Module V)
Humanities, except those that are cross-listed ("M" courses)

Philosophy/Religion Courses:

Anthropology 156
Islamics 110
Oriental Languages 134, 172-174, 183, 184
Philosophy (all courses)
A course may be used to satisfy only one requirement, i.e., College or University or major requirement.

A few course areas that DO NOT APPLY on the general College requirements are: business, communications, creative writing, criminology, education, engineering, family life, marriage and child care, field studies, home economics, independent studies, interdisciplinary studies, journalism, law, mass media, public health and speech. Also no 198, 199 or CED courses and no seminars, proseminars or freshman seminars may be applied on the general requirements of the College. Courses which are multiple-listed (numbers preceded by "M") may not be applied on these requirements.

Additional Nonmajor Department Requirements for the Degree

Three upper division courses (12 units) completed outside your major department. These courses may not apply toward the general College requirements. Studio, performance, activity and 199 (Independent Studies) courses or field studies (400 courses) may not apply as additional nonmajor courses.

Unit Requirements

The candidate for the Bachelor of Arts degree shall have completed for credit no less than 180 units or no more than 280 units, of which at least 64 units shall be upper division courses (numbered 100-199). No more than one course (4 units) of physical education activities courses may be counted toward the degree. No more than 16 units of CED courses and no more than 8 units of Freshman Seminars will be counted toward the degree. Credit for 199 courses is limited to 16 units, 8 units of which may be applied to the major. All 199 courses must be taken for a letter grade. Only work of passing quality will apply toward degree requirements.

University Extension courses with the prefix "X" on those numbered in the 1-199, 200, 300, 400 or 800 series do not apply toward the degree.

Credit earned through the CEEB Advanced Placement Tests may be applied on the general College requirements. It is important to note that portions of Advanced Placement Test credit may be evaluated by corresponding UCLA course numbers, e.g., History 1C. If you take the equivalent UCLA course, deduction of unit credit for such duplication will be made prior to graduation.

Residence Requirements

A student is "in residence" only while enrolled and attending classes at UCLA as a major in one of the departments of the College of Fine Arts. Of the last 45 units completed for the bachelor's degree, 35 must be earned in residence in the College of Fine Arts (28 units must be upper division—16 of which must be in the major department). Not more than 18 of these 35 units may be completed in Summer Session at UCLA.

University Extension: Courses in University of California Extension (either class or correspondence) may not be used to fulfill any part of the residence requirements.

Major Requirements

A major is composed of not less than 14 courses (56 units), including at least nine upper division courses (36 units). Most majors in-
include both lower and upper division courses, arranged and supervised by the department and approved by the Executive Committee of the College.

Your attention is directed to the courses listed as preparation for the major in the "Courses" section of this catalog. It is essential that these courses be completed before upper division major work is undertaken.

Each candidate for the bachelor's degree is required to complete a major in the College of Fine Arts with a scholarship average of at least a 2.0 ("C" average) in all courses and must be recommended by the chairperson of the student's major department. All courses in your major department must be taken for a letter grade. Any student failing to attain a scholarship average of at least 2.0 in his major department may be denied the privilege of a major in that department. A department may also submit to the Dean of the College the name of any student who cannot profitably continue in the major.

As changes in major requirements occur, students are expected to satisfy the new requirements as soon as possible. Hardship cases should be discussed with the departmental advisor, and petitions for adjustment should be submitted to the Dean of the College when necessary.

Any department offering a major in the College of Fine Arts may require from candidates for the degree a general final examination in the department.

Ethnic Arts: Interdisciplinary Studies
An intercollege, interdepartmental major is offered in Ethnic Arts. It is open to students in both the College of Fine Arts and the College of Letters and Science. You enroll in the College of your choice and fulfill the breadth requirements of that College. Counseling is available in the department of your concentration.

The major includes a core of seven courses from the Departments of Anthropology, Art, Dance, Folklore and Mythology, Music and Theater Arts; a concentraton in one of the six disciplines; at least three courses in one foreign language; a senior colloquium; and electives selected by the student.

Ethnic Arts is at present only an undergraduate program. Admission to the major will be by special application to the Committee in Charge. For details of the major, see "Ethnic Arts" in the "Courses" section of this catalog.

Individual Majors
A student who is regularly enrolled and attending classes at UCLA and has some unusual but definite academic interest for which no suitable major is offered may plan his own major. A majority of the courses in the major must be in departments in the College of Fine Arts, with no more than three performance or studio courses.

If you are interested in an individual major, consult the Student Information Office in A239 Murphy Hall.

Scholarship Requirements
A "C" average (2.0) is required in all work attempted at the University of California, exclusive of courses in University Extension and courses attempted on a Passed/Not Passed basis. A "C" average (2.0) is also required in all upper division courses in the major attempted at the University, as well as in all courses applying to the general College requirements and the general University requirements.

The following minimum progress requirements apply to undergraduate students in the College of Fine Arts. You are expected to complete satisfactorily at least 36 units during three consecutive quarters in residence. You will be placed on probation if you fail to pass at least 36 units over three consecutive regular quarters in residence. You will be subject to dismissal if you fail to pass at least 32 units in three consecutive regular quarters in residence.

Honors
Dean's Honors will be awarded at the end of each quarter according to criteria established by the Dean of the College.

Honors at Graduation will be awarded to students with superior grade-point averages. Students eligible for honors must have completed 90 or more units (for a letter grade) at the University of California and must have attained a grade-point average which places them in the top five percent of the College for Summa cum laude, the next five percent for Magna cum laude and the next ten percent for Cum laude.

Counseling and Program Planning
The College of Fine Arts offers services in preadmission advising, program planning in the major and general degree requirements and individual meetings with departmental counselors and faculty, including a yearly degree check sent to each student. Prior to registration and enrollment in classes, each new student is assigned to a counselor in his major department. Any inquiry about these services should be directed to the Student Information Office, College of Fine Arts, A239 Murphy Hall, UCLA, 405 Hilgard Avenue, Los Angeles, CA 90024 (825-9705).

Need to Know More?
In addition to the counseling available in the College, the Psychological and Counseling Services in 4223 Math Sciences and the Placement and Career Planning Center located just south of Powell Library can provide informed guidance.

The following publication offers you added information about UCLA in general: Finders Keepers is a handbook to UCLA with sections on general academic planning. Reference copies are available through all department, College, School and ASK counselors, at the College Library and University Research Library reference desks and at a number of other counseling locations (AAP, Admissions, Dean of Student Relations Office, Division of Honors Office, Placement and Career Planning Center and Psychological & Counseling Services).
The School of Nursing

If you are interested in the academic program offered by the UCLA School of Nursing—on the graduate or baccalaureate level—you are urged to request a copy of the Announcement of the School of Nursing by writing to the School of Nursing, Student Affairs Office, University of California, Los Angeles, CA 90024. You can find a detailed description of the School of Nursing studies in the "Courses" section of this catalog. For information on graduate studies in the School of Nursing, please consult the UCLA Graduate Catalog.

Description and Philosophy

Schools of nursing differ in their professional focus on education and research. It is therefore pertinent to state this School's view of the profession which serves as a basis for its undergraduate and graduate programs. Basic to the philosophy of the School is the belief that it is the right of all individuals to receive optimal health care. Fundamental to this belief is the fact that all individuals possess a unique culture that influences their response to illness and their contribution and involvement in the delivery of health care. Nursing shares with other health sciences the goal of promoting health for individuals and communities, as well as the responsibility for the care, comfort and dignity of patients in acute, chronic and terminal illness.

To accomplish this goal, nurses function as independent practitioners in collaboration with other members of the health team and in a medical supportive role. Based on scientific knowledge and technical skill, the practice of nursing focuses on promotion of health, prevention of illness and support of the resources of the person who is ill.

Nursing concerns include expansion of knowledge essential to the nursing process, new methods of care and improvement of health care delivery systems. In implementing the philosophy of nursing, the curriculum concentrates on the behavior of man as he moves through the health-illness continuum.

The programs provide for an understanding of the social and cultural systems in which living and care-giving take place and for an understanding of man's psychology and physiology under normal and pathological conditions. Nursing research is stressed throughout the programs as the means for the development of new knowledge.

History and Accreditation

The School of Nursing was authorized by the Regents of the University in 1949 as one of the Professional Schools of the Center for Health Sciences at UCLA. This action paved the way for the development of an undergraduate basic program in nursing and made possible the establishment of a graduate program leading to the Master of Nursing degree. The baccalaureate program has been continuously approved by the California Board of Registered Nursing since 1949. The School of Nursing became an agency member of the Department of Baccalaureate and Higher Degree Programs of the National League for Nursing in 1952. The Accrediting Service of the National League for Nursing has granted full accreditation to both programs since 1954.

The Baccalaureate Program

The baccalaureate program leading to the Bachelor of Science degree provides for a close interweaving of general and professional education. The physical, social and emotional health aspects of nursing are emphasized throughout the curriculum. Clinical nursing experience under the guidance of faculty members is provided in hospitals, outpatient clinics, homes and community health centers.

Credit by examination is available to qualified students upon review of previous education. The Assistant Dean of Student Affairs will review a student's case upon request to determine the student's eligibility for this procedure. The School of Nursing offers a curriculum sequence which affords students the opportunity to sit for the California Registered Nurse licensing examination at the conclusion of the junior year. Interested students must maintain each quarter a minimum GPA of 3.0 and must petition the Dean to enroll beyond the four quarter courses usually permitted. Students are reminded that many states do not reciprocally honor California nursing licenses obtained prior to completion of a baccalaureate degree. Students who plan to follow this sequence should contact the Assistant Dean of Student Affairs before the beginning of the freshman year to receive more complete details.

Requirements for the Bachelor of Science Degree

The degree of Bachelor of Science will be granted upon fulfillment of the following requirements:

1. The candidate shall have completed the required 45 courses (180 quarter units) of college work and shall have satisfied the general University requirements.

2. The candidate shall have included in the required 45 courses at least 21 courses in general education.

3. The candidate shall have completed at least 25 quarter courses (100 quarter units) of upper division course work toward the degree, including Nursing 101, 104A, 104B, 104C, 109, 120A, 120B, 120C, 120D, 120E, 120F, 184, 190A, 190B, 193, 195, four electives, Physiology 105N, Public Health 100A, 180.

4. The candidate shall have maintained at least an overall grade-point average of "C" (2.0) in all courses taken while a student in the School of Nursing.

5. The candidate shall have completed all required nursing courses in the School of Nursing and shall have received a grade of "C" or better in the following clinical nursing courses: 101, 109, 120A, 120B, 120C, 120D, 120E, 120F, 190A, 190B, Physiology 105N.

6. The candidate is required to have been enrolled in the School of Nursing during the final three quarters of residence; the last nine courses must be completed while so enrolled.

Honors

The faculty of the School of Nursing, or a duly authorized committee thereof, shall recommend for honors and awards bachelor's degree candidates who meet the criteria determined by the faculty of the School of Nursing and the University.

Admission Criteria

The School of Nursing strives to attain a culturally and ethnically diverse student population. Admission is based on scholarship, diverse life experiences, ethnicity and disadvantage. Completion of a minimum of 84 quarter units with an overall grade-point average of 2.8 or above and three letters of recommendation are required. Diverse life experiences, including previous employment, volunteer work and community service which reflect leadership, responsibility, multicultural involvement, multilingual abilities, and other unusual skills and knowledge are evaluated. Consideration is also given to social and economic disadvantage such as educational background, heavy work schedule during school, housing conditions, family responsibilities and mastery of physical handicaps.

Completed applications should reflect clearly identified career goals and documentation of the applicant's potential in nursing.

Application Process

Applications for acceptance to the baccalaureate program in the School of Nursing must be filed no later than November 30 for the next Fall Quarter. The School of Nursing admits 50 students each Fall Quarter. The School of Nursing does not admit in Winter or Spring Quarters. Two separate applications are required.

1. Application for admission to the University in undergraduate status (accompanied by a $25 application fee) must be filed with the Office of Undergraduate Admissions, University of California, Los Angeles, CA 90024.
The School of Public Health

If you are interested in the programs offered by the School of Public Health at UCLA, you are urged to get a copy of the Announcement of the School of Public Health by writing to the Office of Student Affairs, School of Public Health, University of California, Los Angeles, CA 90024. Detailed descriptions of undergraduate course offerings are listed in the "Courses" section later in this catalog. Graduate courses are described in the UCLA Graduate Catalog.

Description and Purpose

Public health is a broad, multidisciplinary field of study directed toward the understanding and control of factors affecting the health of populations. The mission of the School of Public Health is to develop and teach the application of the sciences to the solution of community health problems. One feature of the field of public health is a reliance on research methods to identify important health relationships. Another feature is a community or social approach to the problems of health and disease in their preventive or therapeutic aspects. The concerns of public health cut across national boundaries and include the functions of both voluntary and governmental agencies, of research and teaching institutions and of health care facilities.

There are many areas of emphasis in the field, and five may be singled out as follows: (1) nature, extent and distribution of disease; (2) quantitative methods of description and analysis; (3) environmental hazards, their identification and control - emphasis is on hazards found in technologically advanced regions of the world, as well as less advanced regions; (4) the organization and delivery of community health services - emphasis is on the development of strategies for optimal provision of health care of high quality for all members of society; (5) basic biological and psychosocial processes that affect the health and well-being of populations.

The purpose of programs of instruction in the field of public health is to provide opportunity to develop understanding of the theoretical foundations and philosophy of the field, and to permit specialization in fields of professional service or research. This is achieved through required and elective courses that stress broad exposure to basic issues, as well as intensive study in selected specialties.

Through organized programs in the School of Public Health, students entering the field may thus prepare themselves for careers in such basic specialties as epidemiology, biostatistics, nutritional science and environmental health sciences. They may also prepare themselves for the challenges of community well-being such as the operation of hospitals, health maintenance in industry, the health education of the public, organization of medical care, behavioral sciences in public health and community health administration.

Degrees Offered

The School of Public Health offers the following degrees: Bachelor of Science in Public Health, Master of Public Health, Doctor of Public Health, Master of Science in Public Health, Doctor of Philosophy in Public Health, Master of Science in Biostatistics and Doctor of Philosophy in Biostatistics. In addition, combined MPH degrees are available with the African Studies and Latin American Articulated Degree Programs, Graduate School of Management, School of Law, School of Medicine and School of Dentistry. For information on graduate programs, please consult the UCLA Graduate Catalog.

Admission

Admission to the Bachelor of Science program is limited to undergraduate students in good standing within the University of California who have satisfactorily completed at least 84 quarter units of work in one of the Colleges of the University or who have transfer credits evaluated as equivalent.

Requirements for the Bachelor's Degree

(1) The candidate shall have completed at least 45 courses (180 quarter units) of college work, of which at least the last 9 courses (36 quarter units) must have been completed while enrolled in the School of Public Health. Not more than 18 of the above 36 quarter units may be completed in Summer Session on the campus of residence.

(2) The candidate shall have completed at least 16 courses (64 quarter units) in upper division (numbers 100 through 199). At least 6 courses must have been completed while enrolled in the School of Public Health, 4 of which must have been in the major.

(3) The candidate shall have maintained a "C" (2.0) average in all courses taken and shall have satisfied all of the course requirements in preparation for the major, as well as those required in the major.

(4) The candidate is not normally expected to take more than 180 quarter units to obtain the bachelor's degree. Approval of the Assistant Dean is required for a candidate, in rare cases, to continue after completing 208 quarter units.

(5) Credit limitations:

(a) Prior approval by the advisor and the Assistant Dean is required before a student may enroll in a course for Passed/Not Passed credit; courses in the major may not be taken on a Passed/Not Passed basis.
(b) Only 4 quarter units of physical education courses may be counted toward degree credit.

c) Public Health 199: open to seniors who must petition before enrolling; limited to 4 units each quarter; no more than 16 units may be counted toward degree credit.

d) Courses in the 200 or 400 series: candidate must secure approval from the faculty advisor, instructor and Assistant Dean before enrolling in these courses.

(e) Concurrent enrollment in University Extension or at another institution is permitted only under extraordinary circumstances and with prior approval from the faculty advisor and the Assistant Dean.

(f) After completing 105 quarter units toward the degree (in all institutions attended), the student will be allowed no further unit credit for courses completed at a community college.

g) Enrollment limitations: the candidate must enroll in no less than 12 nor more than 161/2 quarter units each quarter. Exceptions require approval of the faculty advisor and Assistant Dean. A student on probation may be given other limitations.

(h) A single course cannot be used to satisfy two distinct course requirements.

Major in Public Health

A student majoring in Public Health selects an area of concentration from one of the following: Biostatistics, Consumer Health Information and Education or Nutritional Science.

Preparation for the Major

Preparation for the major consists of the following:

(1) Subject A

(2) American History and Institutions

(3) Foreign language: two years of one language in high school or through Course 3 at college level

(4) Two years of high school mathematics

(5) One course from English 3 or 4, Humanities 2A or 2B

(6) Physical science: Chemistry 11A, 11B, 11BL, 11C, 11CL (Consumer Health Information and Education students take Chemistry 11A, 15 and an elective course in a physical science)

(7) Mathematics 1B or 3A

(8) Life sciences: Biology 5 and 7, and for Consumer Health Information and Education students, Microbiology 10 or 101

(9) Social sciences: three courses

(10) Humanities: three courses

(11) Additional courses may be recommended by the student’s advisor

General Requirements for the Major

Required are:

(1) Public Health 100A—Introduction to Biostatistics
(2) Public Health 110—Introduction to Medical Science or Public Health 111—Human Disease and Public Health
(3) Public Health 112—Principles of Epidemiology
(4) Public Health 150—Environmental Health or Public Health 155—Introduction to Environmental Health
(5) Public Health 180—Introduction to Public Health (Nutritional Science students may substitute Public Health 130)
(6) Public Health 153—Public Health Microbiology and Microbiology 101 (101 is not required for Consumer Health Information and Education students)

Field of Concentration Requirements

Biostatistics

The Biostatistics program prepares students in the application of biostatistics to the broad field of public health and the evaluation of health programs. Required courses include: Mathematics 31A, 31B, 32A-32B, 152A-152B or 150A-150B-150C; Public Health 101A, 101B, 100C (or 100A-100D). 102. Every student will be required to study an additional subject area at the upper division level as a basis for application of statistical methods and theories.

Consumer Health Information and Education

This program prepares a student to be a consumer health advocate and health information and promotion specialist.

A minimum of four courses are to be selected from among: Public Health 130, 160, 170, 182, 183, 184. In consultation with the faculty advisor, a minimum of four additional upper division courses are to be selected as a minor from one of the following fields of concentration: Communications, Organizations, or Behavior.

Nutritional Science

This program prepares students for advanced study in nutrition and related health fields. Required courses include: Mathematics 3B, 3C; Chemistry 21, 23, 25; Physics 3A, 3B, 3C (or 6A, 6B, 6C); Public Health 162, 163, 165, 167. Electives will be chosen in consultation with the faculty advisor.

Counseling

Open counseling is offered in the relevant division offices. Further assistance is given by appointment with the Student Counseling Office (825-7449) in the School of Public Health.

Money at UCLA

In this section you will find a detailed discussion of various fees and other financial obligations—as well as some of the ways to meet them.

Finding out about financial aid is a worthwhile investment of your time. Don’t assume that you don’t qualify. Or that you do. Either of those guesses can be costly. The Financial Aid Office publishes a guide, Passing the Bucks, which gives more information about aid. You can get a copy from your high school counselor or from Financial Aid Office, A129B Murphy Hall, University of California, 405 Hilgard Avenue, Los Angeles, CA 90024 (825-4531).

A further note: all fees outlined here are subject to change without notice. Payment of registration fees is part of the registration process; you can pay other fees at the Main Cashier’s Office, 1125 Murphy Hall, from 8:30 am to 5 pm any weekday.

Fees Assessed Undergraduates

As an undergraduate, you must pay a Registration Fee of $143 per quarter and a Student Union Fee of $4, both payable when registering.

In addition, you are assessed an Education Fee of $100 per quarter and an Associated Students Fee of $5 per quarter.

The Registration Fee covers certain expenses of students for counseling service, for athletic and gymnasium facilities and equipment, for lockers and washroom, for registration and graduation, for such consultation, medical advice and hospital care or dispensary treatment as can be furnished on the campus by the Student Health Service, and for all laboratory and course fees. Membership in the Associated Students is covered by the Associated Students Fee. No part of these fees is remitted to those students who may not desire to make use of any or all of these privileges. If you withdraw from the University within the first five weeks of the quarter, a part of these fees will be refunded. Any refund for withdrawal will be based on the date the completed notice for withdrawal is actually submitted. No claim for refund will be considered unless presented within the fiscal year to which the claim is applicable.

*Lockers are issued, as long as they are available, to registered students who have purchased standard locks. Locks are sold by the Campus Activities Service Office, 130 Royce Hall, for $1.25 each and may be used as long as desired or may be transferred by the purchaser to another student.

Residence for Tuition

All entering students and students returning to the University after a period of absence are required to submit a "Statement of Legal Resi-
tence" form upon acceptance of admission or readmission. The form will be provided by the admitting office and must be returned with the "Statement of Intention to Register" form. Registration materials cannot be prepared until the residence determination is completed.

**Nonresident Tuition Fee**

Students who are not classified as residents of the state of California for tuition purposes by the Residence Deputy are charged, in addition to all other fees, a quarterly tuition fee of $360 which is payable with other registration fees. See the calendar for the deadline.

**Residence for Tuition Purposes at the University of California**

Students who have not been residents of California for more than one year immediately prior to the residence determination date for each term in which they propose to attend the University are charged, along with other fees, a Nonresident Tuition Fee. 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.

**Law Governing Residence**

The rules regarding the establishment of legal residence for tuition purposes at the University of California are governed by the California Education Code and by Standing Orders of The Regents of the University of California. Under these rules residence for tuition purposes can be established by adult citizens or by certain classes of aliens. There are also particular rules applicable to the residence classification of minors (under 18) in that such residence is generally regarded as being derived from the parent or parents with whom the minor last resided.

**Who is a Resident?**

In order to be classified a resident for tuition purposes, an individual must have established his or her residence in California for more than one year immediately preceding the residence determination date for the term during which he or she proposes to attend the University and relinquished any prior residence. An individual must couple his or her physical presence within this state for one year with objective evidence that such presence is consistent with his or her intent in making California his or her permanent home and, if these steps are delayed, the one-year period will be extended until both presence and intent have been demonstrated for one full year. Indeed, physical presence within the state solely for educational purposes does not constitute the establishment of California residence under state law, regardless of the length of his or her stay. A woman's residence shall not be derivative from that of her husband or vice versa.

**Establishing the Requisite Intent to Become a California Resident**

Relevant evidence which can be relied upon to demonstrate one's intent to make California his or her permanent residence include the following: registering to vote and voting in California elections; designating California as his or her permanent address on all school and employment records, including military records if one is in the military service; obtaining a California driver's license or if a nonresident, a California identification card; obtaining California vehicle registration; paying California income taxes as a resident, including income earned outside California from the date residence is established; establishing an abode where one's permanent belongings are kept within California; licensing for professional practice in California; and the absence of this evidence in other states during any period for which residence in California is asserted. Documentary evidence may be required. All relevant evidence will be considered in the classification determination.

**Adult Aliens**

A student who is an adult alien is entitled to resident classification if the student has been lawfully admitted to the United States for permanent residence in accordance with all applicable laws of the U.S. and has thereafter established and maintained residence in California for more than one year immediately prior to the residence determination date. Nonresident aliens present in the United States under the terms of visa classifications A, E, G, I or K who can demonstrate California residence for more than one year prior to the term while holding such visa may be entitled to resident classification. Inquiries should be directed to the Residence Deputy.

**General Rules Applying to Minors**

The residence of the parent with whom an unmarried minor (under age 18) child maintains his or her place of abode is the residence of the unmarried minor child. The residence of an unmarried minor who has a parent living cannot be changed by his or her own act, by the appointment of a legal guardian or by the relinquishment of a parent's right of control. When the minor lives with neither parent, residence is that of the parent with whom the student maintained the last place of abode. The minor may establish residence when both parents are deceased and a legal guardian has not been appointed. Where the residence of the minor is derived, the California residence of the parent from whom it is derived must satisfy the one-year residential requirement.

**Specific Rules Applying to Minors**

(1) **Minor Aliens**—A student who is a minor alien shall be entitled to resident classification if the student and the parent have been lawfully admitted to the United States for permanent residence in accordance with all applicable laws of the U.S., provided that the parent has had residence in California for more than one year after admission to permanent residence prior to the residence determination date for the term applicable.

(2) **Divorced or Separated Parent Situations**—The student must move to California to live with the California resident parent while the student is a minor (before his or her 18th birthday) in order to receive derivative California resident status. Otherwise, he or she will be treated like any other adult coming to California to establish his or her legal residence.

(3) **Parent of Minor Moves from California**—A student who remains in the state after his or her parent, who was theretofore domiciled in California for at least one year immediately prior to leaving and has, during the student's minority and within one year immediately prior to the residence determination date established residence elsewhere, shall be entitled to resident classification until the student has attained the age of majority and has resided in the state the minimum time necessary to become a resident so long as, once enrolled, he or she maintains continuous attendance at an institution.

(4) **Self-Support**—Nonresident students who are minors or 18 years of age and who have demonstrated the intent to make California their permanent home and can evidence that they have been self-supporting and actually present within California for the entire year immediately prior to the residence determination date may be eligible for resident status.

(5) **Two-Year Care and Control**—A student shall be entitled to resident classification if immediately prior to the residence determination date, he or she has lived with and been under the continuous direct care and control of any adult or adults other than a parent of not less than two years, provided that the adult or adults having such control have been California residents during the year immediately prior to the residence determination date. This exception continues until the student has attained the age of majority and has resided in the state the minimum time necessary to become a resident student, so long as continuous attendance is maintained at an institution.

**Exemptions from Nonresident Tuition**

(1) **Member of the Military**—A student who is a member of the United States military stationed in California on active duty, except a member of the military assigned for educational purposes to a state-supported institution of higher education, may be exempted from the Nonresident Tuition Fees until he or she has resided in the state the minimum time necessary to become a resident. He or she must provide the Residence Deputy with a statement from the commanding officer or personnel officer stating the assignment to active duty in California is not for educational purposes and must include the dates of assignment to the state.
(2) Spouse or Other Dependents of Military Personnel—Exemption from payment of the Nonresident Tuition Fee is available to a spouse or to a natural or adopted child or step-child who is a dependent or a member of the United States military stationed in California on active duty. Such exemption shall be maintained until the student has resided in California the minimum time necessary to become a resident. The student must petition for this exemption each term he or she is eligible. If a student is enrolled in an institution and (1) the member of the military is transferred on military active duty immediately after having served in California on active duty, the student shall retain this exemption under conditions set forth above.

(3) Child or Spouse of Faculty Member—The unmarried, dependent child under age 21 or the spouse of a member of the University faculty who is a member of the Academic Senate may be eligible for a waiver. Confirmation of the faculty member’s membership on the Academic Senate shall be secured each term before this waiver is granted.

(4) Child of University Employee—The unmarried, dependent child under 21 of a full-time University employee whose assignment is outside California (e.g., Los Alamos Scientific Laboratory) and who has been employed by the University for more than one year may be entitled to a waiver. The parent’s employment status with the University shall be ascertained each term that the student requests the waiver.

(5) Children of Deceased Public Law Enforcement or Fire Suppression Employees—Children of deceased public law enforcement or fire suppression employees who were California residents and who were killed in the course of fire suppression duties or law enforcement duties may be entitled to an exemption of the nonresident fees.

Maintaining Residence During a Temporary Absence

A student’s temporary absence from the state for business or educational purposes will not necessarily constitute loss of California residence unless the student has acted inconsistently with the claim of continued California residence during his or her absence from the state. The burden is on the student to show retention of California residence during an absence from the state. Steps a student (or parent of a minor student) should take to retain California resident status for tuition purposes include:

(1) Continue to use a California permanent address in all records—educational, employment, etc.

(2) Satisfy California resident income tax obligations. It should be noted that individuals claiming permanent California residence are liable for payment of income taxes on their total income from the date they establish California residence. This includes income earned in another state or country.

(3) Retain California voter’s registration, voting by absentee ballot.

(4) Maintain California driver’s license and vehicle registration. If it is necessary to change driver’s license and/or vehicle registration while temporarily residing in another state, these must be changed back to California within the time prescribed by law, i.e., within 10 days for the driver’s license and within one year or when registration expires (whichever comes first) for vehicle registration.

Reclassification Petitions

Students MUST PETITION IN PERSON at the Registrar’s Office for a change of classification from nonresident to resident status. All changes of status must be initiated prior to the late registration period for the term of attendance for which the student seeks reclassification.

Time Limitation on Providing Documentation

If additional documentation is required for either an initial residence classification or reclassification but is not readily accessible, the student will be allowed a period of time no later than the end of the applicable term to provide such documentation.

Incorrect Classification

All students classified incorrectly as residents are subject to reclassification and to payment of all nonresident fees not paid. If incorrect classification results from false or concealed facts by the student, the student is also subject to University discipline. Resident students who become nonresidents must immediately notify the Residence Deputy.

Inquiries and Appeals

Inquiries regarding residence requirements, determination and/or recognized exceptions should be directed to the CAMPUS RESIDENCE DEPUTY, Office of the Registrar, 1134 Murphy Hall, 405 Hilgard Avenue, Los Angeles, CA 90024 (825-3447) or to the Legal Analyst-Residence Matters, 590 University Hall, 2200 University Avenue, Berkeley, CA 94720. NO OTHER UNIVERSITY PERSONNEL ARE AUTHORIZED TO SUPPLY INFORMATION RELATED TO RESIDENCE REQUIREMENTS FOR TUITION PURPOSES.

The student is cautioned that this summation is not a complete explanation of the law regarding residence. A copy of the regulations adopted by the Regents of the University of California is available for inspection in the Registrar’s Office. Please note that changes may be made in the residence requirements between the publication date of this statement and the relevant residence determination date. Any student, following a final decision on residence classification by the Residence Deputy, may make a written appeal to the Legal Analyst within 120 days of the notification of the final decision by the Residence Deputy.

Privacy Notice

All of the information requested on the “Statement of Legal Residence” form is required by the authority of Standing Order 110.2 (a)-(d) of the Regents of the University of California for determining whether or not you are a legal resident for tuition purposes. Your registration cannot be processed without this information. The Registrar’s Office on campus maintains the requested information. You have the right to inspect University records containing the residence information requested on the form.

Reduced Programs

If you meet the standards described here, you may be eligible for a fee reduction, as indicated.

Fee assessment for the cases discussed below is based on the total units enrolled as of the 15th day of classes.

Nonresidents

The Nonresident Tuition Fee is $960 per quarter. For an undergraduate student with College/School approval for enrollment in less than 12 units, the Nonresident Tuition Fee is $320 per course ($80 per unit). File a “Request for Fee Reduction” form with your academic Dean’s office for the applicable quarter. Refunds for courses dropped from the Official Study List are made according to the “Schedule of Refunds” discussed later in this section. For the purpose of determining reduced University Registration Fee charges and refunds, where applicable, partial dollar amounts greater than 50¢ are rounded to the next higher dollar amount. Amounts below 50¢ are dropped.

Residents

Certain qualified undergraduate students, when properly approved by the Dean of their College/School for enrollment in less than 9 units, may be eligible for a $50 reduction in their Education Fee. The “Request for Fee Reduction” form must be filed by the tenth day of instruction. Except for those qualified and approved part-time students, there is no reduction in the Registration, Education, Student Union or ASUCLA Fees.

Other Fees

The following is a list of what might be called “Miscellaneous Fees” charged undergraduate students at UCLA:
Application Fee, $25 — this nonrefundable fee is charged every undergraduate applicant for admission, readmission or intercampus transfer to the University.

Acceptance of Admission Fee, $50 — for undergraduates only. The fee is nonrefundable, but is applied toward the University Registration Fee in the first term of registration.

Returned check collection, $5

Late registration, $25 — when permitted (on or after the first day of instruction)

Duplicate Registration and/or other cards in “Registration Packet,” $3 each order

Change in Official Study List after the tenth day of instruction, $3 each petition when dropping, changing grading basis or adding a course within published period

Late filing of Study List (Study List card), $10 — when permitted

Removal of grade “E” or “I”, $5 each petition

Late filing of Degree Candidate card for the bachelor’s degree, $3

Late payment of fees, $10 (after a published deadline)

Credit by Examination, $5 per petition

Duplicate diploma, $25 (replacement cost upon presentation of evidence that original is lost or destroyed)

Transcript of Record, $2 for the first copy and $1 for each additional copy ordered at the same time

Late return of athletic supplies**, $1 for each for 24 hours until full purchase price of article is reached

Failure to empty locker within specified period, $5

No claim for refund will be considered unless presented within the fiscal year to which the claim is applicable.

New Undergraduate Students

Prior to Day 1 — Registration Fee you have paid is refunded except for the $50 Acceptance of Admission Fee, and other fees paid are refunded in full.

Day 1 and After — The $50 Acceptance of Admission Fee is withheld from the Registration Fee, and the “Schedule of Refunds” (see below) is applied to the balance of fees assessed.

All Continuing and Readmitted Undergraduate Students

There is a service charge of $10 for cancellation of registration or withdrawal before the first day of instruction. Beginning with the first day of instruction, the “Schedule of Refunds” (see below) is applied to the total of fees assessed.

Schedule of Refunds*

This schedule applies to the procedures described above:

<table>
<thead>
<tr>
<th>Days</th>
<th>Refund Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-14</td>
<td>100%</td>
</tr>
<tr>
<td>15-21</td>
<td>80%</td>
</tr>
<tr>
<td>22-28</td>
<td>60%</td>
</tr>
<tr>
<td>29-35</td>
<td>40%</td>
</tr>
<tr>
<td>36 days &amp; over</td>
<td>0%</td>
</tr>
</tbody>
</table>

*If no credit for courses is received, a full refund of the Registration Fee you have paid is refunded except for the $50 Acceptance of Admission Fee, and other fees paid are refunded in full.

Estimated Budget

The estimated budget presented here was put together based on expense diaries maintained for us by students, the Consumer Price Index, the Student Expenses and Resources Survey, and surveys of local costs for books, rent, transportation, food and clothing — your usual school-related expenses. It is designed to serve as a guide only.

Please note that financial aid awards are based on “need,” which is defined as the difference between allowable school-related expenses (budget) and the contribution expected from you and your family. Budgets do vary, depending on circumstances.

The budget below was estimated for a single student living in a shared room in a UCLA residence hall, co-op, fraternity, sorority or the YWCA. Other standard budgets are estimated for commuters (living with parents), single students living off campus, married or single-parent students living in Married Student Housing, and married or single-parent students living off campus.

1981-82 UCLA Budget*

<table>
<thead>
<tr>
<th>Fee</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Registration Fee</td>
<td>$429</td>
</tr>
<tr>
<td>Education Fee</td>
<td>300</td>
</tr>
<tr>
<td>Student Union Fee</td>
<td>12</td>
</tr>
<tr>
<td>ASUCLA Membership Fee</td>
<td>18</td>
</tr>
</tbody>
</table>

Books and Supplies 320

Residence Hall Room and Board (19-meal plan) 2600

Additional expense of holiday recesses and extra meals 285

Personal (clothing, cleaning, medical insurance, recreation, etc.) 765

Local Bus Transportation 180

Total Budget for California 4310-

Resident 4910

Nonresident Tuition Fee 2880

Total Budget for Nonresident of California 7190-

Financial Aid Programs

An underlying principle in the determination of financial need is that students and parents have an obligation to help finance the students’ education. Expected student and parental contributions are determined from information supplied by you in the “Student Aid Application for California (SAAC).” UCLA uses a nationally approved, nonprofit system of need-analysis to determine what amount your parents are expected to contribute towards your education. If you are an independent student, your financial circumstances are analyzed rather than those of your parents.

Student Financial Independence

The desire of you or your parents to claim financial independence for you does not necessarily release your parents from their responsibility to provide you with financial assistance to meet your college expenses. The Financial Aid Office is required to use two distinct definitions of independence to determine whether you are financially dependent on your parents.

California Definition

To qualify as independent for State and University grant aid in 1982-83, you must meet one of the following criteria:

1. You have been determined financially independent by an educational institution prior to June 30, 1977 or

2. You have not lived with either parent for six consecutive weeks or received more than $1000 from your parents in any of the last three tax years — 1979, 1980, 1981 — and you have not been claimed as an income-tax deduction by anyone except yourself or your spouse during that period.
than six consecutive weeks during calendar
spouse or
(3) You have been a ward of the court or
(5) You have been part of an extremely ad-
verse home situation, documented by respon-
sible community personnel, and without family
assistance for the last full year.

Federal Definition
To qualify as independent for 1982-83 Federal-
ly funded aid programs including grants, you
must meet all of these criteria:
(1) You may not be claimed as a tax deduction
by your parents for the calendar years 1981, 1982 and 1983 and
(2) You may not live with your parents more
six consecutive weeks during calendar
(3) You may not receive more than $1000 per
year assistance from your parents in 1981, 1982 and 1983.
As an independent student, you must also
demonstrate that you have been self-support-
ing during the calendar year prior to the aca-
demic year for which you are accepting aid.
Various financial aid programs administered or
coordinated by the Financial Aid Office are out-
lined below. You may be eligible for several
types of financial aid, and your financial aid
package usually honors your preference. All
Federal-, California-, University- and agency-
funded programs are subject to legislative and
administrative change.

Scholarships
Scholarships are categorized as either need-
based or non-need-based. A need-based
scholarship is awarded to outstanding stu-
dents with financial need. Non-need-based
(honorary) scholarships are awarded on merit
alone and normally carry only a nominal mone-
tary award, except in the case of Alumni Schol-
arships. No financial information is required of
students who apply for honorary scholarships.
Scholarship awards range from a $100 hono-
rarium to the amount of the applicant’s financial
need.

All UCLA scholarship awards are made on a
competitive basis. Consideration is given to
academic excellence, achievement and scho-
lastic promise. Scholarships are awarded to
entering and continuing undergraduates. The
terms and amounts of the awards vary. Stu-
dents are expected to maintain academic ex-
cellence in course work. Eligibility for a schol-
arship is determined by the University Commit-
tee on Undergraduate Student Support, Honors and Prizes. Although most scholar-
ships are open to all undergraduate applicants,
some are restricted by their donors to students
who meet prescribed criteria. Students will be
considered for all scholarships for which they
are eligible. Awards are based on grade-point
average and financial need. Read the scholar-
ship instructions sent to all undergraduate fi-
nancial aid applicants for grade-point average
requirements and special eligibility require-
ments.

Regents’ Scholarships
Unlike other University scholarships, Regents’
Scholarships are awarded for four years to stu-
dents entering from high school, and for two
years to continuing students and those trans-
ferring from another university or college who
will have completed their sophomore year by
the end of Spring Quarter. Students who have
achieved an outstanding academic record and
show a high degree of promise are eligible to
apply for Regents’ Scholarships. Financial
need is not a criterion for this award but stu-
dents who wish to be considered for this sti-
dend must file financial information each year.
Regents’ Scholars receive an honorarium of
$100 regardless of need. If you are eligible for
financial assistance, you may receive a stipend
to cover the difference between your resources
and the cost of your education at UCLA.

Chancellor’s Scholarships
The Chancellor has established this honorary
scholarship, with a nominal honorarium, to rec-
ognize superior achievement among UCLA’s
entering freshmen.

UCLA Alumni Association
Scholarships
Alumni Scholarships are limited to California
residents who will be freshmen in the Fall
Quarter. No financial need is involved and no
financial information is required to apply for
Alumni Scholarships. They are merit based
and competitively awarded. Academic promise
is required of all Alumni Scholarship winners.
The Ralph Bunche Scholarship, also awarded
by the UCLA Alumni Association and named in
honor of the famed Nobel Peace Prize-laure-
ate and UCLA alumnus, is awarded with con-
sideration given to the awardee’s financial sta-
tus and ethnic background.

Prizes
The generosity of alumni and friends of the
University provides for competitive prizes and
awards in several fields. Selections are made
by committees in appropriate academic de-
partments.

Grants
Grants are gifts that do not have to be repaid
and are based solely on need. Whenever
guidelines and funds permit, your financial aid
package includes a grant.

Basic Educational Opportunity Grant
(“Basic Grant”)
Undergraduate students who are U.S. citizens,
permanent residents or refugees are eligible to
apply for the Federal Basic Educational Oppor-
tunity Grant. The award amounts for 1981-82
range from $200 to $1900. If you apply for
UCLA “need-based” financial aid, the “Student
Aid Application for California (SAAC)” al-
so serves as your Basic Grant application. The
University of California requires that all eligible
undergraduates apply for a Basic Grant.

California Student Aid Commission
Cal Grants A and B
Undergraduate California residents who have
not completed more than six semesters or nine
quarters of college work prior to September
1981 are eligible to apply for a Cal Grant
award. The “Student Aid Application for Cal-
ifornia (SAAC)” and “Cal Grant Supplements”
are the official applications for these programs.
You can get them from the UCLA Financial Aid
Office, A128 Murphy Hall (825-4531); college
financial aid offices; high school counselors; or
the California Student Aid Commission, 1410
5th Street, Sacramento, CA 95814. The SAAC
and Supplements must be filed in February of
1982.

“Cal Grant A” awards range from $300 to
$759, are applied toward Education and Regis-
tration Fees and are based on need and aca-
demic achievement. They are renewable each
year.

“Cal Grant B” awards range from $300 to
$1859, are intended to assist low-income fami-
lies and are renewable annually. The State
sends renewal applications to continuing Cal
Grant recipients.

Grants-in-Aid
Grants-in-Aid provide eligible students with fi-
nancial assistance from University funds.
Awards range from $100 to $5010.

Supplemental Educational
Opportunity Grants (SEOG)
These awards are Federally funded and are
granted only to undergraduate students with
exceptional financial need. Grants range from
$200 to $1500 per academic year, but can be
no more than one-half the total assistance
awarded and must be matched dollar for dollar
with other aid.

Education Fee Grants
To qualify for this grant you must demonstrate
need and be a California resident and an un-
dergraduate in your first year at the University.
The maximum Education Fee Grant is $100
per quarter for your first three consecutive
quarters of attendance. This grant is awarded to
pay your Education Fee (if it has not been paid
by another fee-paying agency).

Work-Study Programs
Work-study is a need-based “award” that al-
lows you to work a maximum of 20 hours per
week while attending school and 40 hours per
week during vacation periods. An academic
year’s work-study award may range from $600 to $4500. Your gross earnings may not exceed the amount awarded to you. You can obtain more information from the Financial Aid Work-Study Office on A Level in Murphy Hall.

College Work-Study (Federal)
Under College Work-Study, a portion of your hourly wage is paid by the Federal government; your employer contributes the balance. Whenever possible, work is related to your educational objectives. Hourly pay-rates comply with minimum wage laws and vary with the nature of your work, your experience and your capabilities. Employment may be on or off campus. To be eligible you must be a citizen, permanent resident of the U.S. or a refugee.

President’s Work-Study
(University of California)
This program is administered in the same manner as College Work-Study, except that funding is provided by the Regents of the University and the employer, and you are limited to on-campus jobs. All students are eligible to apply for President’s Work-Study awards.

Loans
All loans described below are need-based, except the Guaranteed Student Loan which is budget-based.

Education Fee Loan
Students who are residents of the State of California qualify for a deferral loan of the Education Fee. Education Fee Loans may be awarded up to $300 per year for undergraduates and up to $360 for graduates. Every continuing resident student who is eligible for financial aid and whose fees are not paid by an outside agency will be offered an Education Fee Loan. Repayment, including interest of 3 percent per year, begins nine months after you terminate at least half-time enrollment. The repayment period may not exceed ten years. Minimum repayment is $90 per quarter including interest. The maximum routine repayment period is ten years. Loans made subsequent to June 30, 1972, include principal-and-interest-cancellation provisions up to 100 percent of their total debt for those who serve as full-time teachers of low-income or handicapped students in certain nonprofit elementary or secondary schools, as defined by Federal guidelines.

National Direct Student Loans (NDSL)
These loans are available to all students, undergraduate and graduate, who are citizens, permanent residents or refugees and who are carrying at least one-half the full-time academic workload. Students are eligible to receive a cosigner. Repayment begins within a year after you terminate at least half-time study. Minimum repayment is $90 per quarter including interest. The maximum routine repayment period is ten years. Loans made subsequent to June 30, 1972, include principal-and-interest-cancellation provisions up to 100 percent of their total debt for those who serve as full-time teachers of low-income or handicapped students in certain nonprofit elementary or secondary schools, as defined by Federal guidelines.

Nursing Loans
To be eligible for a Nursing Loan, you must be a citizen, permanent resident or refugee and a student in the School of Nursing. Up to $2500 is available per academic year. For more information, contact the School of Nursing financial aid counselor.

Student Loan Obligations
If you receive a loan offer as part of your financial aid award, you should carefully evaluate your total educational indebtedness and your ability to repay your loans. All UCLA-administered loan funds are revolving funds: money repaid by former borrowers is immediately reloaned to current students. The University will make every effort to assist you during the repayment of your obligation, but University services, including registration and the release of official transcripts, will be withheld if your loan becomes delinquent. Seriously delinquent accounts are referred to a professional collection agency for action (which may include litigation). You should be aware of your obligations when you accept a student loan.

The Exit Interview for Loan Recipients
All loan recipients are required to come to the Student Loan Services Office (A227 Murphy Hall) for a Loan Exit Interview before leaving UCLA for any reason. The purpose of the Exit Interview is to help you understand your loan agreement and to explain to you your rights and your responsibilities as a loan recipient. Failure to participate in an Exit Interview with the Student Loan Services Office will result in a hold on your academic records and registration materials.

Please call the Student Loan Services Office (825-9684) for an Exit Interview appointment.

Emergency Educational Loans
You need not be a financial aid recipient to apply for emergency loans. Up to $75 may be borrowed for immediate emergency needs. Emergency loans are repayable within five weeks from the day they are issued. Applica-tions are available in A227 Murphy Hall at the Student Loan Services Office. You must be a UCLA student with a satisfactory loan repayment record to qualify for emergency loan privileges.

Guaranteed Student Loans
Federal and California Guaranteed Student Loans are long-term budget-based loans made by banks, savings and loan associations and credit unions.

These loans are available to graduate and undergraduate students who are citizens, permanent residents of the U.S. or refugees and who are enrolled in at least a half-time program. Applications are processed by the Financial Aid Office and are submitted to a lending institution by the student. You should check with various lending institutions to determine their particular loan policies.

You are required to submit a special application for a Guaranteed Student Loan (GSL). Financial need is not taken into consideration in determining eligibility for the GSL. You may obtain the GSL application from the Financial Aid GSL Office, A217 Murphy Hall.

Repayment of the Guaranteed Student Loan begins within a year after completion of, or withdrawal from, school. Eligible students receive a Federal or State interest subsidy: the loan is interest-free during the time you are a student and for 6 to 9 months thereafter. You have up to 10 years to repay the loan at an interest rate of 7% or 9% per year. Minimum repayment is $360 a year. Repayment is waived up to three years while you are serving in the Armed Forces, Peace Corps or VISTA, or during any period of full-time study. Undergraduate students may borrow a total of $12,500 if dependent and $15,000 if independent; graduate students $25,000 (including any amount borrowed as an undergraduate). It takes approximately ten to twelve weeks to process a Guaranteed Student Loan.

Regulations of the Guaranteed Student Loan Program require that student borrowers be notified of (1) their institution’s fee refund policy and (2) the percentage of its students who find employment after obtaining a degree. The University of California’s refund procedures and schedule will be found under the “Schedule of Refunds” earlier in this section. The following salary and employment information for UCLA is derived from an annual survey conducted by the UCLA Placement and Career Planning Center for UCLA 1980 graduates:1

<table>
<thead>
<tr>
<th>Field of Study</th>
<th>Bachelor’s Master’s Doctorate</th>
<th>Degree Level of Graduates</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average Monthly Salary</td>
<td>Average Monthly Salary</td>
<td>Average Monthly Salary</td>
</tr>
<tr>
<td>$1026</td>
<td>$1472</td>
<td>$2067</td>
</tr>
<tr>
<td>$1728</td>
<td>$2453</td>
<td>$2938</td>
</tr>
<tr>
<td>Fine Arts</td>
<td>Humanities</td>
<td>Law</td>
</tr>
<tr>
<td>$939</td>
<td>$1784</td>
<td>$2057</td>
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<tr>
<td>$1016</td>
<td>$76.5</td>
<td>$98.2</td>
</tr>
<tr>
<td>$1568</td>
<td>$2121</td>
<td>$97.5</td>
</tr>
</tbody>
</table>

1. Average Monthly Salary Commitment
Application Procedures for Financial Aid

If you are a prospective undergraduate student, you will find descriptive material and instructions for requesting financial aid information in the 1982-83 "Undergraduate Admissions and Financial Aid Packet." Continuing students may obtain "UCLA Scholarship and Financial Aid Application Packets" at the Financial Aid Office, A128 Murphy Hall, in December of each year.

Continuing students from foreign countries may obtain a 1982-83 "Financial Aid Application for International Students" at the Financial Aid Counseling Window B. No financial aid can be awarded to foreign students in their first year of attendance at UCLA.

The 1982-83 deadline date for all undergraduate and continuing graduate financial aid applications will be in early February 1982. The deadline for entering graduates will be September 1, 1982. These dates are vitally important to you because applications accepted after the deadline date will be classified as LATE. Late applications for financial aid will be considered ONLY after all complete on-time applications have been processed and ONLY if funds are still available. The deadline will be announced in the Daily Bruin and other campus media.

ROTC Financial Assistance

Funds for students in the Reserve Officers' Training Corps are not administered by the Financial Aid Office; the subsistence allowances and scholarships available are briefly described below:

Air Force ROTC

Four-year scholarships are available to high school students; two-year and three-year scholarships to college students. Scholarships include full tuition, books and fees plus $100 a month. All cadets receive $100 per month during the last two years of the program and one-half the pay of a second lieutenant during the summer training period. Call 825-1742 or contact the Department of Aerospace Studies, 251 Dodd Hall, UCLA, 405 Hilgard Avenue, Los Angeles, CA 90024, for full information.

Army ROTC

Cadets receive $100 per month subsistence allowance during the last two years of the ROTC Program (Advanced Course). There are also four-year Army ROTC Scholarships which provide financial assistance to outstanding students (full tuition, books and fees plus $100 per month for the four years). During the six-week summer training period at the end of the junior year, cadets receive one-half the pay of a second lieutenant. Also available are 3-year, 2-year and 1-year scholarships for students enrolled in Army ROTC. Call 825-7381 or contact the Department of Military Science, 127 Men's Gym, UCLA, Los Angeles, CA 90024, for full information.

Navy ROTC

College NROTC students receive $100 per month subsistence allowance during the last two years in the program. Excellent opportunities exist for qualified NROTC students to receive full scholarships (tuition, books and $100 per month) after completing at least two quarters in the program. Call 825-9075 or contact the Commanding Officer, Department of Naval Science, UCLA, 405 Hilgard Avenue, Los Angeles, CA 90024, for full information.

Employment Opportunities

There is a fairly wide spectrum of choice and challenge for part-time employment at UCLA. On campus, ASUCLA has regular job openings in several areas (see the "Student Services" section of this catalog), while the Placement and Career Planning Center (located just south of Powell Library) lists jobs in a variety of categories.

Room and board in exchange for work situations are also kept on file at the Center, which is described more completely in the "Student Services" section of this catalog.

It is a good idea to also check the Daily Bruin and local newspapers for advertisements of potentially appealing part-time opportunities.

Housing at UCLA

Where you live while attending UCLA can play an important role in your total college experience. Housing options available to students include: UCLA Residence Halls (Dormitories and Residential Suites), University-Owned Apartments, UCLA Married Student Apartments, cooperatives, fraternities, sororities and off-campus rentals. Student demand for available on-campus and near-campus housing far exceeds the available supply. If you plan to live off campus, it is advised that you arrive early to make your housing arrangements for the coming academic year. Some students even pay rent year round (and try to sublet during the summer months to minimize costs) in order to assure accommodations for the academic year.

Eligibility to Use Services

You must present a current quarter's Registration Card or a letter of acceptance and a valid photo identification each time you use the services of the Office of Residential Life and the UCLA Housing Office.

Office of Residential Life

The Office of Residential Life, located in 1172 Placement and Career Planning Center (825-3401), provides professional and student staff to assist residents in the Residence Halls and in areas off Student Housing with counseling, programming and advising needs. Primary attention is given to creating an environment which promotes positive relationships, provides maximum support to students in support of educational goals and offers a wide variety of opportunity for personal growth.

University Residence Halls

Four coed dormitories and two coed residential suite complexes accommodate undergraduate students. Graduate students (21 to 29 years of age) are accommodated in a coed graduate dormitory.

Dormitory rooms (shared by two students) are furnished with studio beds, desks, draperies and pillows. Students must furnish blankets, bed linens, bedspreads and towels. Each residential suite consists of two bedrooms, a full bathroom and one common living room. Four students of the same sex are assigned to a suite, which is fully furnished with beds, storage space, couches, tables, chairs, lamps, desks, draperies and pillows. Students must furnish towels, linens and blankets.

The 1981-82 full academic year rate (Fall, Winter and Spring Quarters exclusive of vacation

| Social Science | 1163 | 1650 | 80.5 |
| Social Welfare | 1520 | 2000 | 80.4 |
| Dental | 2096 | 79.1 |
| Medical | 1350 | 98.1 |
| Nursing | 1352 | 1763 | 95.0 |
| Public Health | 1208 | 1645 | 94.0 |
periods) is approximately $2000 for dormitories and approximately $2600 for suites, plus a membership fee of $15 in the Residence Hall Student Association. For portions of the year, the rate is prorated. Contracts are issued from the date occupancy is authorized through the end of Spring Quarter 1982.

Three cafeteria-style meals are served daily with the exception of Saturdays, Sundays and University holidays when two meals are served. Special diets are not available, nor are "room only" contracts.

Application
A Housing Information booklet, which includes an application for Residence Halls, is mailed to all undergraduate students who apply to the University. Graduate students receive this same booklet upon return of the "Request for Housing Information" card enclosed with their packet from the Graduate Admissions Office. Further information pertaining to the application process is contained in the booklet.

Assignment
Residence Hall assignments are mailed in mid-April for Fall Quarter, mid-November for Winter Quarter and mid-February for Spring Quarter.

University Married Student Apartments
The University maintains 643 unfurnished one-, two- and three-bedroom apartments for married students and single student parents. These units are located on Sawtelle and Sepulveda Boulevards, approximately five miles from campus.

Rental rates for 1980-81 ranged from $166 to $263 per month. Due to the ever-increasing costs of maintaining these facilities, it is anticipated that the above quoted rates will be substantially increased for 1981-82. Utilities are not included in the rental rate.

Application
Due to the limited number of facilities, applicants can anticipate an average wait of 18-24 months for any apartment. Early application is important! An application is contained in the Housing Information booklet mailed to all undergraduate students who apply to the University. Graduate students receive this same booklet upon return of the "Request for Housing Information" card contained in the packet from Graduate Admissions.

Assignment
Assignments are made only to the full-time student member of the family and are not transferable to another member of the family. Verification of marriage or birth certificates are required for assignment.

To remain eligible for housing, assigned students must be enrolled in all quarters of the academic year (i.e., Fall, Winter and Spring Quarters). Only the student and his or her immediate family may live in the apartment. Extension students are not eligible. Eligibility criteria for assignments made after Fall 1981 are currently under review. Call the Married Student Housing Office (391-0686) for up-to-date information.

Meals
Students can obtain moderately priced meals at the University Residence Halls on an individual basis or by contracting for meals on a quarterly nonresident meal plan. For further information, contact the Residence Halls Cashier's Office, Sprout Hall, 350 DeNeve Drive, Los Angeles, CA 90024 (825-6131).

In addition, meals may be purchased on an individual basis from the various Associated Students food service facilities and from full-service vending areas located on campus. These are listed in the "Student Services" section of this catalog.

UCLA Housing Office
The UCLA Housing Office, located in 78 Dodd Hall (825-4491), provides listings of available off-campus housing as indicated below, as well as transportation information, bus schedules, area maps and counselors to aid in landlord-tenant conflict resolution.

University-Owned Apartments
UCLA maintains 216 off-campus apartments for single students located within walking distance to the campus and in the Mar Vista area serviced by University trams. Contact the UCLA Housing Office for availability and further information.

Off-Campus Living Groups
You may find accommodations providing a group living experience within walking distance of campus in privately operated cooperatives, in fraternities and in sororities.

Cooperatives
There are five privately-owned, nonprofit, member-controlled student living groups located adjacent to campus. Each student is required to work three to six hours per week as part payment for room and board. The Cooperative Housing Association is for men and women; the YWCA and Stevens House are for women only; Westwood Bayitt is a coed Jewish co-op; and Asher House is a coed Christian Science co-op. For 1981-82 room and board rates will vary from $320-$500 per quarter. Cooperatives normally have long waiting lists, so early application is important! To obtain applications and information, write directly to each cooperative. A list of cooperatives is available from the UCLA Housing Office.

Fraternities and Sororities
Most fraternities and sororities own or lease homes near the campus and provide lodging and meals for a number of their members. However, housing is not guaranteed with membership as each group has more members than live-in spaces. If you are interested in affiliating with a fraternity or sorority, contact the UCLA Interfraternity Council (for fraternities) or the Panhellenic Council (for sororities) in the Dean of Student Relations Office, 2224 Murphy Hall, 405 Hilgard Avenue, Los Angeles, CA 90024 (825-3871).

Off-Campus Listings
Up-to-date listings are maintained of apartments, houses, rooms and board accommodations, part-time work in exchange for room and board, and "share" situations (for people looking for roommates). These listings are available to students who come in person to the UCLA Housing Office (78 Dodd Hall). Listings cannot be mailed as they change daily. The office is open 8 am to 4:30 pm Monday through Friday (call 825-4491 for the expanded summer hours).

The University does not inspect rental accommodations and does not make rental or other arrangements on behalf of students. Student transactions must be made individually and directly with landlords. You are advised to have a clear understanding, preferably in writing, of the terms and conditions of tenancy. The UCLA Housing Office offers a handbook on tenant rights, model lease and rental agreements, other appropriate documents and advice on landlord-tenant problems.

Rental rates are relatively expensive in and around the Westwood area. The farther you get from campus, the less expensive the rental accommodations. Cost balances convenience. Average rental rates listed with the UCLA Housing Office for 1980-81 varied from $150 up per month for rooms in private homes, from $200 up per month for furnished bachelors and singles, from $425 up per month for one-bedroom apartments and from $500 up per month for two-bedroom apartments. Rental rates depend upon the furnishings and location of the lodgings. Housing listings are scarce, and rental prices for houses are appreciably higher. For most rentals utilities are extra. A few homes offer room and board in exchange for work.

Temporary Housing
Motels are located from one to five miles from campus with varying rates and accommodations. It is sometimes advisable for students to accept these accommodations temporarily until more permanent lodgings can be located. Motel listings are available from the UCLA Housing Office.
Transportation
at UCLA

There are several alternatives for personal transportation to and from the campus. Alternatives such as carpooling, public transportation and bicycling are described in the brochure entitled How To Get To UCLA Without Using Your Car, distributed by the Transportation Services Administration. This brochure is available at the Campus Parking Service and includes bus route maps and a "UCLA Ridesharing" application.

UCLA Parking Permits

A limited number of parking permits are sold to students. Students who wish parking permits may obtain a "UCLA Student Parking Request" at the Campus Parking Service. Parking assignments will be based on information on the completed requests. Not all students who request parking permits receive parking assignments. Students with physical disabilities which preclude walking long distances may apply for parking permits through Student Health Service. Only those who have parking permits are assured that they may bring automobiles to campus. Deadlines for returning a completed "UCLA Student Parking Request" to the Campus Parking Service will be established for each quarter and are listed in each quarter's Schedule of Classes. Parking permits are not transferable and may be purchased only from the Campus Parking Service.

Students may obtain "UCLA Student Parking Requests" and instructions for filing, including current deadlines, by contacting the Campus Parking Service at 825-9871.

Need to Know More?

Finders Keepers is a handbook to UCLA, with sections on transportation. Reference copies are available through all department, College, School and ASK counselors, at the College Library and University Research Library reference desks and at a number of other counseling locations (AAP, Admissions, Dean of Student Relations Office, Division of Honors Office, Placement and Career Planning Center and Psychological & Counseling Services).

Student Services at UCLA

This section works in concert with two other parts of the catalog: "Resources to Help You" and "Recreation and Participation." Together, this trio of services sections describes the range and variety of programs to help you.

Academic Advancement Program

The Academic Advancement Program (AAP), formerly EOP, is the primary student affirmative action program at UCLA. AAP is designed to provide academic support to students from ethnic and low-income communities who have been historically underrepresented at UCLA. The program seeks to assist these students in achieving their goal of graduation from the University of California. Applicants must be citizens or permanent residents of the United States and residents of the State of California. This requirement is waived for Native Americans who can document their tribal affiliation. Prospective applicants must meet regular University requirements for undergraduate admission as freshmen or in advanced standing. A limited number of exceptions are made each year. Special-action admission consideration is given on an individual basis. AAP, located in 1209 Campbell Hall (825-1481), offers orientation to campus resources; peer counseling for all entering students; extensive personal counseling services; individual and group tutorial sessions; career and graduate/professional school advisement; seminars and preparation sessions for all graduate school entrance examinations; and help in determining financial aid eligibility for State and Federal funds.

Office of Academic Resources Coordination

Students will find a comprehensive academic support system with advising and referral, Learning Laboratory and tutoring services at the Office of Academic Resources Coordination (ARC), located in 77 Dodd Hall (206-6681). ARC's goal is to help students identify and use the campus resources that will meet their needs.

Advising and Referral

Students are invited to discuss their questions, needs and concerns with an ARC counselor. Experienced counselors are available to respond to initial requests for assistance and to provide informed direct referrals for continued service within ARC or to other campus resources. Referrals will be followed up to assure that they were appropriate and the students' needs were met. Requests for initial assistance are handled on a walk-in basis; continued service usually requires appointments. In addition to the services offered to all students, ARC conducts a special pilot program involving a selected group of entering students. This program aims to improve the students' chances of academic success by providing them with regularly scheduled counseling, advising and referrals.

Learning Laboratory

In the Learning Laboratory students who wish to improve their academic skills can work at their own pace on a variety of self-instructional materials. Students may see a Learning Lab counselor for diagnosis of academic skills problems and appropriate placement into learning programs, or they may be referred by course instructors for specific programs designed to complement and supplement classroom instruction. The self-paced instructional programs include audio, video and written modules for improving reading comprehension and rate, English and mathematics skills, writing approaches, and study and test-taking techniques. Computer-assisted instruction is available for both basic skills development and enriched learning in a variety of academic disciplines. The atmosphere in the Learning Laboratory is warm and personal, with counselors always available to guide students in program selection, to assist them in using materials and to record their progress.

Tutorial Services

ARC is particularly concerned with helping students develop the verbal and quantitative skills required for success at the University. Peer tutoring programs staffed by qualified, trained undergraduates have proved to be one of the most effective means of addressing these needs. In collaboration with UCLA Writing Programs, ARC has developed the Composition Tutoring Lab to serve students enrolled in English composition and ESL classes. With ARC's assistance, the Mathematics Department offers the Math Tutoring Center for students who have special academic difficulties. Peer tutoring programs are open to all students. Students interested in being tutored may inquire at ARC about the availability of tutors in subjects other than mathematics and composition.

Campus Activities Service Office (CASO)

The Campus Activities Service Office, located in 130 Royce Hall (825-9891), administers and operates most campus public assembly facilities, classrooms and auditoriums. CASO offers technical advice in the public events area to groups holding events on campus. Groups
must be registered through the Campus Programs and Activities Office/Student Relations (CPAO/SR, 161 Kerckhoff Hall, 825-7041) to be eligible to use CASO services. CASO administers the Official and General Purpose Bulletin Boards on campus, as well as the General Assignment Lockers, and handles the sale of UCLA padlocks.

Department of Campus Community Safety (Police)
Aside from providing general law enforcement, the Department of Community Safety (Police), located at 601 Westwood Plaza (825-1491), offers a number of services to the University community:

Bicycle Licensing
Bicycles and mopeds can be registered and licensed free of charge either at 601 Westwood Plaza (Monday through Friday 8 am-3:30 pm) or at the Information and Services Booth on Bruin Walk (11 am-3 pm, two days a week). Call 825-9800 for more information.

Escort Service
The Department of Community Safety provides an escort service between campus buildings and/or local living areas within walking distance for students, faculty and staff from dusk to 1 am daily. Radio-equipped, uniformed Community Service Officers patrol the campus during those hours. To obtain an escort, call 825-1493 fifteen minutes before you need an escort.

Information and Services Booth
The booth, located on Bruin Walk and open 11 am-3 pm, two days a week, is staffed by Community Service Officers who provide a number of services free of charge, such as advice on rape prevention, and information on the Escort Service and on avoiding bicycle thefts. Officers also distribute handbooks and maps showing bike rack locations on campus, demonstrate bicycle safety and security equipment, and register and license bicycles and mopeds. For more information, call 825-9800.

Lost and Found
The Lost and Found Office, located at 601 Westwood Plaza, is open Monday through Friday 7 am-3:30 pm (825-1227).

Operation Identification
“Operation Identification” is a property engraving program available to all students free of charge. You may have your valuables (calculators, cameras, tape recorders, etc.) marked with your driver’s license number to increase the chance of recovery in case they are lost or stolen. Call 825-7661 for more information.

Rape and Crime Prevention
Seminars are held periodically throughout the year. For more information, contact the Crime Prevention Office at 825-7661.

Campus Parking Service
Please refer to the “Transportation” section of this catalog for a description of this service.

Campus Programs and Activities Office/Student Relations
The Campus Programs and Activities Office/Student Relations (CPAO/SR), located in 161 Kerckhoff Hall (825-7041), services existing organizations and encourages the development of new groups; assists registered organizations with advice on program planning and development (including the graduate and undergraduate student governments); aids in securing program funding; registers all campus organizations; has primary responsibility for interpreting and applying University rules and regulations to and for organizational programs and unscheduled activities. CPAO/SR acts as a clearinghouse for information on the programs and activities of registered organizations and as a referral agency for events occurring on campus.

Central Ticket Office
The Central Ticket Office serves the UCLA community through two locations:

James E. West Alumni Center (ground floor)
This location (325 Westwood Plaza, 825-2101) offers tickets to all UCLA athletic and cultural events; students tickets to athletic events at reduced prices; Ticketron and Mutual Ticket Agency tickets to off-campus events; bus tickets and tokens for the RTD and Santa Monica bus systems (discount rides for students); and special student discount tickets for local motion picture theaters.

650 Westwood Plaza
This location (trailer across from the University Police Department, 825-2953) also offers tickets to all UCLA athletic and cultural events. It also sells student tickets for on-campus cultural events at reduced prices, subsidized by the Student Committee for the Arts (you must show your Registration Card and Student Photo ID Card, and there is a limit of two tickets per person; watch the Daily Bruin ads for ticket sale dates).

Child Care
Child Care Services
Child Care Services (825-5086) offers two child care programs to University students, staff and faculty.

Child Care Center
Part-time and full-time care, depending upon parents’ needs, is offered for children two months to six years of age. Fees range from $29-$60 per week depending on full- or part-time care. The Child Care Center is located in Parking Lot 1, behind the Credit Union and the BRI trailers (10833 Le Conte Avenue, 825-5086).

Family Day Care
The program provides homes in the West Los Angeles community which are licensed by Los Angeles County and which participate in training and enrichment by the Child Care Services staff. Full- and part-time care is available; fees and hours are arranged with the individual care providers. Call 825-8474 for more information.

UCLA Parent Toddler School
Located in the Married Student Housing complex four miles south of campus at 3327 S. Sepulveda Boulevard (391-8155, 398-8739), this is a cooperative preschool open to all members of the UCLA community (full-time students, faculty and staff).

The program is designed to help toddlers from 18 months to three years develop a sense of independence, self-worth and the ability to relate to other children and to adults outside their own families. Some structured activities which encourage mobility and dexterity are available, but the children are encouraged to make their own choices and decisions.

Tuition is on a sliding scale, according to parental income. Parents participating in this cooperative scheme are required to work at school one morning in every four that their child attends. The Parent Toddler School operates Monday through Friday 9 am to noon.

University Parents Cooperative Nursery School
Located in the Married Student Housing complex four miles south of campus at 3327 S. Sepulveda Boulevard (397-2735), the school offers a warm, supportive educational environment to children of the UCLA community. The nature of the school also provides parents of varied cultural backgrounds the opportunity to gain insights and skills in parenting. Care is provided for children ages 3-6 years. The hours are Monday through Friday 9 am to noon and/or noon to 3:45 pm, with extended care available from 3:45 to 5:30 pm. After-school care for first and second graders who attend Clover Avenue School also is available from 2 to 5:30 pm Monday through Friday.
Computer Services
Registered students can obtain an account free of charge on the DEC system-10 interactive computer operated by the Office of Academic Computing. Special funds from the Chancellor support this resource designed to give students the opportunity to familiarize themselves with the use of computing equipment as a tool to assist in studies. You may use the computer to do homework, edit term papers, conduct independent research, teach yourself programming, or in connection with specific courses that make use of the computer as a learning aid. Terminals to access the computer are available in the Graduate School of Management, the Math Sciences building and Boelter Hall. Apply in 4302 Math Sciences from 8 am to 5 pm Monday through Friday (825-7548). Plans are to upgrade the DEC system-10 to a new machine in 1981 to provide the same service.

Financial Aid Office
The Financial Aid Office is located in A129 Murphy Hall. Walk-in counseling hours are 8:30 am to 5 pm Monday through Friday at Counseling Window B. Counselors are also available by appointment from 9 am to 4 pm Monday through Friday (825-4531). Please read the "Money" section of this catalog for a complete look at the services of the Financial Aid Office.

Office of International Students and Scholars
The Office of International Students and Scholars and the International Student Center provide services and programs specifically for foreign students and postdoctoral scholars. The staff, which includes professional and peer counselors, is uniquely prepared to respond to the questions and concerns of persons from other cultures. These include immigration, employment and other government regulations; financial aids; interpreting local customs; and personal problems. In addition, the office serves as an advocate for the interests of foreign students, individually and collectively. The office programs focus on facilitating an exchange within the academic setting between foreign and American students.

The Center, located on the south edge of campus at 1023 Hilgard Avenue (477-4567), operates with a small professional staff and several hundred volunteers. Its services include English language conversation groups, other language groups, assistance with locating housing, and special assistance for the family members of students and postdoctoral scholars. The Center's programs focus on student-community relations and include discussion groups, nationality dinners, international celebrations, tours of the local area and social activities.

Together the Office and the Center provide a comprehensive orientation program for entering foreign students. Both are committed to providing assistance to foreign students and scholars in their pursuit of the academic objectives for which they came to UCLA, and then to providing the means by which they can share their viewpoints with the American students and community. The Office is in 297 Dodd Hall (825-1681).

Ombudsman
The Ombudsman is responsible for listening to grievances from any member of the campus community, i.e., students, faculty, administrators and staff; for investigating those grievances; for resolving where possible, through mediation, those grievances where resolution has not been to the satisfaction of the concerned individual or where there are no established guidelines for resolution; and for resolving where possible, through mediation, those grievances in which the Ombudsman is requested to assist by the individual involved. The office, located in 274 Kinsey Hall (825-7627), is independent in operation, and all matters are handled confidentially. The Ombudsman is empowered to recommend changes to the University Policies Commission and/or to the Chancellor regarding University policies and practices. However, no action will be taken without approval of the individual(s) concerned.

Orientation
Orientation at UCLA is one aspect of the Academic Resources Coordination Office. It is more than just a summer program—it is part of a process that begins with admission, extends throughout the first year and seeks to provide support to students' academic endeavors at UCLA. During the summer and prior to the beginning of the Winter and Spring Quarters, special programs are offered for new students. These programs bring extensive academic counseling and educational planning to all new undergraduates entering the University. At these sessions, students work in small groups with peer counselors and discuss what will be required of them in order to be successful at UCLA. They also plan their schedules for the upcoming quarter and learn of the educational opportunities open to them. In addition, undergraduates can learn about student services and the University's facilities and activities. Each student receives individual time with a counselor, fulfilling the academic advising recommended for all students (required by some Colleges and Schools). These sessions provide opportunities for dealing with the problems of adjusting to University life. Sessions for parents are also offered. For further information, contact the Orientation Office in 77 Dodd Hall (206-6681).

Placement and Career Planning Center
The Placement and Career Planning Center offers career guidance and placement services to students of all disciplines at all degree and class levels. It is comprised of three functional divisions: Career Development, Student Employment and Educational Career Services. Services are located in the Placement and Career Planning Center building (825-2981) and in two satellite locations: 1349 GSM (specializing in management, 825-3325) and 5289 Boelter Hall (specializing in engineering and the physical sciences, 825-4608).

Career Development
A staff of career counselors is available to assist you in career exploration, choice and the job search. The Career Resources Library furnishes information on planning further education and alternative careers. The Campus Interview Program provides convenient access for student interviews with employers and graduate school representatives. A more diverse selection of job opportunities is posted for direct referral to the employer.

Cultural and Recreational Affairs Office
For detailed information on the programs offered by this office, please refer to the section of this catalog on "Recreation and Participation at UCLA."

Dean of Student Relations Office
The Dean of Student Relations Office (2224 Murphy Hall, 825-3871) is one of the few generalists left in these days of specialization. It exists to help students with whatever needs they might have, either directly or by referral.

The direct services offered by the Dean of Student Relations Office include: emergency locating of and emergency messages to students; fraternities and sororities; general counseling; "good student automobile insurance discount" verification; honorary societies, including Phi Eta Sigma and Alpha Lambda Delta (freshmen honor societies), Pi Gamma Mu (social science honor society), Mortar Board (senior honor society); letters of recommendation; tie-line for business calls to other UC campuses; and assistance in understanding grievances and community relations.

The Dean of Student Relations Office also plays a role in the administration of campus discipline. This role is discussed in more detail in the "Student Conduct" section of this catalog.

Field Studies Development
Please refer to the "Resources to Help You" section of this catalog for a complete description of this office.
Student Employment
A job listing and referral system is provided for currently enrolled students and their spouses who are seeking part-time, temporary or vacation employment. Career-related opportunities (including paid and nonpaid internships) are available either through the listings or through personal search with the assistance of this unit.

Educational Career Services
Specialized information and counseling is available to assist students and alumni seeking positions in universities, colleges, community colleges, and secondary and elementary schools. Current listings of educational job opportunities, internships in educational institutions and a professional file service are included.

Psychological and Counseling Services
The Psychological and Counseling Services include two separate divisions—the Behavioral Division and the Counseling Division. Both divisions provide professional services focusing upon student development and are available for the voluntary use of any regularly enrolled student.

Behavioral Division
The Behavioral Division (4223 Math Sciences, 825-4207) offers counseling for students who want to increase their effectiveness in handling specific problems encountered in the course of University life. Typical concerns which can be resolved through a self-management learning process include overcoming test-taking anxiety, fear of oral exams or participating in classroom discussions, public speaking anxiety, tension or inexpressiveness in difficult interviews and procrastination in studying. Other personal problems in which excessive anxiety or inappropriate learned behaviors interfere with performance can also be relieved, such as lessening difficulty in meeting people, learning to express oneself more directly and honestly in interpersonal relationships, and finding ways to increase self-confidence and self-control. Emphasis is placed upon the learning of techniques and abilities to help students implement decisions they have made and to realize their goals more effectively.

The staff is composed of professional psychologists. Both individual and group programs are offered. Students should call or come in to arrange an appointment (immediate appointments are possible when there is a pressing need) or to receive further information.

Registration Fee Advisory Committee
The RFAC (126 Royce Hall, 825-7609) functions as the primary agency for channeling student input into decisions regarding the level and use of Registration Fee funds. The voting membership consists of four undergraduate students, four graduate students, three administrative representatives and a faculty representative.

The committee conducts budget reviews annually for all departments and programs receiving Registration Fee funds and advises the Chancellor on funding for those areas, as well as the overall level of the Registration Fees. In addition, the Capital Outlay Task Force of the RFAC reviews funding requests for proposed Registration Fee Capital projects. The findings are forwarded to the RFAC for review and approval and are transmitted to the Chancellor thereafter.

Religious Programs
The University Religious Conference is located at 900 Hilgard Avenue (at Le Conte, 475-5055). URC membership is held by the Baptist, Catholic, United Church of Christ, Disciple, Episcopal, Jewish, Lutheran, United Methodist and United Presbyterian organizations. The Assembly of God is an associate member. The URC serves as the headquarters for various campus ministries and programs which are carried out on the campus and within the building. Other facilities of the URC members include the Catholic Center, 840 Hilgard Avenue; Campus Baptist Chapel, 668 Levering Avenue; University Lutheran Chapel, 10915 Strathmore Drive; and Episcopal Center, 580 Hilgard Avenue.

Other campus-related religious facilities include the L.D.S. Institute of Religion, 856 Hilgard Avenue; Christian Science Organization, 500 Hilgard Avenue; the Y.W.C.A., 574 Hilgard Avenue; and Chabad House, 741 Gayley Avenue.

In these facilities worship services, religious discussion groups, lectures, Bible classes, social gatherings, luncheons, dinners, social action conferences and other meetings dealing with campus religious life are held. In addition, the URC student religious organizations hold regular meetings and occasional services on campus.

ROTC
In accordance with the National Defense Act of 1920 and with the concurrence of the Regents of the University, a unit of the Senior Division Reserve Officers’ Training Corps (ROTC) was established on the Los Angeles campus of the University in July 1920.

Air Force
Air Force ROTC, through its Aerospace Studies offerings, enables students to develop, demonstrate and apply the knowledge and leadership qualities requisite for an officer’s commission in the U.S. Air Force. Students who demonstrate dedication to their assignments, who willingly accept responsibility, who think critically and who have the ability to communicate with clarity and precision will, upon completing the curriculum and graduating from the University, receive an officer’s commission. See the “Aerospace Studies” listing in the “Courses” section of this catalog for more details.

Army
The purpose of the Army ROTC is to qualify selected male and female students as leaders in their chosen fields, as far as the requirements of the service permit. These fields include: engineering; communications; administration; logistics; personnel management; intelligence; and many others. The ROTC Program qualifies graduates for commissions as officers in the United States Army Reserves, National Guard and Active Army. Distinguished graduates may qualify for a commission in the Regular Army.

Options now available include two-, three- and four-year programs leading to an Army commission. Cross-enrollment is available through UCLA Extension from community colleges or other colleges that do not offer Army ROTC. You can check the “Military Science” listing in the “Courses” section of this catalog for details of the program.

Navy
By action of the Secretary of the Navy and of the Regents of the University of California in June 1938, provision was made for the estab-
Student Health Service

General Description

The UCLA Student Health Service is designed to make available the health care and information a student may need while attending UCLA. Three areas of service are integrated by the Student Health Service to provide a comprehensive approach to meeting health care concerns. These are:

1. Clinical Care by the SHS professional staff, designed to provide a broad range of services, both preventive and medical, to meet the most health care needs, and referral services to professional care elsewhere for services not otherwise provided.

2. A low-cost Supplemental Health Insurance Plan which may be purchased to provide substantial financial coverage for the costs of necessary care which cannot be obtained in Student Health, such as hospitalization, surgery, specialized treatment or care at facilities other than Student Health.

3. Programs and Learning Opportunities, including a strong self-help component, to assist students in achieving an awareness of their own health and of assuming responsibility for their own health care, and several programs in which students may participate as active health workers.

The Student Health Service's resources are organized to meet the anticipated health care needs of the majority of students which may arise during active attendance at the University. Student Health offers comprehensive coverage for most conditions. In selected cases, limited direct care is available for predictably chronic or recurring needs. For most long term conditions, however, the student will be assisted in locating resources other than Student Health.

Benefits, Locations and Hours

Direct clinical care is available to students at the UCLA Student Health facilities, as well as at other UC campuses.

General and Emergency Care is available at the Student Health Clinic in A2-130 Center for Health Sciences. Office hours are Monday through Friday 8 am to noon and 1 to 5 pm, except TUESDAY, when service begins at 9 am. Emergencies only, as determined by the staff, are seen from 11:30 am to 1 pm and from 4:30 to 5 pm. Emergencies are handled on an appointment basis. Students are encouraged to make an appointment by calling 825-2463 or by stopping by the appointment desk in person; (b) a wide variety of Specialty Clinics to provide medical and/or surgical consultation of a specialized nature upon referral from the Primary Care Clinic. Specialty services include Dermatology, Orthopedics, Surgery, Gynecology, Internal Medicine, Allergy, Chest, Ear, Nose and Throat, Ophthalmology, Urology and Neurology; (c) ancillary services, such as a professionally staffed Clinical Laboratory, Radiology Unit and Pharmacy, are available in Student Health to provide support to the Primary and Specialty Clinics.

Moderate fees are currently charged for pharmaceuticals, contraceptive devices and medications, routine physicals and required health evaluations, dental care, orthopedic supplies, immunizations and missed appointments. All other services provided within the Student Health Clinics are available at no additional cost to fully registered or prepaid students during the academic year and are available to some categories of other students at fee-for-service rates (see "Conditions of Eligibility").

Gynecology and Contraceptive Services

The Women's Health Clinic provides care for routine women's health needs and treatment of gynecology problems. Family planning (birth control) services are available, as are testing, counseling and referrals for pregnancy. Counseling for sexuality and relationship concerns is also provided. Students wishing to use the contraceptive services are encouraged to first attend one of the educational orientation classes (CECE classes) offered by the Clinic. These classes are scheduled several times each week, and men are invited to attend.
All services of the Women's Health Clinic are available to eligible students free of charge during the academic year, with the exception of contraceptive devices and medications. No direct service or coverage is provided by Student Health for abortions, except for counseling and referrals. For additional information, for scheduled class hours or for appointments, call 825-5850 or 825-0854 or come in person to Student Health.

Dental Clinic

Services of the Student Health Dental Clinic are available by appointment without the need of a referral. While the primary function of the Dental Clinic is to treat dental emergencies, a limited amount of general dentistry and dental hygiene services is available. Dental examinations, X rays, prophylaxis, hygiene instructions, and advice and consultation on dental problems are provided. Fees are charged for all services of the Dental Clinic, and students are required to pay for care at the time of treatment. For additional dental information, call 825-5858.

Mental Health Service

Individual and group psychotherapy, as well as diagnostic and psychotherapeutic techniques, are available free of charge through the Mental Health Service located in Student Health and through the Psychological and Counseling Services located in 4223 Math Sciences. The respective staffs of psychiatrists, psychologists and clinical social workers provide help with situational stresses, such as school pressures, family conflicts or relationship problems, as well as with other emotional or psychological concerns. Student visits to these services are strictly confidential, and, in an emergency, a student will always be seen immediately. Call 825-7985 for more information or for an appointment in the Mental Health Service; call 825-4207 for information and appointments in the Psychological and Counseling Services.

Student Involvement Programs

Many students enjoy and benefit from the opportunity to become involved in the health care system. Benefits include increased awareness and understanding of health and health care, peer involvement in health counseling and care, student input and participation in health care administration, and increased exposure to a variety of health care careers and professions.

If a student is interested in becoming involved, Student Health offers several ways for him or her to do so. Self-care clinics encourage students to play an active role in their own health care. Student outreach programs such as the Student Health Advocates and the Peer Health Counselors give students the opportunity to become involved in providing health care for other students. Committees such as the Student Health Advisory Committee and the Student Health Insurance Committee represent formalized student input into health care administrative decisions.

For more information on the student involvement programs, please call 825-6385.

Hospitalization

The University and the Student Health Service do not provide any coverage for the costs of hospitalization or inpatient care at UCLA or at any other hospital. All such hospital and related costs are the student's responsibility.

To assure protection against unexpected and sometimes severe financial losses, students should be certain that they are adequately covered either through private hospital/medical insurance or through purchase of the UCLA Supplemental Health Insurance Plan (see "Supplemental Health Insurance" below).

Financial Support of Health Services

Student Health is supported principally by allocations from the Registration Fee paid by all fully registered students, by the voluntary Optional Health Service Fee paid by some categories of students and by the fees paid by students for certain services. Those students paying the Registration Fee or the Optional Health Service Fee have standard eligibility status and receive all benefits as described above at no additional cost, except for moderate service charges for pharmaceuticals, contraceptive devices and medications, routine physicals and required health evaluations, dental care, immunizations, orthopedic supplies and missed appointments.

Summer Session Fees, Filing Fees and any other monies advanced for special study categories short of full Registration Fees do not in themselves provide any support or eligibility for Student Health Service, but may make such persons eligible for benefits either by paying the Optional Health Service Fee or on a Fee-for-Service basis as explained below. Benefits not directly provided through the UCLA Student Health Service or exceeding stated limits are the student's personal financial responsibility, with or without the aid of any health insurance he or she may have. Such insurance, including the UCLA Supplemental Health Insurance Plan (see below), effectively extends the student's overall health care coverage beyond the limits of direct care at Student Health Service.

Conditions of Eligibility

(1) Students paying full Registration Fees in any quarter of the regular academic year of any School, College or Division of UCLA are entitled to full benefits as set forth above with official verification of registration. This privilege extends from the first day of the quarter or semester (as officially published) through the last day of the same, except in the case of withdrawal or dismissal (see below for limitations following withdrawal or dismissal). If the student intends to register for the next immediately following quarter or semester, his coverage extends through the break between quarters or semesters. On the basis of a reciprocal arrangement between UC campuses, students currently registered at other UC campuses may receive care on the same basis as those at UCLA. In the case of an officially confirmed transfer to UCLA as a fully registered student, the student will be entitled to full benefits during the regular academic year, for the period between the last day of official registration at another UC campus and the first day of the UCLA quarter immediately following.

(2) Some categories of students who pay less than the full Registration Fee may receive Student Health benefits during any quarter (including summer months) in which their eligibility applies by electing one of the two following payment methods:

- They may receive full benefits by prepayment of the Optional Health Service Fee at the beginning of the quarter or initial Summer Session or
- They may utilize the Student Health Service on a Fee-for-Service basis between the last official day of the academic session just preceding and the opening day of the next session following such periods.

The specific categories of students eligible for these options are as follows:

(a) Continuing students (including those from other UC campuses transferring to UCLA) during summer months, whether attending Summer Session or not.

(b) Accepted candidates for any UCLA degree including undergraduates who have filed an Intent to Graduate during any one quarter of nonregistration, for any reason except withdrawal, provided that they have been fully registered or under academic department sponsorship in the previous quarter, and that they have satisfactory evidence of intent to reregister.

(c) Graduate students actively researching and/or writing dissertations who have no need to take classes or to register for this purpose, and who are not ready to submit their theses and pay Filing Fees. Service is contingent upon presentation of any official written confirmation of current sponsorship and continuing bona fide degree candidacy for the quarter from the responsible senior faculty member or department head.

(d) Graduate students paying a Filing Fee for dissertations, but not otherwise registered for that quarter or summer period in which that fee is paid.

(e) Postdoctoral fellows and trainees, properly identified as such by their sponsors, working full time towards additional credentials in any quarter or summer period.
Supplemental Health Insurance

The cost of necessary hospital inpatient care is not covered by Student Health nor is the cost of any care obtained outside of Student Health. Students treated within Student Health following withdrawal from school or during an unregistered quarter are liable for Fee-for-Service charges for care received. Since such costs are the student’s responsibility and may cause serious financial hardship, each student should be certain that he or she has adequate health insurance coverage. The University requires as a condition of registration that all foreign students attending UCLA on nonimmigrant visas supply written proof of adequate health insurance to the Student Health Service at the beginning of their first quarter or semester of registration and thereafter annually at the beginning of Fall Quarter. Additionally, the University reserves the right to require adequate health insurance of all students as a condition of registration.

If not already covered by health insurance, students are encouraged to purchase the Supplemental Health Insurance Plan developed jointly by the UCLA Student Health Insurance Committee and the Student Health Service. This plan is available only through the Student Health Service and only at the beginning of each quarter. The specific enrollment periods for the insurance appear at the front of this catalog.

The Supplemental Health Insurance Plan is negotiated annually and is typically as follows: It is an “excess” plan providing benefits only after all benefits available from other insurance coverage have been exhausted. It is a “supplemental” plan which is intended to provide coverage only for those services not available to students through the Student Health Service facilities. Consequently, no benefits will be payable under this policy should expenses be incurred for services which could have been obtained in Student Health.

“Preexisting” conditions are not covered. These are conditions for which professional advice or treatment was previously received or which were manifest prior to purchase of the plan.

The plan will also have other specific benefit exclusions. Students are urged to carefully review the policy prior to purchase. Assistance is available at the Student Health Insurance Office or by calling the Insurance Coordinator at 825-1856.

The Supplemental Health Insurance Plan is not automatically renewed and students are not automatically enrolled in it. Students must reapply for the plan on or before the date the coverage period expires. Renewal notices are not mailed.

Care of Students' Dependents

Due to limitations of staff and space, no care for students’ dependents can be provided within the Student Health Service. The Supplemental Health Insurance Plan may be purchased at Student Health for the dependents of any student who has purchased the plan for himself or herself. Dependents’ benefits under the insurance plan are identical to those available to the student.

Confidentiality of Medical Records

To protect individual privacy, no information whatsoever will be given to any person regarding a student’s medical condition without his or her prior written consent or a legal court order, except in cases of extreme emergency when not to do so would, in the Director’s opinion, endanger the student’s life or the lives of others, and as otherwise required by law. Students have the right to examine and review the contents of their medical records in the presence of Student Health professional staff members by appointment and according to established rules. The record itself, however, is the property of the University and may not be removed from the custody of Student Health by any person, except under court order.

Care Off Campus

When visiting another University of California campus, a UCLA student is eligible for services at that campus Student Health Service under the same conditions that apply to students enrolled on that campus. Verification of student registration at UCLA will be required. While a student is off campus participating in an officially sponsored event, necessary medical expenses incurred because of injury are covered by insurance carried by the Regents of the University. This policy does not cover any care which the student could reasonably have obtained through the UCLA Student Health Service.

Third-Party Liability and Subrogation

When a student is treated under Student Health Service auspices for illness or injury resulting from third-party negligence or intent, the University reserves the right to recover the actual costs of such care as the “prime insurer” by assignment or subrogation from any subsequent legal settlements and/or awards to the patient.

Federal Income Tax Deduction

For Federal income tax purposes, the amount allocated to Student Health from each quarterly Registration Fee paid during the taxable year may be taken as a deduction for medical care. This amount changes each year, and the exact figure for the most current taxable year may be obtained by contacting the Information Desk at Student Health.
Health Requirements at Entrance

Before beginning course work at the University, all students are urged to have their own physician and dentist examine them for fitness to perform University work. Students are encouraged to have any health problems capable of being remedied, such as dental cavities, impaired hearing or defective eyesight, corrected before coming to the University.

All new and reentering students in the Graduate Schools of Dentistry, Education, Medicine, Nursing and Social Welfare must complete and return to the Student Health Service the health registration and history forms mailed to them with their registration materials. These individuals are required by the respective Schools to have a thorough physical examination and selected tests and immunizations prior to registration. The required health evaluation procedures are offered by appointment through the Student Health Service at a low cost. Charges for such procedures are the responsibility of the individual student.

All new and reentering foreign students attending UCLA on nonimmigrant visas must complete and return to the Student Health Service the health registration and history forms mailed to them with their registration materials. These individuals are required by University policy to supply written proof of adequate health insurance to the Student Health Service annually at the beginning of the Fall Quarter. Additionally, all new and reentering foreign students are required to be cleared by Student Health for freedom from active tuberculosis. These students must have a chest X-ray or tuberculin test performed at Student Health Service.

Other students are not required to complete a health evaluation form as a condition of registration. However, students who would like to participate in a special campus medical program for the physically disabled are urged to contact the Disabled Students Medical Program Coordinator in the Student Health Service at 206-6216.

Additional Information

Metered parking for students visiting the Student Health Service is available on the A Level of the Center for Health Sciences parking structure. Students and others may obtain additional information about the Student Health Service by calling 825-4073 or by writing to: Director, UCLA Student Health Service, A2-130 Center for Health Sciences, Los Angeles, CA 90024. The following telephone numbers may be useful for obtaining specific information regarding services at Student Health:

<table>
<thead>
<tr>
<th>Service</th>
<th>Number</th>
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<tbody>
<tr>
<td>SHS Information</td>
<td>825-4073</td>
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<tr>
<td>Insurance Coordinator</td>
<td>825-1856</td>
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<td>Appointments:</td>
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<tr>
<td>General Care</td>
<td>825-2463</td>
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<tr>
<td>Specialty Clinics</td>
<td>825-1163</td>
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<tr>
<td>Women's Health Service</td>
<td>825-5850</td>
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<tr>
<td>Mental Health Service</td>
<td>825-7985</td>
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<tr>
<td>Dental Clinic</td>
<td>825-5858</td>
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<tr>
<td>Social Services</td>
<td>825-4076</td>
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<tr>
<td>Pauley Pavilion Station</td>
<td>825-5704</td>
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<tr>
<td>Health Evaluations</td>
<td>825-0861</td>
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<tr>
<td>Health Education</td>
<td>825-6385</td>
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<tr>
<td>Health Advocates</td>
<td>825-4730</td>
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<tr>
<td>Peer Health Counselors</td>
<td>825-8462</td>
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<tr>
<td>Cold Clinic</td>
<td>825-8462</td>
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<tr>
<td>Nutrition Clinic</td>
<td>825-8462</td>
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<tr>
<td>Student Health Advisory Committee</td>
<td>206-6845</td>
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<tr>
<td>Campus Information</td>
<td>825-4321</td>
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<tr>
<td>If On Campus</td>
<td>33</td>
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<tr>
<td>If On Campus</td>
<td>35</td>
</tr>
<tr>
<td>Escort Service</td>
<td>825-1493</td>
</tr>
<tr>
<td>UCLA Emergency Room</td>
<td>825-2111</td>
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</tbody>
</table>

Deaf and hard of hearing students may communicate with the Student Health Service via the UCLA Hospital Interpreter/Translator Service at 825-7275 or via the Office of Special Services at 206-6083.

The Student Health Service encourages students to share their reactions, expectations and health care needs with the Student Health staff or with the Student Health Advisory Committee in order that the Health Service may better serve them. The following suggestions are provided so that students may receive the maximum benefits from the Student Health Service:

- Participate actively in your own health care, including the self-help and student-run programs.
- Become knowledgeable about all the services and informational materials offered through the Student Health Service and take advantage of them.
- If possible, make an advance appointment for services. Remember though, fees are charged for missed appointments, so cancel ahead of time.
- Ask to be seen by a specific clinician if you like and respect that person.
- For walk-in service, come early in the day.
- Be certain that you are adequately covered by health insurance. If not, consider purchasing the UCLA Supplemental Health Insurance Plan.
- Don't hesitate to ask questions about any diagnosis or treatment you may receive or about any costs incurred. Be sure you understand the answers you are given.
- Use the suggestion forms available in Student Health to make known any comment, complaints or compliments you may have about the Health Service.
- Be a responsible patient and complete the course of treatment prescribed for you, including any follow-up visits or tests that may be necessary.

Student Legal Services

Registered students with legal problems may obtain assistance free of charge in the resolution of their difficulties in such diverse areas as landlord/tenant relations, domestic relations, accident and injury problems, criminal matters and contract and debt problems. Each student will be seen on a walk-in basis in the 70 Dodd Hall (825-9894) by an attorney or by a law student participating in a clinical program of the UCLA School of Law under the direct supervision of an attorney.

UCLA Alumni Association

You don't have to be an alum to take advantage of the programs and benefits of the UCLA Alumni Association. Staff, parents and University Extension students are all eligible for membership. In whatever capacity, you become a partner in the UCLA community designed to foster interest in UCLA.

Organized for the benefit and betterment of UCLA's students, faculty and alumni, the Association programs include a wide range of opportunity to get involved on a uniquely personal basis.

You may join as either an Annual member or on a Life member basis. And, for graduating seniors, there are special discounts on cap and gown rentals and graduation announcements for those who join. Whether you're a senior or not, you'll enjoy associating yourself. Some of the activities of the Alumni Association are:

Advisory and Scholarship

The Advisory and Scholarship Program awards approximately $150,000 annually in merit scholarships to entering freshmen and continuing students. Freshmen scholarships range from $700 to $3500. Eligibility for these awards is a minimum 3.5 GPA and California residency. Financial "need" is not a requirement, and the awards are conferred on a competitive basis. Recipients of these awards are known as Alumni Scholars and form a club which engages in a number of University service and recreational activities. Awards to continuing students are in the Distinguished Scholar category and are competitive among departmentally nominated students. In addition, the Advisory and Scholarship Program provides training to alumni who serve as "advisors" to highly able high school seniors.

Student/Alumni Relations

Student/Alumni Relations programs are designed to give students the chance to get to know the Alumni Association, its members and services. Programs such as Homecoming and "Dinners for Twelve Strangers" offer a unique opportunity for students to meet and work with faculty, staff and the Los Angeles area alumni. Each year the office and its programs serve to support student events such as the Chancel-
lor’s Freshman Reception and University Sing, as well as administering the Alumni Association’s Outstanding Senior Awards program.

The Student Alumni Association is a service and support group with many planned activities each quarter, such as ski trips, finals’ food feasts, Homecoming, Mardi Gras and informative seminars.

UCLA’s Young Alumni group is organized to service the needs of recent graduates. Activities include sporting events, credit and career seminars, and various social and service programs.

More Information
You can get more information about the activities of the UCLA Alumni Association in the James E. West Center (across Westwood Plaza from Ackerman Union, 825-3901).

University Policies Commission
The University Policies Commission functions as a deliberative body to study and, when appropriate, to recommend innovations or policy changes which would enhance the quality of the campus environment. Representing all segments of the campus community, its membership includes three students, three faculty members, three nonacademic staff members and three administrators.

Students, faculty, staff and administrators are encouraged to contact the office in 126 Royce Hall (825-7906) with policy items of concern to them and the campus community.

Visitors Center
The Visitors Center, located in 100 Dodd Hall (825-4338, 825-4467), has a reception area where visitors are met, welcomed and assisted. Campus appointments for both domestic and foreign visitors, including escorting and interpreting, are part of the services offered.

Campus tours for the public are offered weekly, and personalized campus tours are arranged upon special request for visitors and guests of University staff and faculty.

Literature and information on campus events, concerts, exhibits, lectures and recreation areas are kept on hand in the Center.

Women’s Resource Center
The Women’s Resource Center (WRC), located in 2 Dodd Hall (825-3945), offers services to the entire campus community, with special focus on women’s needs, including:

- Drop-in and telephone referrals both on and off campus for child care, counseling, health care, legal aid and employment.
- Ongoing and new support groups for women and men focused around a wide variety of topics.

- Boards with listings on women-related events on and off campus, jobs, housing and more.
- An information system and library covering topics such as women in history, health care, aging, legislation, violence against women, politics, career preparation and assertion training.

The Women’s Resource Center also offers internships in creative writing, editing, library science, graphic art, legislative research, women’s issues, publicity, program development and administration. Internships involve a six-hour per week commitment for eight to ten weeks.

The Women’s Resource Center is a unique student service committed to the improvement of the status of women on campus by providing opportunities for women to develop their full potential. To this end, WRC works cooperatively with a wide variety of individual staff, faculty and students, as well as campus units, organizations and student groups to provide supplemental programs, workshops and resources that will enrich the educational, personal, career and leadership development of women at UCLA.

About ASUCLA
The Associated Students of UCLA combines four diverse vital campus functions within one organizational structure. Its basic goal is to enhance the quality of UCLA campus life for students and the entire UCLA community by providing meaningful programs and activities through the undergraduate (SLC) and graduate (GSA) student governments and the Communications Board, and by providing commercial services and facilities through its professional staff. ASUCLA operates and manages Ackerman Hall, Kerckhoff Hall and the North Campus Student Center.

You will find information about student government in the “Recreation and Participation” section of this catalog; a description of ASUCLA services follows below:

Food Service
ASUCLA operates the general campus food service for UCLA with a number of menu options at a variety of locations:

THE TREEHOUSE—Located on the first floor of Ackerman Union (825-0611, ext 271), the Treehouse is the Student Union’s main cafeteria and is open for breakfast, lunch and dinner. You can find a carved-to-order roast beef sandwich and make-your-own salad bar; the Truck Farm which offers fresh vegetable salads, cold soups, cheese wedges, sandwiches-by-the-inch, fresh fruit and freshly baked specialties; and La Quicheria, offering spinach salad and a variety of quiches. Adjacent to the Treehouse is the Sandwich Room where you can find low-cost traditional sandwiches, along with Belgian waffles for breakfast and barbecued beef sandwiches for lunch. Treehouse hours are Mon-Thu 7 am-9 pm, Fri 7 am-7 pm, Sat and Sun 11 am-7 pm. The Sandwich Room is open Mon-Fri 7:45 am-4 pm.

THE COOPERAGE—Replacing the Coop on the A Level of Ackerman Union is the Food Service Department’s newest restaurant, offering Mexican food, made-to-order pizza, grill items, natural food, beer and wine. There will be seating for 330 indoors and for 250 outside in the Beargarten. Opening in early summer 1981, this multifaceted facility will also feature live entertainment. Hours are Fri and Sat 10 am-1:30 am, Sun-Thur 10 am-midnight.

NORTH CAMPUS STUDENT CENTER—This food service facility (825-0611, ext 331) is located just south of the Research Library and offers a full range of menu options, including full-course entrees, a variety of pastas, deli-type sandwiches, a salad bar, hamburgers and French fries, and special garden sandwiches. North Campus is open for breakfast, lunch and dinner. Hours are Mon-Thu 7:30 am-1 am, Fri 7:30 am-8 pm, Sat 10 am-6 pm, Sun 11 am-8 pm.

THE BOMBShelter DELI AND BURGER BAR—This unique food service is located in the center of the Court of Sciences (825-0611, ext 281). It offers an assortment of deli sandwiches and salads at low prices. In addition, you can get hamburgers and fries or a genuine falafel for lunch. “Gypsy breakfasts” are served in the morning. It is open Mon-Fri 7:30 am-5 pm, Sat 10 am-3 pm.

CAMPUS CORNER—The oldest of the ASUCLA facilities, the Campus Corner is located just across Bruin Walk from Meyerhoff Park (825-0611, ext 275). Pita bread pocket sandwiches, soft frozen yogurt, hamburgers and French fries are available. Hours are Mon-Thu 7:30 am-5 pm, Fri 7:30 am-4 pm.

THE KERCKHOFF COFFEE HOUSE is located on the second floor of Kerckhoff Hall (825-0611, ext 283) and offers ice cream specialties, a variety of teas and coffees, plus an assortment of potages. Live entertainment is featured almost every night. The Coffee House is open Mon-Fri 7:30 am-1 am, Sat and Sun 11 am-midnight.

POTLACH is a lounge on the first floor of the Graduate School of Management (1323A GSM, 825-0611, ext 285) which offers sandwiches, snacks and beverages. Hours are Mon-Thu 8 am-8 pm, Fri 9 am-2 pm.

BANQUETs AND CATERING—The ASUCLA Food Service also provides catering service within the Student Centers. The staff will be delighted to discuss any banquet or catering needs and is prepared to offer attractive and innovative options. Visit the catering office in 1311 Ackerman Union or call them at 825-0611, ext 277.
Students' Store
The ASUCLA Students' Store is actually a "mini department store" with three locations on campus: Ackerman Union (B Level, 825-7711), the Center for Health Sciences (13-126 CHS, 825-7711, ext 218) and the North Campus Student Center (825-7711, ext 216). You can buy a wide variety of textbooks, general books, school and art supplies, dental and medical supplies, electronic items, sporting goods, UCLA merchandise (Bearwear), casual and fashion clothing, food, health aids, greeting cards and Lecture Notes. The main store is open Mon-Thu 7:45 am-7:30 pm, Fri 7:45 am-6 pm, Sat 10 am-5 pm, Sun noon-5 pm during the school session and Mon-Fri 8:30 am-5:30 pm, Sat and Sun noon-5 pm during school breaks.

Graphic Services
ASUCLA Graphic Services, located in 150 Kerckhoff Hall (825-0611, ext 295), is the campus center for photographic, printing, typographical and other graphic services. Services include Xerox and book copying, quick offset, custom printing, typesetting, commercial photography, color portraits, senior portraits (all academic apparel is furnished), identification and passport photographs, "Perma Plaques," film, photo and dark room supplies and discount photofinishing. Hours are Mon-Fri 7:45 am-6:30 pm, Sat 10 am-3 pm.

Check Cashing
Students, staff and faculty with current UCLA identification may cash a personal check for up to fifty dollars a day, with a 15¢ service charge for each check at the Service Center in 140 Kerckhoff Hall (825-0611, ext 321). Postdated checks may also be cashed for up to $50 with a 35¢ service charge. The postdated check will be held for two weeks before being sent to the bank. Only one postdated check per two-week postdating period is allowed. Traveler’s checks in amounts up to $50 per day may be cashed with a 15¢ service charge. Check cashing hours are Mon-Fri 9 am-4 pm. The Cashier’s Office on the A Level of Ackerman Union will cash checks on Sat from 10 am to 5 pm and Sun from noon to 5 pm. No postdated checks may be cashed during the weekend hours.

Meeting Rooms and Lounges
The following lounging and meeting spaces are available for the use of the entire campus community: five meeting rooms, two activity rooms and the Grand Ballroom in Ackerman Union; three meeting rooms in Kerckhoff Hall; and two meeting rooms in the North Campus Student Center.

Public lounges include the Upstairs Lounge located on the third floor of Kerckhoff Hall; the Downstairs Lounge and the Alumni Lounge on the second floor of Kerckhoff Hall; a lounge on the A Level of Ackerman Union; and a lounge in the North Campus Student Center.

Students may reserve a space for a meeting in Ackerman Union or Kerckhoff Hall by visiting the Information Desk on the first floor of Ackerman Union or by calling 825-0611 (ext 314) and may reserve space at the North Campus Student Center by visiting the information area at North Campus or by calling 825-0611, ext 331.

Travel Service
The ASUCLA Travel Service, located in A209 Ackerman Union (825-9131), offers a selection of domestic and international charter flights, land arrangements and charter packages, student tours, and scheduled air and rail tickets, as well as other travel-related services. The Travel Service is open Mon-Fri 8:30 am-8 pm, Sat 10 am-2 pm.

Job Opportunities on Campus
ASUCLA Personnel provides over 1300 part-time jobs, all reserved for registered UCLA students, and all conveniently located on campus. In many cases, no previous work experience is required. These jobs provide excellent background, training, promotional opportunities—and sometimes supervisory experience—for your future. ASUCLA is sensitive to arranging your work schedule around your academic schedule. Starting salaries for these jobs are competitive, and increases are given based on performance.

You can find the ASUCLA Personnel Office in 205 Kerckhoff Hall (825-7055). Hours are Mon-Fri 8 am-5 pm.

Money Orders
At the Money Order Window in 140 Kerckhoff Hall (825-0611, ext 321), students may purchase money orders for up to $200, with the exception of those to the UC Regents which can be over this limit. There is a service charge of 35¢ for each money order. The Money Order Window is open Mon-Fri 8:30 am-4:30 pm.

Post Office Boxes
Boxes are available to students, staff and faculty in 140 Kerckhoff Hall (825-0611, ext 321) for $4.50 per quarter for a small box or $5.50 per quarter for a large box. The Post Office Box Rental Window is open Mon-Fri 8:30 am-4:30 pm.

Need to Know More?
This section of the catalog has given you a spotlighted selection of available student services. It's designed to tell you that they're here—and how to find them. It is worth repeating, though, that the best way to learn more about each of them is to call or visit the offices mentioned here.

Reference copies of Finders Keepers also include information about student services. They are available through all department, College, School and ASK counselors, at the College Library and University Research Library reference desks and at a number of other counseling locations (AAP, Admissions, Dean of Student Relations Office, Division of Honors Office, Placement and Career Planning Center and Psychological & Counseling Services).
Recreation and Participation at UCLA

The phrase, "a college education," is an incomplete description of the opportunities available at UCLA. One of the most stimulating aspects of the UCLA experience is the fact that there is not just a single education here — "a college education"—but actually many different avenues to learning which, when taken all together, make up the components of your education at UCLA.

Most of the other sections of this catalog have focused on the academic aspects of UCLA. This section will attempt to describe the educational experiences which occur outside the classroom.

One other note—the information you find here is related to the "Student Services" section of this catalog, as well as to the chapter called "Resources to Help You." And, like those other sections, this information will only be of real value if you actually make a move and use it.

Lastly, you should notice that the activities, places and experiences touched on here are open to people at all levels of skill or interest, with all levels of spare time or spare money. Involvement outside the classroom can make a major difference in the quality of your education here — "a college education" enhanced by the collection of choices talked about below.

Athletics

A first look at UCLA—an impression of classrooms surrounded by a grassy sea of playing fields—is a fairly accurate picture of the relationship between athletics and academics here.

There is a wide assortment of athletic opportunities available for men and women, for intercollegiate team play or a solitary jog at dusk. If you already have a favorite sport, you will get plenty of chances to practice it. If you have always wanted to learn about a new one, there are lots of people to teach you how to do it.

Men's Intercollegiate Sports

UCLA is a member of the Pacific 10 Conference, which includes Arizona State University, University of Arizona, University of California, Berkeley, Stanford University, University of Southern California, University of Oregon, Oregon State University, Washington State University and the University of Washington. UCLA provides opportunities for participation on the varsity level in football, basketball, track, baseball, tennis, crew, volleyball, gymnastics, swimming, water polo, riflery, golf, soccer, rugby, cricket and cross-country.

For a player or a spectator, there is always something happening on the UCLA men's intercollegiate calendar.

Women's Intercollegiate Sports

The Department of Women's Intercollegiate Athletics sponsors twelve different varsity programs for women athletes under the jurisdiction of the Association for Intercollegiate Athletics for Women (AIAW), the National Collegiate Athletic Association (NCAA) and the Western Collegiate Athletic Association (WCAA). UCLA's women's teams have won many national, regional and conference titles and have nationally ranked teams in basketball, volleyball, swimming, tennis, track and field, cross-country and gymnastics. Athletic grants-in-aid are available on a selective basis in most sports.

UCLA is proud of its commitment to women's athletics and is equally proud of the athletes themselves, who have achieved distinction at the highest levels of national and international competition.

More Information

If you would like more information on the UCLA Intercollegiate Sports Program, contact the Men's Athletics Office at 825-3236 or 825-3326 and the Women's Athletics Office at 825-9541.

Office of Cultural and Recreational Affairs

The Office of Cultural and Recreational Affairs (600 Kerckhoff Hall, 825-3701) serves as the administrative center for the coordination of facilities, equipment, programming and supervision of campus recreational activities and services. All students who have paid the full Registration Fee are entitled to these services. Five professionally staffed divisions provide a variety of services and programs to accommodate the total university community. Program information is contained in the Recreation Release brochure available at the beginning of each quarter in 600 Kerckhoff Hall, 164 Pauley Pavilion, Men's Gym, Women's Gym, Recreation Center, Ackerman Union Information Desk and/or posted in various places around the campus. Also watch the Daily Bruin for additional details.

Intramural Sports Office

There are teams formed for just about every sport during every season of the year. There are divisions for men and women, as well as participation on a coed basis. Some sports (i.e., basketball) are divided into size or skill divisions, so anyone who wants to can get involved, at whatever level they choose. You can join a team in your dorm or in your fraternity or sorority house, or you can form an independent team from among your friends. The office can help you form a team. Playoffs are set up in each sport and in each division to determine the "ALL-U" champs. The Intramural Sports Office is located in 118 Men's Gym (825-3267).

Recreation Instructional Program Office

This office, located in 164 Pauley Pavilion, organizes noncredit instructional courses in a wide range of activities. Classes are offered in dance, fine arts, outdoor skills, tennis, gymnastics, martial arts, physical fitness and many more. Call 825-4546 for enrollment details, schedules and course content information.

Recreation Services and Facilities Office

The purpose of this office, also located in 164 Pauley Pavilion (825-4546), is to schedule and supervise athletic facilities for informal and unstructured recreational play. Opportunities for informal participation in swimming, weight training, basketball, volleyball, badminton, tennis and field sports are available seven days a week at the two gymnasias, the Memorial Activities Center, the athletic fields and tennis courts. Locker and equipment checkout is also coordinated by this unit.

Sunset Canyon Recreation Center

The Sunset Canyon Recreation Center, located next to Hedrick Residence Hall at 111 De Neve Drive (825-3671), is a recreational and cultural facility aesthetically designed to serve the University community. It is open all year, seven days a week (10 am-7 pm; 10 am-8 pm in the summer), for formal and informal use on both an individual and group basis. The "Rec Center" features two swimming pools (one for children), picnic/barbecue areas, multipurpose play fields and an outdoor amphitheater. Rooms are available for meetings, receptions, symposia, dances, catered luncheons and dinners. It also sponsors poetry readings, informal concerts, exhibits, art classes and an extensive aquatics program for adults and children. You need to bring your Registration Card to get in, and you can bring friends along for a nominal charge.

University Recreation Association

URA, located in 600 Kerckhoff Hall (825-3703), is an association of special interest clubs in the cultural and recreational area. There are over 40 clubs already in existence, and you may form a new one by gathering ten other people with the same interest. The types of existing clubs include water ski, chess, scuba, snow ski, etc (a complete list is available in 600 Kerckhoff Hall). To join a club, you may either sign up in 600 Kerckhoff Hall or simply attend the first meeting of the club (check the "What's Bruin" column in the Daily Bruin).
Cultural Opportunities

The geographical location of UCLA and its position as a leader in the arts combine to make a rich variety of cultural activities available.

On Campus

If you wish to be active beyond the sphere of your field of specialization, there are clubs (see "Clubs" later in this section) and interesting classes offered to nonmajors by various academic departments.

Complementing the academic environment, UCLA offers you the opportunity for personal growth and development in a variety of programs and activities.

The campus presents a changing variety of cultural and recreational events, many of which are free of charge or available to students with substantial discounts. For time and place you are urged to check the student newspaper—the Daily Bruin—and the campus announcement boards.

All that can be done in a catalog is to give you an overview of what happens on campus.

In the Music Department there are fine choral groups as well as the Opera Theater. Also, instrumentalists are invited to play with the University Symphony Orchestra and the Collegium Musicum, a group utilizing the famous Lachmann Collection of Historical Stringed Instruments. The UCLA bands include the Wind Ensemble, the Symphonic Band, the Marching Band, the Varsity Band and the Jazz Ensemble. Augmenting the campus activities of the bands are frequent off-campus performances.

Since there is an extensive program in ethnomusicology on the UCLA campus, students also have the unique opportunity to participate with various non-Western performance groups, all playing on representative native instruments.

UCLA also offers students numerous opportunities in theater arts through the various programs of the Theater Arts Department. The creative and technical work on productions is done by major students in the department, but acting roles in all media are open to any student registered in the College of Fine Arts.

Each year the Theater Division presents to the general public a series of major productions in the Ralph Freud Playhouse, the Little Theater and directed films each year with various screenings, as well as numerous television programs. "Melnitz Movies" are presented almost nightly by UCLA graduate students.

You will also find the opportunity for participation in afternoon and evening dance concerts and demonstrations and in dance assignments in many theater and opera workshop productions. There are folk and ethnic performing groups which meet regularly. Students of dance may direct and choreograph, as well as perform.

In addition, UCLA is one of the nation’s leading university centers for the performing and graphic arts, presenting an average of more than 600 individual cultural events each year to both campus and community audiences. An extensive schedule of professional presentations of the Committee on Fine Arts Productions features performances by world-renowned artists both classical and popular. There is a full calendar of exceptional programs by the Music, Dance and Theater Arts Departments. Another aspect of the program, sponsored by ASUCLA and/or the Student Committee for the Arts, brings leading jazz and folk presentations and artists-in-residence to campus.

The Committee on Public Lectures sponsors free public lectures of general and scholarly interest by distinguished authorities, supplementing and stimulating the work of University departments and sharing with the community at large its resources and expertise.

In the graphic arts, the Frederick S. Wight Art Gallery and the Grunwald Center for the Graphic Arts in Dickson Art Center have established a national reputation for presenting and originating important exhibitions, including the distinguished annual UCLA Art Council Exhibition. The Museum of Cultural History presents regular exhibitions that include works from one of the world’s foremost university collections of ethnic art.

A special Student Committee for the Arts subsidy program provides tickets for UCLA students at only $3 for a great many campus events. Tickets are obtainable at the Central Ticket Office, 650 Westwood Plaza. Public tickets to events sponsored by the Committee on Fine Arts Productions are also available at the 650 Westwood Plaza location, which also makes a limited number of tickets available to all full-time students at reduced rates.

Off Campus

Westwood Village has become the entertainment magnet for the entire West Los Angeles area. There are 20 first-run movie theaters, many restaurants, several bookstores, a couple of discos and a pinball arcade. Prices tend to be high, but Westwood has the advantage of being accessible from campus on foot. In fact, the most popular Westwood activity—walking the streets and watching the people—is free.

In any one of the bookstores in Westwood, you will find an entire shelf of books devoted to the cultural attractions of the city beyond Westwood—Los Angeles. While these guidebooks attest to the impossibility of summarizing the vibrant cultural life of the city, they also indicate the virtually limitless list of "things to do." Los Angeles is home to major museums, motion picture studios, a world-renowned symphony orchestra and many other cultural focal points.

Two encouraging generalizations can be made, however: most cultural activities (Music Center, Los Angeles County Art Museum, etc) feature a student discount policy or student ticket performances. And a car isn’t really necessary to get to most of the off-campus attractions (please see the “Transportation” section of this catalog).

UCLA and the Natural Environment

UCLA is located in an urban setting, but the campus is also close to miles of coastline along the Pacific Ocean and acres of protected wilderness in the Santa Monica Mountains. The natural environment beyond Los Angeles offers the unmatched resources of the entire state, from uninhabited islands to popular ski resorts.

Travel

Several sorts of travel opportunities are available at UCLA. The ASUCLA Travel Service (see listing in the “Student Services” section of this catalog) can arrange charter air fares to many major cities at the lowest possible cost; rail tickets are also on sale.

In addition, several clubs offer charters and tours.

Day trips to San Diego or weekend excursions to San Francisco are also popular outings.

 Clubs and Organizations

The clubs and registered organizations on campus provide an added dimension to the UCLA experience. There are clubs for joiners and nonjoiners, too, representing almost every interest. And, if your interest isn’t covered by a club, you can start your own.

A full listing of registered student organizations is available in the CPAO/SR Office, 161 Kerckhoff Hall (825-7041); clubs centering on sports and recreation are listed in the University Recreation Association Office, 600 Kerckhoff Hall (825-3703). Each of these offices can provide you with information on how to join—or start a club at UCLA.

Fraternities and Sororities

Sample costs are discussed in the “Housing” section of this catalog. Fraternities and sororities offer their members more than simply a place to live. Serving as a small, cohesive community within the larger community of UCLA, each fraternity or sorority house provides a center for academics, athletics and social life.
You can find out more about the fraternities and sororities at UCLA by contacting either the Panhellenic Council (sororities) or the UCLA Interfraternity Council (fraternities) in the Dean of Student Relations Office, 2224 Murphy Hall, 405 Hilgard Avenue, Los Angeles, CA 90024 (825-3671).

In the past few years, UCLA has witnessed a tremendous upsurge in the popularity of fraternities and sororities—otherwise known as the Greeks—whose members now number more than 4,500.

There are 27 fraternities and 18 sororities, all chapters of their respective national organizations. The fraternities are bound together and overseen by the Interfraternity Council, the sororities by the Panhellenic Council.

Student Government

Student government at UCLA offers a chance for expression that students may feel is lacking in other parts of their university experience. Why not make an effort to become involved in the decision-making process here?

Students have control of more than $300,000 to run over 50 different programs.

In recent years the dimensions of student government have expanded in many directions, and there have been changing priorities for the university's resources. The quality of the education students receive and student input into the educational process have become high priorities, and the question of safety on and off campus is an ever-increasing concern. Many student leaders have also realized that high-level decision making can be affected by approaching not only University administrators, but also officials at the local, state and national levels. This has led to the development of effective lobbies dedicated to meeting the needs of this unique community.

Additionally, the wide variety of student government programs offers invaluable service to the community and provides an opportunity for thousands of students to benefit from these endeavors. Some highlights include Mardi Gras, the world's largest collegiate charity activity, Voter Awareness (an objective voter information booklet) and outstanding guest speakers provided through the Campus Events Commission. The Speakers Program, enjoyed by over forty thousand students, faculty and staff each year, is a well-known forum where persons of significance, all political persuasions and all professions are invited to address the student body. Finally, over one thousand students participate voluntarily in community service programs such as the Exceptional Childrens Tutorial Project and the Prison Coalition.

For more information on undergraduate student government at UCLA, visit 304 Kerckhoff Hall (825-7068).

An Urge to Action

Through its commissions—and the people who serve on them—student government at UCLA offers a direct role in decision making at UCLA. Students hold membership on policy groups governing the use of the Registration Fee, ASUCLA Board of Control, Academic Senate and the Board of Regents, to name just a few. Additionally, student activities such as Mardi Gras, participation on student publications, and nearly every other facet of student life is sponsored or organized in some way by student government. Some 40 different committees, in fields ranging from the arts to general University policy, offer an opportunity for involvement outside the classroom.

Living groups (such as the dormitories) and many academic departments also encourage student activities. Whether on your dorm floor or at a meeting of the Board of Regents, students have a say in the actions which govern their lives at UCLA.

Remember, too, that any community tends to "get the government they deserve"—another way of saying that your participation (or lack of it) can make a difference.

Need to Know More?

Finders Keepers has more information about recreation and participation opportunities at UCLA. Reference copies are available through all department, College, School and ASK counseling offices, at the College Library and University Research Library reference desks and in a number of other counseling locations (AAP, Admissions, Dean of Student Relations Office, Division of Honors Office, Placement and Career Planning Center and Psychological Counselling Services).

At the start of this section, it was indicated that unlike some other sections of this catalog, specific details covering every available cultural and recreational opportunity presents an impossible task. Checking daily newspapers, the Daily Bruin, campus bulletin boards or taking a stroll up Bruin Walk will help to keep you current with what is going on.

Resources to Help You

In this section of the UCLA Undergraduate Catalog, you will find a listing and description of the many resources—people as well as publications—available to help you get the most out of your undergraduate education at UCLA.

It is important that you recognize that the services discussed below are offered in addition to department, division or School/College programs of advice and counsel which are outlined in other sections of this catalog.

Advisors

Different types of advisors have different functions; it's useful to keep those more or less distinct roles in mind.

College or School Staff Members answer general questions about the College or School, as well as give out information about various petitions, filing procedures and deadlines.

College or School Counselors, on the other hand, can show you how College/School or University academic regulations apply to your individual situation.

Departmental Counselors provide you with information about the courses within their department; information on departmental and major requirements (and advice on meeting them) is also available.

Additionally, departmental counselors may be aware of study, research and employment opportunities in your area of academic interest.

Faculty Advisors can advise you on questions pertaining to course work and can offer guidance on research projects or independent study to supplement your courses.

Remember, too, that each UCLA faculty member is an advisor if you are having trouble in a course that professor is teaching. Professors keep office hours for students to ask questions and try out ideas. Those hours are one of the most valuable parts of your academic experience. Use them.

Peer Counselors are trained students who can give you an informed "students-eye" view on program planning.

Before You Need Them

Here's some advice about advisors: don't wait until you are in academic difficulty to seek them out—it may be too late. Advisors work with you to avoid problems, so see them before you need them.

Seeing Your Advisor

Here are some things to keep in mind when you see your advisor. Write down your questions as completely as possible.
Make sure you and your advisor understand the questions you’re asking—and the answers you get. Then, write down the answer. With both your question and the answer to it, ask for clarification until you are sure you fully understand.

Keep a record of your visits, including any printed materials the advisor gives you. In the same way, you are urged to keep a record of your UCLA transactions in general. Save, and carefully store, copies of petitions, grade cards and so forth.

You also have the option to try various counselors to find the one you can relate to most easily.

Currently, UCLA offers the following opportunities for advice on academic questions:

**College/School Counselors**

- **College of Fine Arts** A239 Murphy Hall, 825-9705
- **College of Letters and Science** 1312 Murphy Hall, 825-3382
- **Division of Honors** 1331 Murphy Hall, 825-1553, 825-3786
- **School of Engineering and Applied Science** 6426 Boelter Hall, 825-2826
- **School of Nursing** 2-137 Factor Building, 825-7181
- **School of Public Health** 16-071 Public Health, 825-5524, 825-5516

**Departmental Advisors/Counselors**

- **Aerospace Studies** 251 Dodd Hall, 825-1742; Sally Ann Cohen, 251 Dodd Hall, 825-1742
- **African Languages** Linguistics, 2113 Campbell Hall, 825-5069, 825-0634; William Weimers, 2113 Campbell Hall, 825-1574
- **African Studies** Special Program, Interdepartmental; African Studies Center, 10244 Bunche Hall, 825-3686; Christopher Ehret, 825 Bunche Hall, 825-4093
- **Afro-American Studies** Interdepartmental; Center for Afro-American Studies, 3105 Campbell Hall, 825-7403; Halford Fairchild, 3101 Campbell Hall, 825-7403, 825-2961
- **American History and Institutions** 6265 Bunche Hall, 825-4601; Sylvia Dillon, 6248 Bunche Hall, 825-3720
- **Analysis & Conservation of Ecosystems** Geography, 1255 Bunche Hall, 825-1071; Diana Sawyer, 1113 Bunche Hall, 825-1166; Stanley Trimble, 1255 Bunche Hall, 825-1314
- **Ancient Near Eastern Civilizations** Near Eastern Languages, 376 Kinsey Hall, 825-4165; Andras Bodrogligeti, 376 Kinsey Hall, 825-4165
- **Anthropology** 341 Haines Hall, 825-2055; Ann Walters, 341D Haines Hall, 825-2511
- **Arabic** Near Eastern Languages, 376 Kinsey Hall, 825-4165; Andras Bodrogligeti, 376 Kinsey Hall, 825-4165
- **Art/Art History** 1300 Dickson, 825-3281; Gayle Pica, 1300 Dickson, 825-3077
- **Asian American Studies** Special Program, Interdepartmental; Asian American Studies Center, 3232 Campbell Hall, 825-2974; Tim Dong, 3232 Campbell Hall, 825-2974
- **Astronomy** 8979 Math Sciences, 825-4434; Steven Grandi, 8923 Math Sciences, 825-4319
- **Atmospheric Sciences** 7127 Math Sciences, 825-1217; James G. Edinger, 7101 Math Sciences, 825-3057
- **Bacteriology** See Microbiology
- **Berber** See African-American Studies
- **Biochemistry** Chemistry, 3034 Young Hall, 825-4219; Dorothy Seymour, 4016 Young Hall, 825-1859; John Jordan, 655 MBI, 825-1500
- **Biography** 2203 Life Sciences, 825-3481; Roxane Alkaslassy, 2312 Life Sciences, 825-1680
- **Black Studies** See Afro-American Studies
- **Bulgarian** Slavic Languages, 115 Kinsey Hall, 825-2676; Michael Heim, 115L Kinsey Hall, 825-7894
- **Business/Economics** 244 Moore Hall, 825-2626; L.W. Erickson, 244 Moore Hall, 825-2626
- **Caucasian Languages** Near Eastern Languages, 376 Kinsey Hall, 825-4165; Andras Bodrogligeti, 376 Kinsey Hall, 825-4165
- **Chemistry** 3034 Young Hall, 825-4219; Dorothy Seymour, 4016 Young Hall, 825-1859; Kenneth Trueblood, 3042 Young Hall, 825-1259
- **Chemistry/Materials Science Interdepartmental**; Engineering/Materials, 6531 Boelter Hall, 825-5534; John Mackenzie, 6531K Boelter Hall, 825-3539
- **Chicano Studies** Interdepartmental; Chicano Studies Center, 3121 Campbell Hall, 825-2363; Carlos Haro, 3121 Campbell Hall, 825-2364
- **Chinese** Oriental Languages, 222 Royce Hall, 825-3340; Kuoyi Pao, 212C Royce Hall, 825-3340
- **Classics** 7349 Bunche Hall, 825-4679; Bernard Frischer, 7377 Bunche Hall, 825-1867
- **Also for:** Classical Civilization
- **Communication Studies** 232 Royce Hall, 825-3303; Diane Simpson, 232 Royce Hall, 825-3303
- **Cybernetics** Interdepartmental; Jack W. Carpenter, 825-8807, 825-1322
- **Czech** Slavic Languages, 115 Kinsey Hall, 825-2676; Michael Heim, 115L Kinsey Hall, 825-7894
- **Dance** 205 Women’s Gym, 825-3951; Wendy Urright, 101 Women’s Gym, 825-8537, 825-3951
- **Danish** Scandinavian Languages, 332 Royce Hall, 825-2432; contact the department
- **Design Art** 1300 Dickson, 825-3281; Gayle Pica, 1300 Dickson, 825-3077
- **Diversified Liberal Arts** Certificate Program, Interdepartmental; see counselors in Letters & Science
- **Dutch-Flemish and Afrikaans** Germanic Languages, 310 Royce Hall, 825-3955; Robert S. Kiraner, 310 Royce Hall, 825-3955
- **Earth and Space Sciences** 3806 Geology, 825-3880; Spring Verity, 3683 Geology, 825-3917; Clemens A. Nelson, 4686 Geology, 825-1363
- **East Asian Studies** Interdepartmental; David M. Farquhar, 9381 Bunche Hall, 825-3078
- **Economics** 2263 Bunche Hall, 825-1011; Lora Clarke, 2253 Bunche Hall, 825-5118
- **Economics/System Science Interdepartmental**; Engineering/System Science, 4532 Boelter Hall, 825-6830; Stephen E. Jacobsen, 4532E Boelter Hall, 825-2327; Michael Intriligator, 2263 Bunche Hall, 825-4144
- **Engineering and Applied Science Undergraduate Office** 6426 Boelter Hall, 825-2826; Janet Elliott, 6412 Boelter Hall, 825-2941; Richard Stern, 6426 Boelter Hall, 825-2036
- **Also for:** Chemical, Nuclear & Thermal Engineering Computer Science Electrical Sciences and Engineering Engineering Systems Materials Mechanics and Structures System Science
- **English** 2225 Rolfe Hall, 825-4173; Edith Lufkin, 4305 Rolfe Hall, 825-1389
- **English/Greek** Interdepartmental; see advisors in English and Classics
- **English/Latin** Interdepartmental; see advisors in English and Classics
- **Ethnic Arts** Interdepartmental; Dance, 205 Women’s Gym, 825-3951; Wendy Urright, 101 Women’s Gym, 825-8537, 825-3951
- **French** 160 Haines Hall, 825-1147; Eric Gans, 198 Haines Hall, 825-4294
- **Geochemistry** Earth & Space Sciences, 3806 Geology, 825-3880; Spring Verity, 3683 Geology, 825-3197; Clemens A. Nelson, 4686 Geology, 825-1363
- **Geography** 1255 Bunche Hall, 825-1071; Diana Sawyer, 1113 Bunche Hall, 825-1166; Richard Logan, 1181 Bunche Hall, 825-1818
- **Geography/Ecosystems** Geography, 1255 Bunche Hall, 825-1071; Diana Sawyer, 1113 Bunche Hall, 825-1166; Stanley Trimble, 1255 Bunche Hall, 825-1314
- **Geology** Earth & Space Sciences, 3806 Geology, 825-3880; Spring Verity, 3683 Geology, 825-3197; Clemens A. Nelson, 4686 Geology, 825-1363
- **Geophysics and Space Physics** Earth & Space Sciences, 3806 Geology, 825-3880; Spring Verity, 3683 Geology, 825-3197; Clemens A. Nelson, 4686 Geology, 825-1363
German  Germanic Languages, 310 Royce Hall, 825-3955; Franz Bauml (A thru L), Eli Sobel (M thru Z), 310 Royce Hall, 825-3955
Greek  Classics, 7349 Bunche Hall, 825-4679; Bernard Frischer, 7377 Bunche Hall, 825-1867
Hebrew  Near Eastern Languages, 376 Kinsey Hall, 825-4165; Andras Bodrogigeti, 376 Kinsey Hall, 825-4165
History  6265 Bunche Hall, 825-4601, 825-1069; Sylvia Dillon, 624B Bunche Hall, 825-3720
Humanities  Interdepartmental; 334D Royce Hall, 825-7650; Ross Shideler, 334A Royce Hall, 206-8155
Hungarian  Germanic Languages, 310 Royce Hall, 825-3955; Marianna D. Birnbaum, 2221C Bunche Hall, 825-3330
Indigenous Languages of the Americas  Linguistics, 2113 Campbell Hall, 825-0634, 825-5069; see advisors in Linguistics
Intercollegiate Athletics  221 MAC-B, 825-3236, 825-3326; Eugene Beymaier, Roland Almeida, 229 MAC-B, 206-6281
International Relations  Special Program, Political Science, 4286 Bunche Hall, 825-4331; David O. Wilkinson, 3280 Bunche Hall, 825-3450, 825-4331
Italian  340 Royce Hall, 825-1940, 825-3055; Atthea Reynolds, 340A Royce Hall, 825-3055
Italian and Special Fields  Interdepartmental; students wishing to major in the Italian and Special Fields major should see the undergraduate advisors in each department (Anthropology, Art History, Classics, English, French, History, Linguistics, Music or Theater Arts, as well as Italian)
Japanese  Oriental Languages, 222 Royce Hall, 825-3340; Robert C. Epp, 212J Royce Hall, 825-3445
Jewish Studies  Near Eastern Languages, 376 Kinsey Hall, 825-4165; Andras Bodrogigeti, 376 Kinsey Hall, 825-4165
Journalism  360 Kinsey Hall, 825-4501; Hazel Richmond, 360 Kinsey Hall, 825-4501
Kinesiology  206 Men's Gym, 825-3891; Linda Powell, 206 Men's Gym, 825-3891
Latin  Classics, 7349 Bunche Hall, 825-4679; Bernard Frischer, 7377 Bunche Hall, 825-1867
Latin American Studies  Interdepartmental; Latin American Center, 10343 Bunche Hall, 825-4571; Kathleen Fischer, 10343 Bunche Hall, 206-6571; Carolyn Ramirez, 10347 Bunche Hall, 206-6571
Linguistics  2113 Campbell Hall, 825-5069, 825-0634; Sandra Thompson, 2113 Campbell Hall, 825-0272
Linguistics—Computer Science, English, French, Italian, Oriental Languages, Philosophy, Psychology, Scandinavian Languages, Spanish  Students wishing to major in any of these interdepartmental majors should consult the undergraduate advisors in the Linguistics Department, as well as the undergraduate advisor in the other department involved
Mathematics  6364 Math Sciences, 825-4701; Sally Yamashita, 6356 Math Sciences, 825-4701
Also for:
Math/App lied Science, Math/Computer Science, Math/System Science
Meteorology  See Atmospheric Sciences
Microbiology  5304 Life Sciences, 825-3578; Marta Holtzer, 5304 Life Sciences, 825-3578
Military Science  127 Men's Gym, 825-7381; Michael Callahan, Bruce Lawson, Philip Taylor, Barrie Town, 127 Men's Gym, 825-7381
Motion Picture/Television  Theater Arts, 2310 Macgowan Hall, 825-5761; Steven Moore, 1319 Macgowan Hall, 825-1766
Music  2449 Schoenberg Hall, 825-4761; Mary Crawford, Thomas Croy/e, 2438 Schoenberg Hall, 825-4761
Naval Science  123 Men's Gym, 825-9075; Dale E. Baugh, 123A Men's Gym, 825-9075; George A. Carlson, 128 Men's Gym, 825-9075; Kathryn Kane, Edward Messmer, 122A Men's Gym, 825-9075
Near Eastern Languages  376 Kinsey Hall, 825-4165; Andras Bodrogigeti, 376 Kinsey Hall, 825-4165
Near Eastern Studies  Interdepartmental; Von Grunebaum Center for Near Eastern Studies, 10286 Bunche Hall, 825-1181; Michael G. Morony, 6242 Bunche Hall, 825-1962
Norwegian  Scandinavian Languages, 332 Royce Hall, 825-2432; contact the department
Nursing  School of Nursing, 2-137 Factor Building, 825-7181; Helen Medlock, 2-137 Factor Building, 825-7181
Oriental Languages  222 Royce Hall, 825-3440; see Chinese or Japanese
Philosophy  321 Dodd Hall, 825-4641; Thomas Hill, 363 Dodd Hall, 825-6049, 825-4641
Physics  3-171 Knudsen Hall, 825-3440; Julie Sturm, 3-145R Knudsen Hall, 825-2453; Robert Satten, 6-130H Knudsen Hall, 825-1522
Polish  Slavic Languages, 115 Kinsey Hall, 825-2676; Michael H. Heim, 115L Kinsey Hall, 825-7894
Political Science  4289 Bunche Hall, 825-4331; Vicki Waldman, 4256 Bunche Hall, 825-3862
Portuguese  Spanish and Portuguese, 5303 Rolfe Hall, 825-1036; Leslie Nord, 5327 Rolfe Hall, 825-1036, 825-1430; Eduardo Dias, 5328 Rolfe Hall, 825-1430
Psychology  1283 Franz Hall, 825-2961; Kristin Marr, 1531 Franz Hall, 825-2549; Patti Ritzo, 1531 Franz Hall, 825-1603
Also for:
Psychology—Biological, Psychobiology, Quantitative
Romanian  Slavic Languages, 115 Kinsey Hall, 825-2676; Michael H. Heim, 115L Kinsey Hall, 825-7894
Russian  Slavic Languages, 115 Kinsey Hall, 825-2676; Michael H. Heim, 115L Kinsey Hall, 825-7894
Also for:
Russian Civilization, Russian Linguistics
Scandinavian Languages  332 Royce Hall, 825-2432; contact the department
Serbo-Croatian  Slavic Languages, 115 Kinsey Hall, 825-2676; Michael Heim, 115L Kinsey Hall, 825-7894
Slavic Languages  115 Kinsey Hall, 825-2678; Michael Heim, 115L Kinsey Hall, 825-7894
Sociology  264 Haines Hall, 825-1313; Mary Jo Johnson, 254B Haines Hall, 825-1215
Spanish  Spanish and Portuguese, 5303 Rolfe Hall, 825-1036; Leslie Nord, 5327 Rolfe Hall, 825-1036, 825-1430
Speech  See Communication Studies
Study of Religion  Interdepartmental; Anthropology, 341 Haines Hall, 825-1565; Jacques Maquet, 341 Haines Hall, 825-1565
Subject A  302 Royce Hall, 825-4515, 825-5796; Pauline Ward, 302 Royce Hall, 825-4515
Swedish  Scandinavian Languages, 332 Royce Hall, 825-2432; contact the department
Theater Arts  2310 Macgowan Hall, 825-5761; Steven Moore, 1319 Macgowan Hall, 825-1766
Ukrainian  Slavic Languages, 115 Kinsey Hall, 825-2676; Michael H. Heim, 115L Kinsey Hall, 825-7894
Urban Studies/Organizational Studies Special Program, Interdepartmental; Robert Fried, 3333 Bunche Hall, 825-3660, 825-4331
UrdU  Near Eastern Languages, 376 Kinsey Hall, 825-4165; Andras Bodrogigeti, 376 Kinsey Hall, 825-4165
Women's Studies  Special Program, Interdepartmental; 240 Kinsey Hall, 206-8101; Mary M. Smith, 240 Kinsey Hall, 206-8101
Yiddish  Germanic Languages, 310 Royce Hall, 825-3955; Janet R. Hadda, 310A Royce Hall, 825-3955
Zoology  See Biology
About ASK
ASK is a network of 16 academic peer counselors trained by the College of Letters and Science. ASK also sponsors meetings regarding the educational and career concerns of UCLA students. ASK gives you a chance to get the academic guidance you need in a convenient informal setting.

You can find ASK at these locations:

**Days:** Ackerman Union (by the Treehouse), Monday-Friday 10 am to 2 pm
Bunche Hall Court, Monday-Friday 10 am to 2 pm
Court of Sciences, Monday-Friday 10 am to 2 pm
Murphy Hall, Monday-Friday 9 am to 4 pm
Powell Library, Monday-Friday 10 am to 2 pm

**Evenings:** In the undergraduate dorms, Tuesday & Wednesday 5 to 7 pm

If You're a Prehealth Care Student
The Prehealth Care Advising Office is in 1332 Murphy Hall, Window 9 (825-1817). Here you can receive general information, as well as attend open counseling sessions. ASK counselors in the Court of Sciences can provide further information and referrals. They are available at a table by the steps of the Chemistry Building (Young Hall).

Finally, specific prehealth care advising resources include:

**Preclinical:** School of Dentistry, A3-042 Dentistry; Ann Beech, A3-042 Dentistry, 825-6141; also see counselors in Letters and Science.

**Preclinical Hygiene:** See counselors in Letters and Science.

**Premed:** See counselors in Letters and Science.

**Prenursing:** School of Nursing, 2-137 Factor Building, 825-7181; see counselors in Letters and Science.

**Preoptometry:** See counselors in Letters and Science.

**Prepharmacy:** See counselors in Letters and Science.

**Prephysical Therapy:** See counselors in Letters and Science.

**Prelaw Advising**
While individual prelaw counseling is not currently available, the College of Letters and Science holds weekly drop-in sessions for those who need to know about application and selection procedures. These are advertised in the "What's Bruin" Section of the Daily Bruin. For application and selection procedures and informational meeting times, call 825-3160 or 825-1655. Other campus resources—see "Student Services at UCLA"—can also be quite useful to prospective law students.

Alternative Academics
UCLA has a variety of options that allow you to bring an added dimension to your academic program.

Designing Your Own Major
The requirements that allow you to be eligible for an individual major vary with each College or School at UCLA. If you qualify—usually after submitting a detailed course of study under the sponsorship of a regular faculty member, as well as maintaining the specified grade-point average in your College or School—the individual major allows you to tailor your interests and scholarly pursuits.

Designing Your Own Classes
Most departments offer the 199 or individual study course for seniors or juniors with a "B" average or better who want to pursue a particular research interest. Consult your department or the departmental listings in the "Courses" section of this catalog for further information.

Programs for Freshmen and/or Sophomores
UCLA features several programs centering on the concerns of new students. Among them are:

**Freshman/Sophomore Professional School Seminar Program**
This program introduces students to the relationships which exist between various academic disciplines and professional practice. It also seeks to build upon the common characteristics which link various professions to one another. Students are introduced to these characteristics in the following way:

1. In order to find answers to problems, professionals must bring together information from varying disciplines.
2. Because of the way that social need often drives scientific investigation, all professionals must be sensitive to the complex interplay between basic research and social problems.
3. Professionals must bring their creativity to the task of translating theoretical knowledge into practical application.
4. Professionals are subject to high level and ethical standards because they exercise control over individuals and society.

Students seeking to define their own academic and career goals will find that these seminars provide a valuable opportunity to assess the role of professionals today and to understand the challenges and demands that stimulate professional activity. The program offers an unparalleled opportunity to be exposed to the views of professionals.

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HC 10—"Literature and Science: The Idea of Interrelation" (8 units, Winter Quarter)
HC 11—"Los Angeles Symposium: Improbable Los Angeles" (4 units, Spring Quarter)
HC 12—"Constancy and Change" (4 units, Spring Quarter)
HC 13—"Military and Society" (4 units, Fall Quarter)

For more information about the Honors College, contact the Division of Honors, 1331 Murphy Hall (825-1553, 825-3786).

Council on Educational Development (CED)
The Council on Educational Development (CED) was created by the Los Angeles Division of the Academic Senate in May 1968. The Council’s purpose is to promote academic enrichment and to encourage educational diversity and innovation. In fulfilling these objectives, the Council works closely with departments, Colleges, Schools and research centers on the UCLA campus. The Council is uniquely situated to offer special courses and programs, since it possesses modest funding which can be used for faculty released time or for the employment of outside lecturers and teaching personnel.

The Council seeks out and, upon approval, supports academic projects, programs and individual courses of scholarly excellence not otherwise available at the University, including courses of timely or topical importance. The Council can offer a course as many as three times, although in principle the Council seeks to encourage departments and Schools to adopt appropriate courses into their regular curriculum.

Quite a few of these courses are on socially important issues which, because of their being new to the intellectual scene, were unavailable in existing academic departments. Many of them involve nontraditional pedagogy, interdisciplinary topics and subject matter that is at the leading edge of our faculty’s interests.

For information about CED courses, consult the Schedule of Classes and the "Registration" and other selected issues of the Daily Bruin. If you want to find out about credit towards graduation for CED courses, you should consult your major department, College or School. The CED office is located in 3121 Murphy Hall (825-5467).

Education Abroad Program
The Education Abroad Program provides opportunities for qualified UC students to earn a full year of academic credit while studying at overseas universities. Currently, there are EAP students enrolled on 44 campuses in 19 different countries. EAP students study with the local students of EAP-affiliated institutions in each country, giving them a unique opportunity to enhance greatly their language skills and to become involved in the culture of the host country.

EAP participating institutions currently include:
- Universities in the United Kingdom
  - Bath
  - Birmingham
  - Exeter
  - Kent
  - Leeds
  - St. Andrews
  - Stirling
  - Sussex
  - Warwick
- Westfield College of the University of London
- University College, Nairobi, Kenya
- Universities in Israel
  - Haifa
  - Jerusalem (Hebrew University)
- American University of Cairo, Egypt
- Chinese University of Hong Kong
- International Christian University, Tokyo, Japan
- Universities in France
  - Bordeaux
  - Grenoble
  - Marseille
  - Montpellier
  - Paris
  - Pau-Paris
  - Poitiers
- Georg-August University, Goettingen, Germany
- Trinity College, Dublin
- Universities in Italy
  - Padua
  - Bologna
  - Venice
- University of Bergen, Norway
- Universities in Spain
  - Barcelona
  - Madrid
- University of Lund, Sweden
- National Autonomous University of Mexico (UNAM), Mexico City
- University of Sao Paulo, Brazil
- State University of Leningrad, USSR
- University of Vienna, Austria
- Pontificia Universidad Catolica del Peru

Designed primarily for undergraduates, the program is open to students who have upper division standing in the University, an overall "B" average, seriousness of purpose and an indication of ability to adapt to a new environment. For the centers in Austria, France, Germany, Mexico, Peru and Spain, two years of university-level work in the language of the country with a "B" average (or equivalent thereof) are required. For all other centers, the language requirements are variable. Each UC Study Center abroad operates under the supervision of a UC faculty member.

Participants pay only the usual UC Registration and Education Fees. The full range of University financial aid is available. UC units and grade points are awarded for overseas courses. A complete range of orientation services is provided, including opportunities to meet with returned students and students attending UCLA from EAP-affiliated universities.

Detailed information sheets about these campuses are available in the EAP office, 221B Bunche Hall (825-4889, 825-4995).

Field Studies Development
Field Studies Development, located in 50 Dodd Hall (825-2295, 825-7867), is a division of the Office of Instructional Development. This division provides coordination and support to students, faculty and academic departments who are interested in developing meaningful learning experiences outside the classroom. These experiences may come in the form of internships, field studies or research, community service-learning, practicum cooperative education programs and so on. Programs and services offered through the Field Studies Development division include the following:

Departmental Field Studies Development Program
The goal of this program is to enhance field opportunities for academic credit by encouraging the development of coherent field programs within relevant departments. Developmental coordinators work with students in developing field projects and in finding placements and academic sponsorship.

Independent Field Studies
Students may individually design internships and field study opportunities to meet their specific academic, personal and career interests. A field study coordinator helps the student on a one-to-one basis in a similar fashion as the departmental field study coordinators and helps broker credit for appropriate learning gained from the field experience.

Developmental Disabilities Immersion Program (DDIP)
Cosponsored by Field Studies Development and the Departments of Psychology and Psychiatry, DDIP offers two sessions each year—one during the Fall and Winter Quarters and the second during the Spring and Summer. Each offers students an intensive living, studying and working experience in developmental
disabilities. For more information, contact Ross Shimabukuro in 50 Dodd Hall (825-7867).

Professional Seminar Internships
This program is an extension to the Freshman/ Sophomore Professional School Seminar series which enables lower division students the opportunity to understand more about the professions through internships and other academically related placements. For more information, contact Paul Von Blum in 2859 Slichter Hall (825-2480).

Internship Programs
Included are UCLA International, Washington, Sacramento and Los Angeles Internship Programs, the Model United Nations Program and the Volunteer Income Tax Assistance Program. For more information, contact Julie Inouye or Christie Dodson in the EXPO Center, A213 Ackerman Union (825-0831).

International, National and Local Opportunities
In addition to regular internship programs, students can find out about a wide range of opportunities as near as Westwood or as far as Australia. They include:

International Opportunities, including information on study and travel abroad programs, International Student Identity and Youth Hostel Cards, and internships with international agencies in the United States and abroad. For more information, contact Christie Dodson in the EXPO Center, A213 Ackerman Union (825-0831).

National Opportunities, including information on alternative and summer study, internships and travel opportunities offered throughout the United States. For more information, contact Julie Inouye in A213 Ackerman Union (825-0831).

Local Opportunities, including information on cultural, recreational and volunteer opportunities and the Volunteer Action Center which lists over 3000 volunteer positions in the Los Angeles area. For more information, contact Julie Inouye or Christie Dodson in A213 Ackerman Union (825-0831).

Medicine, Law and Human Values: The UCLA Program
The UCLA Program in Medicine, Law and Human Values conducts the monthly Medicine and Society Forum at the UCLA Medical School and offers transdisciplinary courses and seminars on both the undergraduate and graduate levels. Course topics and materials are designed to introduce students to the investigation and analysis of the complex relationships among the often-conflicting ethical, societal and scientific values in medical and mental health care issues, such as genetic screening, human experimentation, patients' rights and the use of highly sophisticated medical technology.

Undergraduate courses include a survey course (Medicine, Law and Society) which covers a range of issues and stresses development of writing skills and a series of upper division seminars on single topics, including (in 1980-81) "Health Care and Constitutional Law," "Legal and Ethical Aspects of Social Science Research," "The Language of Suicide," "Historical Origins of Psychoanalysis" and "Literature and Medicine." For more information, contact the program in 2859 Slichter Hall (825-4976, 825-6682).

Mentor Program
The UCLA Mentor Program was created to ease the transition of new students into the University, to provide an avenue to explore different fields and to create a sense of community on campus. The Mentor Program teams staff and faculty members with seniors and graduate students, then matches a small group of entering undergraduates to a Mentor team based on academic or career interests. The Mentors serve voluntarily as both friends and resources, taking a personal interest in their students by exploring students' concerns and providing referrals to other campus offices and services.

In addition, the Mentor Program sponsors group activities for all program participants. A quarterly calendar of events allows students to meet staff, faculty and other students in an informal setting to tour campus departments and services, to discuss various topics relative to the university experience or to just have fun. For more information, contact the Mentor Program, A181 Franz Hall (825-8425).

Orientation
Orientation at UCLA is one aspect of the Academic Resources Coordination Office. It is more than just a summer program—it is part of a process that begins with admission, extends throughout the first year and seeks to provide support for students' academic endeavors at UCLA. During the summer and prior to the beginning of the Winter and Spring Quarters, special programs are offered for new students. These programs bring extensive academic counseling and educational planning to all new undergraduates entering the University. Individual counseling (which fulfills the academic advising recommended for all students and required by some Colleges and Schools) and peer group sessions are offered. These sessions give new students various perspectives on the common problems encountered by students new to UCLA. Sessions for parents are also offered. More information on the services of the Orientation Office are available in 77 Dodd Hall (206-6681).

Summer Sessions
UCLA offers two six-week Summer Sessions each year. Summer Session study is designed to provide academic enrichment, to help students enroll in courses they were unable to take during the year because of schedule conflicts, to correct course deficiencies in preparation for graduate school and to offer small class size.

Credit
Summer Session courses may apply toward the minimum unit requirement of the College of Letters and Science and the College of Fine Arts. Consult the Colleges to make sure. The fees for Summer Sessions differ from those of regular academic quarters because Summer Sessions receive no state support.

Admission
Admission to a Summer Session does not constitute admission to a regular session. Students planning to attend the University in regular session are referred to the "Admission" section of this catalog. More information about Summer Sessions is available in 1254 Murphy Hall (825-8355).

University Extension
UCLA Extension offers more than 4500 classes and special programs each year, many of them innovative and experimental in content, format and teaching methods, with extensive use of media technology. Extension programs are designed to bring to adults in the community, on a part-time basis, the benefits of the talent, research and resources of the University of California. Credit and noncredit courses in nearly every academic discipline and in interdisciplinary areas provide opportunities for professional/career advancement; for expansion of cultural horizons; for development of scientific literacy; for growth in personal awareness and human interrelationships; for enhancement of capability to assess and deal with the great issues of politics and society in this era of fundamental reappraisal of established ideas and values. In the broad social view, Extension has a primary responsibility for the public service functions of the University, including community development programs and the application of University resources toward the solution of crucial statewide and urban problems.

Programs
Types of programs include regular campus-equivalent classes; lecture series; discussion groups; conferences, institutes and short courses; community development and other public service programs; film and television series; correspondence study; residential programs; sequential certificate programs; studio/workshop courses in the creative and performing arts; an extensive creative writing program
series; family field/study trips and foreign travel/study programs; special programs for the blind and other handicapped persons; and counseling and testing.

Credit
For information on transferability of credit earned through Extension toward the bachelor’s degree at UCLA, please contact the Extension Information and Advisory Service (see "Additional Information" below).

Continuing Education Units
Many Extension noncredit programs offer the opportunity to earn CEU (noncredit Continuing Education Units). One CEU is awarded for each 10 contact hours of instruction. CEU are recorded on the student’s transcript. They are widely accepted for relicensure and other professional/career-related purposes.

Additional Information
To obtain the current UCLA Extension catalog, call 825-8895.
An Information and Advisory Service (IAS) is available to all for assistance in planning long- or short-term study through Extension, for credit or not for credit. There is no charge for this service. Those interested may write, telephone or visit the IAS offices, 114 UNEX, UCLA Extension Building, 10995 LeConte Avenue (at the southwest corner of the campus), Los Angeles, CA 90024 (206-6201).
Veterans may use the educational benefits available to them under Federal and State laws to enroll in University Extension classes, provided the classes are part of their prescribed and recognized objectives approved by the Veterans Administration.

The University Library
The University Library system consists of nineteen libraries designed to serve the study and research needs of students, faculty and staff in all the academic and research disciplines offered on the campus. The libraries collectively contain more than four million volumes, as well as extensive holdings of government publications, newspapers, pamphlets, manuscripts, microforms, music scores, slides, maps and recordings in cassette, video cassette and tape form. The library regularly receives nearly 55,000 serial publications.
Card catalogs in each library list all processed material in that library. Microfiche supplements list periodical and partially processed books.
The main card catalog in the University Research Library lists holdings in all campus libraries.
Students have access to the stacks of most of the libraries at UCLA. Orientation to and guidance in the use of these facilities, collections and services is available at each campus library. Self-service photocopiers are available at most library units.

Copying periodical articles and portions of books are available in most library units.

The College Library
The services and collections of the College Library, located in the Lawrence Clark Powell Library Building, are designed to meet most of the basic study needs of undergraduates. Its book and periodical collections are maintained in open stacks, with course reserve materials available for loan at the Circulation Desk. The College Library Audiovisual Center contains a collection of plays, speeches, poetry and satire and a selection of popular music on audio cassettes, as well as video cassettes on such subjects as biology, chemistry, dance, drama, engineering and kinesiology.
Study carrels and reading rooms are found throughout the Powell Building, and typing and self-service photocopy machines are also provided. The College Library also offers a self-paced, self-directed noncredit course of instruction in the use of the library, “Learning Library Skills,” for a charge of $5.

University Research Library
The principal collections relating to the humanities and social sciences are located here in an open stack arrangement. In addition, the Reference Room, Circulation Department and Periodicals Room are in this building. The Microform Reading Service, with some 400,000 microcopies of newspapers, books and periodicals, has a variety of reading and copying equipment. The Graduate Reserve Service places books on open-shelf reserve for graduate courses. Typing and group study rooms and a self-service photocopy center are also provided.

The Public Affairs Service, located in the Research Library, provides a service embracing collections of official publications of governments and international organizations and of other books and pamphlets in the social sciences. It is a depository for official publications of the United States government, the State of California, California counties and cities, the United Nations and some of its specialized agencies, and a number of other international organizations. Also available are selected publications of the other states and possessions of the United States, publications of foreign governments, books and pamphlets on local government and materials on current issues.

The Department of Special Collections, in the Research Library, contains rare books and pamphlets, manuscripts, the University Archives, early maps, and files of early California newspapers. Collections of rare materials are also in the Art Library (the Elmer Belt Library of Vinciana), the Biomedical Library (the Benjamin Collection of Medical History) and the Management Library (the Gross Collection of Business and Economic History); others are located in the Music Library and the Theater Arts Library.

Other Campus Libraries
The resources of the special libraries on campus are devoted primarily to the subjects of concern to the departments or Professional Schools in which they are situated. The libraries serve primarily these departments and Schools, but their materials are available to all students and faculty members of the University.

The Biomedical Library, in the Center for Health Sciences, has collections in all of the health and life sciences. Materials for engineering, astronomy, meteorology and mathematics are kept in the Engineering and Mathematical Sciences Library. Education, kinesiology and psychology are the principal subjects served by the Education and Psychology Library, which also has collections in the field of Teaching English as a Second Language. The Management Library serves the Graduate School of Management and the various subjects relating to business and management.

The following libraries support the UCLA curricula: Architecture and Urban Planning, Art, Chemistry, Geology-Geophysics, Law, Map, Music, Oriental Languages, Physics, Theater Arts and the University Elementary School.

Supplementing the University Library is the William Andrews Clark Memorial Library, with its collection of about 75,000 books, pamphlets and manuscripts relating to English culture of the seventeenth, eighteenth and nineteenth centuries and the history of Montana, is not on the UCLA campus, but is located at 2520 Cimarron Street (at West Adams Boulevard). Its materials do not circulate; leaflets describing the Clark Library and information about University transportation to it may be obtained at the Reference Desk in the Research Library.

Special Library Services
The Library Photographic Service located in the Powell Library Building, offers complete documentary photographic service, producing photostats, microfilm, slides, ozalid prints and other photographic work.

Computer Reference Services are offered on a partial cost-recovery basis by librarians in the Reference Department and Public Affairs Service in the Research Library, as well as by those in the Biomedical, Chemistry, Education and Psychology, Engineering and Mathematical Sciences, Geology-Geophysics, Graduate School of Management and Physics Libraries. Based on a number of important abstracting and indexing publications, the information covers primarily the social, life and physical sciences, technology and education. Descriptions and price lists are available at reference desks throughout the library system.
The resources and services of all the campus libraries are available to all students, faculty and staff of the University. A library handbook, describing the organization, activities and the "Summary of Library Privileges," may be obtained in any of the campus libraries.

Research Facilities, Museums, Other Resources

Recognizing the value of an interdisciplinary approach to the search for knowledge, the University maintains Regentally designated organized research units and other research programs outside the usual departmental structure. An organized research unit consists of an interdepartmental group of faculty and students engaged in research with them. Research units aid research and may enhance the teaching of participating members of the faculty, but they do not offer regular academic curricula or confer degrees. They may provide research training to graduate students employed in research programs with faculty supervision. These units, along with more specialized activities in focal fields, provide significant support to the educational program and enhance the overall academic quality of the University.

Universitywide

The INSTITUTE OF GEOPHYSICS AND PLANETARY PHYSICS, located in 3839 Slichter Hall (825-1664), is engaged in interdisciplinary programs related to studies of the interior of the earth, moon and other planets, the fluid and gaseous parts of the planets, and interplanetary space. Major research programs being actively explored in the laboratories of the Institute include investigations into the origin of the magnetic field; the configuration of the earth's magnetic field in space; the earth-sun interaction; structure and properties of the lunar surface and interior; meteorites; origin of the earth's magnetic field; the history of the solar system; astrophysical plasmas; high energy astrophysics; ocean-atmosphere interactions; seismology; earthquake control and prediction; internal structure of the earth; earth tides; continental drift and plate tectonics; properties of materials under high pressures and temperatures; mineral synthesis; radiocarbon archaeology; geochronology; glaciology; petrology and metamorphism; isotopic geochemistry; origins of life; and man's interaction with the environment.

The laboratory facilities of the Institute and its faculty are available to guide the dissertation research of students in the physical sciences, including the Departments of Earth and Space Sciences, Physics, Chemistry, Mathematics, Atmospheric Sciences, Astronomy, Engineering and Anthropology.

Leon Knoppoff, Associate Director

The WHITE MOUNTAIN RESEARCH STATION, an organized research unit of the University of California, was established (1) to provide laboratory facilities for any qualified research investigator who wishes to utilize a high-altitude environment in his work and (2) to serve as a teaching facility for field courses conducted in the region. Located in the vicinity of Bishop, California, the Station includes four separate laboratory sites: (1) the Owens Valley Laboratory, 3 miles east of Bishop at an elevation of 4050 feet above sea level; (2) the Crooked Creek Laboratory on the White Mountain Range northeast of Bishop at an elevation of 10,150 feet, used in conjunction with the U.S. Forest Service; (3) the Barcroft Laboratory at an elevation of 12,470 feet; and (4) the Summit Laboratory atop White Mountain Peak at an elevation of 14,250 feet. The three laboratories above 10,000 feet are within the Inyo National Forest, and their operation is subject to the regulations of the U.S. Forest Service, as well as to those of the University of California. General operational policy for the Station is set by the President's Advisory Committee for the White Mountain Research Station (WMRS), which includes faculty representatives from every campus of the University.

In the more than 25 years of its existence, several hundred scientists have used the laboratories to conduct research in the agricultural, biological and physical sciences and have come to the Station from universities and colleges, government laboratories and industrial research laboratories located both in this country and abroad. The facilities also have been used by several hundred undergraduate students enrolled in field courses conducted at the WMRS by a number of academic institutions. Primary emphasis of the Station is high altitude research. The administrative offices of the WMRS are located at UCLA in 3805 Geology (825-2093). Clarence A. Hall, Jr., Director

Campuswide

The INSTITUTE OF AMERICAN CULTURES is charged with promoting and coordinating the activities of the four ethnic centers—the Center for Afro-American Studies, the American Indian Studies Center, the Chicano Studies Research Center and the Chicano Studies Research Center. The Institute conducts no research itself, but fulfills its purpose by making research and fellowship funds available to the ethnic centers and by encouraging and coordinating the efforts of the centers to recruit faculty and develop new instructional programs. The Institute is guided by an Executive Committee consisting of the four center directors, three faculty members (one of whom serves as the chair) and the Vice Chancellor for Research (ex officio). The director of the Institute is the Executive Vice Chancellor.

The CENTER FOR AFRO-AMERICAN STUDIES, located in 3105 Campbell Hall (825-7403), is an organized research unit established on the UCLA campus in 1969. Its basic mission is to encourage and support research that enhances the interpretation of the Afro-American experience. Pursuant to this objective, it provides faculty and graduate student research grants, sponsors in-house research projects, offers fellowship and scholarship awards, supports interdisciplinary symposia, encourages related curriculum development, and most important, relates these findings to the community at large via lectures, publications and cultural programs. In addition, the Center participates with an interdepartmental degree committee responsible for administering an interdisciplinary master's degree program and an undergraduate program in Afro-American Studies.

Claudia Mitchelli-Kernan, Director

The AMERICAN INDIAN STUDIES CENTER, located in 3230 Campbell Hall (825-7315), acts as an educational catalyst in a variety of ways. It encourages new programs of study, promotes faculty development and systematic research, and develops library materials and curricula related to American Indian studies. In addition, the Center is involved with the cultural activities of the Indian community and sponsors lectures, symposia, conferences and workshops relevant to American Indian development. Special emphasis is placed upon coordinating the educational needs of American Indian students with the University and the community.

Charlotte Heth, Acting Director

The ASIAN AMERICAN STUDIES CENTER, located in 3232 Campbell Hall (825-2974), seeks to provide a deeper understanding of a particular area of study by the development of related human and material resources. It promotes the systematic development of material resources related to Asian American studies through an aggressive library acquisitions program, coordinated interdisciplinary research, and a broad publications program. Human resources are nurtured by vigorous curriculum development efforts, and courses have been designed with degree-granting programs at both the undergraduate and graduate levels. The Center supports and encourages promising graduate students and postdoctoral scholars to pursue their interests in this vital field of study and sponsors a variety of conferences, lectures, symposia and cultural events. In addition, the Center supports a wide variety of projects designed to channel the resources of the University and the fruits of the Center's other areas of activity to Asian American communities.

Lucie Cheng Hirata, Director

The CHICANO STUDIES RESEARCH CENTER (CSRRC), located in 3121 Campbell Hall (825-2363), is an organized research unit established at UCLA in 1969 whose mission is to facilitate interdisciplinary academic research related to the Mexican experience. Its purpose is to seek the development of Chicano studies as a unique scholarly area of activity, recognizing that campus and national development of Chicano studies are interrelated.
The CRUMP INSTITUTE FOR MEDICAL ENGINEERING, located in 6417 Boelter Hall (825-4111), joins medicine and certain aspects of engineering, especially chemical engineering and materials science. Its research interests include: (1) pharmacokinetics (the analysis and modeling of drug and hormone distribution and metabolism), (2) design of optimal experimental strategies for identifying pharmacokinetic models, (3) design of new therapeutic systems for the controlled delivery of drugs, (4) physiological systems analysis by combined animal experimentation and computer simulation, (5) development of synthetic polymers with programmed surfaces (chemically coded) to provoke selective bonding to certain tissues, (6) analysis of transports of air and soil pollutants, with emphasis on risk assessment and (7) development of an extended statistical, irreversible thermodynamic approach to the understanding of complex systems, including nervous systems.

The Institute will ultimately occupy a new building being constructed for it in Fall 1986. At maturity, the Institute will include fifteen faculty members from engineering and medicine.

F. Eugene Yates, Director

The INSTITUTE OF INDUSTRIAL RELATIONS, located in 9244 Bunche Hall (825-1964) and authorized by the Legislature of the State of California in 1945, is concerned with three principal types of activity. The first is an interdisciplinary research and publishing program directed primarily toward the study of labor-management relations and related problems, such as wage determination, economic security programs, the labor market, occupational safety and health, the quality of working life, the status of disadvantaged groups in the work force, labor law, labor history, comparative studies and employment problems. Research staff members of the Institute are usually drawn from the regular faculties of the Graduate School of Management, the Departments of Economics, History, Psychology, Political Science and Sociology, the School of Law or other academic departments. This program affords opportunities to students specializing in personnel management and industrial relations to engage in investigative work under expert guidance. A second important concern of the Institute is the support and encouragement of teaching programs and courses in industrial relations at the University. The third major activity consists of community and labor relations programs serving unions, management, the public and other groups interested in industrial relations. The programs consist of public lectures, conferences, symposia and institutes of varying duration and include a series of courses in cooperation with University Extension leading to a Certificate in Industrial Relations.

Daniel J. B. Mitchell, Director

The LABORATORY OF BIOMEDICAL AND ENVIRONMENTAL SCIENCES, located in Warren Hall (900 Veteran Avenue, 825-9431), conducts research in the fields of biomedical and cellular science, environmental biology and nuclear medicine. It is funded through a contract with the Department of Energy (formerly ERDA and AEC). Research and training in nuclear medicine are conducted in the Center for Health Sciences. Most of the remaining program is conducted in Warren Hall, located on the West Medical Campus.

Warren Hall is well-equipped with modern research tools including a cobalt radiation source with an activity of 10,000 curies at the time of installation. The Laboratory also operates a biomedical cyclotron in the Center for Health Sciences which produces isotopes and is capable of activating procedures in support of its research programs. The Laboratory staff consists of about 190 scientists, technicians and supporting personnel representing many disciplines. Graduate student and postgraduate research programs are supervised by the staff in several fields.

O. R. Lunt, Director

The MOLECULAR BIOLOGY INSTITUTE was established to serve various interested departments of the biological, medical and physical sciences in the coordination, support and enhancement of research and training in molecular biology. Interests and activities of the Institute encompass all approaches which aim to explain biology at a molecular level, with particular emphasis on correlation of structure and function. These include study of structure and function of macromolecules, molecular genetics and virology; bioenergetics, catalysis and control; molecular basis of cellular architecture, development, evolution, neurobiology and oncology. Staff members from departments in biological, physical and medical sciences participate in Institute programs, and the Institute aids departments in graduate training and postdoctoral programs in the general area of molecular biology.

Most of the Institute staff are housed in the Molecular Biology Institute building completed in 1976 (administrative offices are located in 168 MBI, 825-1018). Approximately one-half of the building space is devoted to the Parvin Cancer Research Laboratories. The Institute building is located adjacent to the Chemistry, Biology and Microbiology Departments and close to the School of Medicine.

Paul D. Boyer, Director

The NEUROPSYCHIATRIC INSTITUTE (NPI), located within the UCLA Center for Health Sciences (on B Level off Westwood Boulevard, 825-0511), is an organized activity devoted to teaching, research and patient care in psychiatry, neurology and related fields. The mission of the Institute is threefold: (1) education—developing scholars and practitioners who contribute to the solution of problems related to mental health, mental retardation and diseases of the nervous system; (2) research—acquiring new knowledge about the factors that affect an individual's social, psychological, intellectual and neurological health; and (3) patient care and treatment—developing and utilizing the most effective techniques of diagnosing and treating these disorders. Today, the NPI staff consists of mental health professionals representing a broad spectrum of disciplines relevant to the fields of mental health and illness, mental retardation, diseases of the nervous system and allied fields of research (including anatomy, anthropology, biochemistry, computer sciences, dentistry, education, epidemiology, ethnology, genetics, health administration, linguistics, neurology, nursing, pathology, pediatrics, pharmacology, physiology, psychiatry, social work and sociology).

The Institute houses the Department of Neurology and the Department of Psychiatry and Biobehavioral Sciences and works in close association with the latter to conduct educational programs at the undergraduate, graduate and postdoctoral levels. An active and varied program of basic research, as well as biomedical, behavioral and clinical research is emphasized; NPI also provides inpatient and outpatient psychiatric and neurological services for adults, adolescents and children.

L. J. West, M. D., Director

Dentistry

The DENTAL RESEARCH INSTITUTE, located mainly on the 7th floor of the School of Dentistry, involves faculty, graduate and professional students doing original research in six program areas as follows: (1) Immunology/Immunogenetics; (2) Periodontal Disease; (3) Ultrastructure and Cell Biology; (4) Oral Neurology/Pain; (5) Craniofacial Biology; and (6) Biomaterials. M.S. and Ph.D. students are sponsored by individual Institute faculty members. An informational brochure outlining current studies of Institute members is available from the Office of the Director, 43-186 CHS (825-5478).

William H. Hildemann, Director
Engineering

A NATIONAL CENTER FOR INTERMEDIA TRANSPORT RESEARCH (NCITR) has been established at UCLA with the support of the U.S. Environmental Protection Agency (EPA). At the Center, studies will be conducted of the transport of particles and gases across interfaces and of chemical conversion processes involving particulate matter at interfaces. Of special interest will be the transport of chemical species, such as trace metals and organic compounds of pollution concern. The Center will emphasize the fundamentals of these processes. At the same time, however, the Center will apply the results of these and other studies to systems of practical interest, such as emissions from the new synthetic fuel technologies and the chemical and petrochemical industry.

For this purpose, theoretical and modeling approaches will be employed in the evaluation of field and monitoring data collected by EPA and others.

Participants in the Center include faculty and students from the Departments of Chemical Engineering and Atmospheric Sciences and the Institute of Geophysics and Planetary Physics. Administrative offices are located in 5531 Boelter Hall (825-2206).

S.K. Friedlander, Director

Letters and Science

The AFRICAN STUDIES CENTER, located in 10244 Bunche Hall (825-3686), provides a framework for furthering teaching and research on Africa involving social sciences, education, linguistics, humanities, fine arts, law, the health sciences and the natural sciences. The Center participates in an interdisciplinary master's degree program in African Area Studies and in an undergraduate program in conjunction with degrees in the social sciences or African languages. The Center has also become increasingly involved in special programs which entail the dissemination of knowledge about Africa to the larger community.

Through its Research Committee, the Center makes grants to assist UCLA faculty members and students with research on Africa. It participates in administering the NDEA Title VI fellowship awards for the study of African languages and offers a limited number of supplementary grants-in-aid to students both in master's and in doctoral programs whose focal point is Africa. The Center provides information to faculty and students on extramural sources of research support and employment opportunities which require knowledge of Africa. It also brings Africanists to the University for lectures or as Visiting Professors or Research Associates and sponsors interdisciplinary colloquia focused on integrative and innovative themes.

Other Center activities include the publication of quarterly journals, African Arts, UAFAHAMU (a student journal), Studies in African Linguistics, The Journal of African Studies, African Law Studies, The African Studies Center Newsletter and Research in Progress, as well as occasional papers and books based on the interdisciplinary colloquia. The Center also provides facilities for a student organization, the African Activist Association, which is active in sponsoring events that focus public attention on important aspects of African culture or politics.

Michael F. Lolchic, Director

The INSTITUTE OF ARCHAEOLOGY, located in 288 Kinsey Hall (825-8506), was established in 1973 for the purpose of developing and coordinating all aspects of activities relating to archaeology. Its goal is to contribute to the ideal of a comprehensive interdisciplinary reconstruction of the human past, as evidenced especially from artificial remains.

The Institute includes faculty members from eleven academic units at UCLA, as well as faculty from various other UC campuses. It also serves as a home for visiting archaeologists from the U.S. and abroad. It provides an intellectual focus for all University of California archaeologists, facilitating the exchange of views on theoretical models and technical developments. It does so by sponsoring lectures, seminars and symposia and by arranging for visiting faculty; it also helps support excavation programs of individual archaeologists active on campus. Through the Archaeological Survey, the Institute serves the needs of California archaeology, especially in the southern part of the state. Besides occasional publications, the Institute issues a yearly journal, a series of technical monographs and a series devoted to major archaeological reports and investigations. The Institute has recently expanded its laboratory facilities for the analysis of ceramics, bones, metals and other materials. These are largely manned by graduate students in archaeology. Its archives, such as those devoted to rock art and archaeological sites in Southern California, provide an important research resource for archaeologists, historians, folklorists, art historians and other interested scientists. Given the considerable amount of public interest in archaeology, the Institute promotes a variety of activities which serve a broadly based need in the off-campus community, such as an Extension curriculum in archaeology, field trips, public lectures and publications for the interested lay public.

Giorgio Buccellati, Director

The CENTER FOR THE STUDY OF COMPARATIVE FOLKLORE AND MYTHOLOGY, located in 1037 GSM (825-4242), is an interdisciplinary research facility that supports and coordinates the comparative study of folklore and mythology from throughout the world. Research facilities in the Center include the Wayland B. Hand Library of Folklore and Mythology, the Western Folklore Archive, the John Edwards Memorial Foundation, a recording study and sound laboratory, and collections of field recordings, phonograph records, films and slides. Center-sponsored research projects include such diverse subjects as the mythologies of the Indo-European peoples, American popular beliefs and superstitions, American legends, Anglo-American ballads, Irish narrative songs, Chicano traditional arts and oral history. Patrick K. Ford, Director

The LATIN AMERICAN CENTER, located in 10343 Bunche Hall (825-4571), is an organized research unit providing support for the multidisciplinary study of Latin America. With over 90 affiliated faculty and visiting scholars, the Center is a major resource for individual and collaborative research activities in the social sciences, arts, humanities and professions. Cooperation between the Center and seven Colleges and Professional Schools of the University is facilitated by the Dean's Advisory Committee for Latin American Studies.

Designated as a "center of excellence" by the U.S. Department of Education, the NDEA Latin American Language and Area Studies Center at UCLA supports the interdisciplinary B.A. and M.A. degree programs in Latin American Studies and coordinates articulated graduate degree programs with the Schools of Public Health, Library and Information Science, Management, Education, and Engineering and Applied Science. NDEA Title VI fellowships, research assistantships and grants-in-aid are available to students in the graduate degree programs.

The Center also sponsors an extensive program of lectures, films, colloquia and other special events for the University and general public. Additional outreach activities include precollegiate curriculum development, special offerings through University Extension, programs for community college instructors and participation in the Southern California Conference on International Studies.

The Center publishes a series of documentary and scholarly publications, which include the Statistical Abstract of Latin America, the Latin American Studies Series, the Reference Series, the Journal of Latin American Lore and the Hispanic American Periodicals Index (HAPI).

Ludwig Lauermann, Jr., Executive Director

The CENTER FOR MEDIEVAL AND RENAISSANCE STUDIES, located in 11365 Bunche Hall (825-1880), is an organized research unit of the University of California. The Center does not currently offer courses or degrees, but it contributes to the goals of the University in various ways.

The Center seeks to encourage multidisciplinary attitudes and skills as it promotes, among some twenty UCLA departments, the study of Western civilization between 300 and 1650 A.D., from the early Christian period through the time of Milton. Accordingly, the Center encompasses the arts, sciences, history and languages, and it embraces the Latin West, Byzantium, Islam, Judaism, the minor Christian communities and the various Slavic communities, as well as the Germanic and Celtic worlds. The Center seeks to furnish opportunities, facilities and assistance for individual research and interdepartmental exchanges; it appoints postdoctoral associates and visiting professors; and it sponsors lectures and organizes
coordinated cultural enterprises such as conferences and colloquia. Through books and television programs, it makes the findings of scholars available to both the academic community and the general public.

Students working in Medieval and Renaissance fields enjoy excellent resources at UCLA. Among the major research tools available on campus are the Berenson photographic file and the Princeton Index of Christian Art, the Beinecke Library's collections in the history of medicine, and the manuscript holdings in the Music Department and in the Research Library's Special Collections. As of 1979, UCLA was estimated to have more than 390,000 volumes in the fields of special interest to the Center, supplemented by growing collections in Judaica and Near Eastern studies. Nearby are the manuscripts and printed riches of the Huntington and Clark Libraries.

Fredi Chiappelli, Director

The GUSTAVE E. VON GRUNEBAUM CENTER FOR NEAR EASTERN STUDIES, located in 10286 Bunche Hall (825-1181), was established to promote individual and collaborative research and training in this area. The Center encourages the research of individual faculty members and collaborators in the solution of basic research problems which require institutional backing. The Center also sponsors lectures, seminars and conferences on various topics falling within the scope of Near Eastern studies and actively promotes an extensive publication program.

Speros Vryonis, Jr., Director

The CENTER FOR RUSSIAN AND EAST EUROPEAN STUDIES, located in 334 Kinsey Hall (825-4060), was established to promote, assist and coordinate research and training on Russia and the countries of Eastern Europe. It further encourages the research of individual faculty members and graduate students, sponsors colloquia, seminars and lectures, organizes conferences and participates, with other universities, in academic exchange programs with Russia and Eastern Europe.

Bariša Krekić, Director

The INSTITUTE FOR SOCIAL SCIENCE RESEARCH (ISSR), located in the Gayley Center at 1101 Gayley Avenue (825-0711), undertakes basic and policy studies on a broad spectrum of contemporary sociological, psychological, political and economic problems and other social-related community issues. The Institute encourages collaborative research between faculty in the various social science departments, as well as cooperative projects that involve members of the Professional Schools. The core staff of the Institute provides research consultation and supportive services to University faculty members engaged in research investigations, as well as advice on the designing and funding of projects. From time to time, the Institute offers special opportunities for graduate students to gain research experience. As funds permit, the Institute provides seed-funding for project development and pilot studies.

An integral part of the Institute is the Survey Research Center (SRC) which not only serves the UCLA faculty but investigators from other universities and research groups in the local and national social research community. Several times a year, SRC undertakes studies of Los Angeles County residents that provide research information to a number of different investigators. These multipurpose surveys allow researchers to economically obtain data-sets on large representative samples of Los Angeles County citizens.

The current research program includes studies in medical care, mental health, human development, law, demography, economic resources, gerontology, energy and economic behavior.

Howard E. Freeman, Director

Management

The WESTERN MANAGEMENT SCIENCE INSTITUTE, located in 6223 GSM (825-1581), fosters research and advanced study in management science and operations research, with special emphasis on developments needed for more effective practical applications. The Institute conducts mathematical and computer-oriented studies on a variety of subjects. These include the construction of optimization models for production and distribution systems, finance and marketing policies, conservation of natural resources and resource allocation in organizations. Appropriate tools of decision-analysis, mathematical programming and simulation are being developed and applied. The basic economics of decision and information systems are also being studied.

In addition to its research programs, the Institute is engaged in developing faculty resources and graduate curricula in the management sciences and in sponsoring workshops and seminars such as the Jacob Marschak Interdisciplinary Colloquium on Mathematics in the Behavioral Sciences.

Although composed largely of faculty members of the Graduate School of Management, the Institute staff is interdisciplinary. Fruitful collaborative relationships have occurred with the Departments of Economics, Engineering, Mathematics, Political Science and Psychology.

J.C. LaForce, Acting Director

The BRAIN RESEARCH INSTITUTE, provides an environment for research in the neurological and behavioral sciences for investigators particularly from the behavioral, health and life sciences fields but also from the physical sciences and engineering. Three principal goals of the Institute are: (1) to support and conduct research which contributes to an understanding of brain mechanisms and behavior; (2) to contribute to the training of predoctoral and postdoctoral students for professional careers in brain science; and (3) to develop and disseminate information about brain function in the interest of the social and scientific communities. Located in the Center for Health Sciences (73-401 BRI, 825-6055), the Institute conducts programs which are largely interdisciplinary. General activities include attention to such broad fields of interest as neurobiology, neurophysiology, neurochemistry, neuroanatomy, neuropharmacology, neuroendocrinology, neuropsychiatry, biophysics and communications, neuroimmunology, behavior and neuropathology.

Carmon D. Clemente, Director

The JERRY LEWIS NEUROMUSCULAR RESEARCH CENTER is located in the northwest corner of the Center for Health Sciences (off Westwood Boulevard, 825-3733) adjacent to the Reed Neurological Research Center, BRI and NPI. It houses the research programs of members of several departments, with a common focus of interest in the physiology, anatomy and biochemistry of nerves and muscles and of pathological conditions affecting muscles.

Alan D. Grinnell, Director

The JULES STEIN EYE INSTITUTE is a comprehensive facility located within the Center for Health Sciences (2-138 JSEI, 825-5051) devoted to research in the sciences related to vision, the care of patients with eye disease and the dissemination of knowledge in the broad field of ophthalmology. Incorporated in this structure are outpatient, inpatient and operating room facilities for the care of patients with ophthalmic disorders; areas for research in the sciences related to vision; and facilities for scientific reading, lectures and seminars. The Institute affords a unique opportunity for the training of students in the School of Medicine, residents and graduate physicians, as well as postgraduate and postdoctoral fellows in fields related to vision science. A close relationship with graduate and undergraduate research and teaching facilities at UCLA is maintained.

B.R. Straatsma, Director

The MENTAL RETARDATION RESEARCH CENTER, located in 48-240A NPI (825-0313), provides laboratories and clinical facilities for basic and applied research and research training in mental retardation and related aspects of human development. Its interdisciplinary activities range from molecular biology to epidemiology. The Center is closely allied with a professional education and clinical services facility which promulgates interdisciplinary training in the evaluation and treatment of mentally retarded and otherwise disturbed children and their families. Together, these two units comprise a total program directed toward a major public health program.

Nathaniel A. Buchwald, Director

Museums, Galleries, Special Facilities

The FREDERICK S. WIGHT ART GALLERY is located in the Dickson Art Center at the north end of the campus. The permanent holdings include the Franklin D. Murphy Sculpture Garden, a collection of 66 sculptures from the 20th century by Arp, Calder, Lachaise, Lipchitz, Moore, Noguchi, Rodin and Smith.
Twelve exhibitions of painting, sculpture, prints and drawings, architecture, and design are presented annually in close conjunction with the UCLA Museum of Cultural History and the Grunwald Center for the Graphic Arts. One major exhibition yearly is sponsored by the UCLA Art Council, the supporting organization of the Gallery.

In the past several years, the Gallery had exhibitions of Amish Quilts, Dowries from Kutch (a Women's Folk Art Tradition in India), Louis M. Eilshemius in the Hirshhorn Museum, UCLA 50th Anniversary (presented by the Grunwald Center for the Graphic Arts), American Impressionism, New American Monotypes and 20th-Century American Drawings from the Whitney Museum of American Art, as well as undergraduate and graduate student exhibitions from the UCLA Department of Art. The Gallery is open Tuesday through Friday 11 am-5 pm and Saturday and Sunday 1-5 pm. There are daily tours at 1 pm and group tours by appointment. The administrative office is located in 1101A Dickson Art Center (825-1461).

Jack B. Carter, Acting Director

The GRUNWALD CENTER FOR THE GRAPHIC ARTS, which houses a distinguished collection of prints and drawings, is maintained as a study and research center for the benefit of students, scholars and collectors, as well as the general public. The permanent holdings of the Center, located in 2122 Dickson Art Center (825-3783), include significant examples from the 15th century to the present which were originally selected to complement courses given in the history and connoisseurship of the graphic arts. It is particularly noted for its collection of German Expressionist prints formed by Fred Grunwald, as well as for specialized collections in 19th- and 20th-century lithography (including the Tamarind archive), the history of ornament, Japanese prints (including the Frank Lloyd Wright collection), and comprehensive holdings of Matisse, Picasso and Rouault. Several major exhibitions are organized each year accompanied by the publication of a scholarly catalog.

E. Maurice Bloch, Director

The MUSEUM OF CULTURAL HISTORY (formerly The Museum and Laboratories of Ethnic Arts and Technology) comprises growing collections of objects which represent a wide range of the material culture, and specifically of the arts of peoples who lived until recently at, or beyond, the margins of the major Oriental and Occidental civilizations. These collections represent the arts and archaeology of Africa, Melanesia, the Americas, the Ancient Near East, the circum-Mediterranean cultures, the European, Neolithic and Bronze ages, and the folk arts of Latin America, Europe and the Orient.

The Museum promotes the study of arts and artifacts as one of the most important avenues toward an understanding of man's cultures. As a resource for UCLA faculty, students, visiting scholars and the general public, the Museum offers assistance with instruction, research field work, exhibitions and seminars, and sponsors exhibitions, lecture programs, symposia and publications.

In the community, the Museum directs a satellite museum program which organizes and mounts exhibitions that are located throughout greater Los Angeles, particularly in culturally disadvantaged areas, and a prehistory program which is designed to make children familiar with museum objects in a classroom setting. Trained volunteers teach classes in prehistoric archaeology in the Los Angeles City School System.

The Museum has an 1800 square-foot multipurpose facility, located in 55A Haines Hall (825-4361), which is used primarily for exhibitions directly related to teaching and research—a focus for classes, seminars and lectures. Designed as a home for many University, Museum and community activities, the gallery enhances and gives impetus to further development. The exhibitions highlight various aspects of the Museum's collections.

Christopher B. Donnan, Director

The 8-acre MILDRED E. MATHIAS BOTANICAL GARDEN, located on the southeast corner of the campus, contains a useful teaching and research collection of about 4000 plant species from around the world. Included are a native section, desert garden, lathouse and experimental field. The Herbarium contains a teaching and research collection of about 250,000 dried plant specimens, representatives of the world flora, with special collections of the native plants and ornamental species cultivated in Southern California. The administrative office is located in 124 Botany (825-3620).

Arthur C. Gibson, Director

The UCLA JAPANESE GARDEN in Bel Air that reminds one of Kyoto was donated to the University in 1965 by Edward W. Carter, then Chairman of the Regents of the University. It serves as an adjunct in the teaching programs of several UCLA departments. It is open to individual visitors and groups by reservation only (call the UCLA Visitors Center at 825-4338) Tuesday from 10 am to 1 pm and Wednesday from noon to 3 pm.

The garden was created in 1961 by Mr. and Mrs. Gordon Guiberson in memory of his mother, Ethel L. Guiberson, organizer of the Beverly Gardens Club. The Guibersons had studied many Japanese gardens, including the most famous ones in Kyoto. They enagaged Nagao Sakurai, a leading landscape architect, to design it. Major structures in the garden—the main gate, teahouse, bridges and shrine—were built in Japan and reassembled here by Japanese artisans. Major symbolic rocks were shipped from Japan, and antique stone carvings and water basins were imported. In addition, much specially selected local stone was used, including 400 tons of lichen-covered dark brown stone from Santa Paula Canyon in Ventura County.

Except for the old native coast live oaks which antedate the garden, nearly all the trees and plants belong to species that are grown in Japan. (This is not true of the separate Hawaiian Garden behind the teahouse.) The garden was seriously damaged by heavy rains in 1969; the extensive reconstruction was designed by Professor Kawana and financed by Friends of the UCLA Gardens. Gabriel Aguilera, who helped build and plant the original garden, has been in charge of it ever since.

The OFFICE OF ACADEMIC COMPUTING (OAC), located in 5905 Math Sciences (825-7511), is responsible for all general-purpose computing activities on the UCLA campus. In support of instructional and research activities, OAC provides a broad range of computing services to the UCLA academic community and, through a nationwide computer network, to institutions throughout the United States. The principal computing resource is an IBM System/370, 3033 computer. The 3033 is available to all departments and Schools within UCLA, and timesharing terminals and remote-job-entry stations are located throughout the campus.

Both interactive and batch methods are available for performing work on the 3033. Interactive terminal-oriented systems available are APL *PLUS (STSC's version of A Programming Language), TSO (IBM's Time Sharing Option) and WYLBUR. The 3033 supports MVS batch services as well as a fast, student-oriented batch service (QUICKRUN). Turnaround for jobs run on the 3033 typically ranges from under a minute for student jobs to under an hour for every job requiring extensive setup operations.

OAC also maintains a DEC (Digital Equipment Corporation) PDP-10 computer, principally for student use. Any member of the UCLA student body or faculty can individually establish an account for using the PDP-10. Plans are to replace the PDP-10 in 1981 with a new system. Other noteworthy equipment provided to OAC users is special equipment for graphics work: two plotters (a CalComp 936 Drum Plotter and a Versatec 1200A Electrostatic Plotter) and several Tektronix graphics display devices (models 4081, 4051 and 4013).

Computing activities are supported by an extensive library of application programs, consulting services and reference documentation. The applications program library for the 3033 includes a wide range of statistical, engineering and mathematical software. Several FORTRAN and PL/1 compilers, as well as other esoteric computer languages, are also supported on the 3033.

W.B. Kehl, Director

The DIVISION OF LABORATORY ANIMAL MEDICINE, located in IV-211 CHS (825-7281), is the centralized animal resource facility responsible for the procurement, husbandry and general welfare of animals required for teaching and investigative services. The Division's veterinary and support staff administers the veterinary medical and husbandry programs throughout the campus. The Division's
Grading Regulations, Student Conduct & Leaving UCLA

Grades in courses (graduate or undergraduate) are defined as follows: "A", excellent; "B", good; "C", fair; "D", poor; "F", failure; "IP", In Progress; and "I", undetermined (work of passing quality but incomplete). The grade "DR" (Deferred Report) is entered on the student's record (a) when, to the faculty member's knowledge, the student's work in the course is complete, but the faculty member is not able to assign a grade or (b) when disciplinary proceedings are in progress. The designations "P" (Passed) and "NP" (Not Passed) are used in reporting grades for undergraduate students taking courses on a Passed/Not Passed basis. Grades "A", "B", "C", "D" (including plus or minus notations where authorized), "F", "P" and "NP" are final when filed by an instructor in his end-of-quarter course report, except for the correction of a clerical or procedural error. No term grade except Incomplete may be revised by reexamination.

A-306 General

(a) The Schools of Dentistry, Medicine and Law shall develop their own grading codes for their respective professional programs and these programs are thereforeexcepted from the provisions of this grading code.

(b) The instructor in charge of a course shall be responsible for determining the grade of each student in the course. The standards for evaluating student performance shall be based upon the course description as approved by the appropriate course committee.

(c) The final grade in the course shall be based upon the instructor's evaluation of the student's achievement in the course. When on an examination or other work submitted by a student, the student is suspected of having engaged in plagiarism or otherwise having cheated, the suspected infraction is to be reported to the appropriate administrative office of the University for consideration of disciplinary proceedings against the student. Until such proceedings, if any, have been completed, the grade "DR" (Deferred Report) shall be assigned for that course (see Senate Divisional Regulation A-315). If in such disciplinary proceedings, it is determined that the student did engage in plagiarism or otherwise cheat, the administrative officer, in addition to imposing any discipline, shall report back to the instructor of the course involved, the nature of the plagiarism or cheating. In light of that report, the instructor may replace the grade "DR" with a final grade that reflects an evaluation of that which may fairly be designated as the student's own achievement in the course as distinguished from any achievement that resulted from plagiarism or cheating.

(d) If an instructor in charge of a course has been determined by the Committee on Privilege and Tenure to have assigned a grade on any basis other than academic grounds, the Committee on Privilege and Tenure shall communicate that information to the division chairman. Within a period of two weeks after notification, guided by the Committee or Committee, the division chairman shall establish an ad hoc committee to determine whether the grade shall be changed. The ad hoc committee shall consist of at least three members, with at least one member a representative of the department involved. The ad hoc committee will obtain whatever records are available and use these records to make a final decision concerning the grade. If the records are not adequate, then the committee may assign a grade of Pass or allow the student to repeat the course without penalty. The ad hoc committee will report to the division chairman, who shall report the change of grade to the Registrar. To protect the student, the grade shall be changed, if warranted, within four weeks following information of the ad hoc committee.

A-307 Grading of Undergraduate Students

(a) The level of achievement of all undergraduate students shall be designated in the following terms: "A" (superior), "B" (good), "C" (fair), "D" (poor), "F" (fail), "I" (Incomplete), "IP" (In Progress). "P" (Passed), "NP" (Not Passed), "DR" (Deferred Report). The passing grade "A" may be modified by a minus (−) suffix. The passing grades "B", "C" and "D" may be modified by plus (+) or minus (−) suffixes.

(b) Grade points per unit shall be assigned by the Registrar as follows: "A" = 4, "B" = 3, "C" = 2, "D" = 1, "F" = 0, "Plus" grades carry three-tenths grade point more per unit and "minus" grades carry three-tenths grade point less per unit than unsuffixed grades. Subject to the provisions of Senate Regulation 634, courses in which a student receives a "P" grade shall be counted in satisfaction of degree requirements, but courses in which either a "P", "NP", "DR", "I" or "IP" has been awarded shall be disregarded in determining a student's grade-point average.

(c) The grades "A", "B", "C" and "P" denote satisfactory progress toward a degree. The "D" grade denotes progress toward a degree but as stipulated in Divisional Senate Regulation A-304 such a grade must be offset by higher grades.

A-308 Grading of Graduate Students

Please refer to the UCLA Graduate Catalog.
A-309 The “I” Grade

(a) The grade “I” may be assigned when a student’s work is of passing quality, but is incomplete. The grade “I” shall only be assigned when the student establishes to the instructor’s satisfaction that his work is incomplete for a good cause. When the instructor assigns the grade “I” on the grade sheet, the grade should be accompanied by a notation specifying what work must be done to remove the Incomplete.

(b) The student is entitled to have the grade “I” replaced by a passing grade and to receive unit credit and grade points provided he satisfactorily completes the work of the course by the end of the next full term that he is in residence in regular session following the term in which the “I” was received. The Dean of the appropriate School or College has authority to extend the deadline for completion in the event of unusual circumstances that would clearly impose an unfair hardship on the student if the original deadline were maintained.

(c) If the work is not completed according to the provisions of Senate Divisional Regulation A-309(b), the grade “I” shall automatically be replaced with “F”, “NP” or “U” as appropriate.

A-310 The “P” and “NP” Grades for Undergraduate Students

(a) Subject to the limitations in (c) and (d) below, an undergraduate student in good standing may enroll in one course each term on a P/NP basis.

(b) A grade of “P” shall be awarded only for work which would otherwise receive a grade of “C” or better.

(c) A student who has received two “NP” grades shall be excluded from enrolling in a course on a P/NP basis for the next term in residence.

(d) A department or School may designate any course or courses as courses not to be taken by its major on a P/NP basis and may at its option require a student who has received a “P” in such a course before entering a major to repeat the course for a letter grade.

(e) A student who has not elected the P/NP option in a preceding term may take two courses P/NP.

(f) The Council on Educational Development and the Committee on Undergraduate Courses and Curricula may authorize exceptions to (a) and (e) above when they would be inconsistent with the purpose or design of experimental courses or programs which these committees may approve.

A-312 The “IP” Grade for Undergraduate Students

(a) For courses authorized to extend over more than one quarter and where evaluation of the student’s performance is deferred until the end of the final term, a provisional grade of “IP” (In Progress) shall be assigned in the intervening term(s). The provisional grade shall be replaced by the final grade if the student completes the full sequence. The faculty of each School or College and the Graduate Council are authorized to regulate the award of credit in cases where the full sequence is not completed.

(b) Authorization for use of “IP” grades in undergraduate courses shall be by the Committee on Undergraduate Courses and Curricula.

A-313 Correction of Grades

All grades, except “DR”, “I” and “IP”, are final when filed by an instructor in the end-of-term course report. However, the Registrar is authorized to change a final grade:

(a) Upon written request of an instructor, provided that a clerical or procedural error is the reason for the change or

(b) Upon written request of the chairman of the division 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 reexamination or, with the exception of the “I” and “IP” grades, the completion of additional work. Any grade change request made by an instructor who has left the University must be countersigned by the department chairman.

A-314 Repetition of Courses

Repetition of courses other than those authorized by the Committee on Undergraduate Courses and Curricula or the Graduate Council to be taken more than once for credit is subject to the following conditions:

(a) A student may repeat only those courses in which he received a grade of “D”, “F”, “NP” or “U”. Courses in which a grade of “D” or “F” has been received may not be repeated on a P/NP or S/U basis.

(b) Repetition of a course more than once requires approval by the appropriate Dean in all instances.

(c) Degree credit for a course will be given only once, but the grade assigned at each enrollment shall be permanently recorded.

(d) In computing the grade-point average of an undergraduate who repeats courses in which he received a “D” or “F”, only the most recently earned grades and grade points shall be used for the first 16 units repeated. In the case of further repetitions, the grade-point average shall be based on all grades assigned and total units attempted.

A-315 The “DR” Grade

The grade “DR” (Deferred Report) shall be entered on the student’s record:

(a) When, to the faculty member’s knowledge, the student’s work in the course is complete, but the faculty member is not able to assign a grade or

(b) When disciplinary proceedings are in process according to the provisions of Divisional Regulation A-306(c).

The “DR” shall not itself be calculated in any way in the student’s grade-point average. The “DR” shall be changed to a grade, or perhaps to an Incomplete, only when the Registrar receives a written request from the instructor which indicates that the student has clarified the situation.

The report of the grade “DR” must be accompanied by a letter from the instructor to the Dean of the School or College and to the student stating the basis for the action. For students enrolled in a course approved by the Graduate Council, the Dean of the Graduate Division is the dean of record. For students in a course approved by any undergraduate course committee, the dean of record is the Dean of the College or School in which the course is offered. The Dean shall establish a date or a specific circumstance terminating the period of the Deferral of Report and inform the Registrar, the instructor and the student. Unless changed by the instructor as specified in the preceding paragraph, the “DR” shall then automatically become “F”.

A-320 Special Studies Courses

(a) All special individual studies courses for undergraduate students are numbered 199. These courses are structured by the instructor and the student at the time they are initiated. The structure of the course, including both the specific proposed course of study and the requirements that must be met before a grade can be assigned, are then summarized on the standard form, “Petition for Enrollment in a Special Studies Course (199).”

(b) To register for a special studies course, the “Petition for Enrollment in a Special Studies Course (199)” must be approved both by the instructor in charge and the chairman of the department (or the head of the relevant interdisciplinary program).

(c) Limitations:

1. Enrollment requires the consent of the instructor who is to supervise the study. The applicant shall show that his background is adequate for the proposed study.

2. Credit for supervised individual studies in a single term is limited to a maximum of 8 units. Subject to the provisions of Divisional Regulation A-310, the student may take a 199 course on a Passed/Not Passed or a letter grade basis, but the total number of units allowed in individual study courses for a letter grade is 16.

3. At the close of the term, some tangible evidence of work accomplished, signed by the student and the supervising faculty member, shall be filed by the department for an appropriate period of time. The department shall designate the form of the evidence acceptable for this purpose.
At the outset of a special studies course (199) the student must complete, and the instructor must sign, a "Petition for Enrollment in a Special Studies Course (199)," which will include the specific proposed course of study and the requirements to be met before a grade can be assigned. The form must have been completed and submitted before a grade can be assigned in the course.

To register for 199 and/or 199H, a student must have advanced junior standing and at least a 3.0 GPA in his or her major field, or he or she must have senior standing.

A student who has an outstanding Incomplete in 199 or 199H may not register for another 199 or 199H until the grade of Incomplete has been removed.

On the advice of the instructor(s) and chairman concerned, the Dean of a student's College or School may authorize exceptions to the limitations listed.

Departments may impose additional limitations on the individual study courses.

A-330, A-332 Final Examinations

No student shall be excused from assigned final examinations except as provided in Divisional Senate Regulation A-332 below.

A-332

(a) The instructor in charge of an undergraduate course shall be 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 upon adequate evaluation of that achievement. The instructor's methods 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 shall not exceed three hours duration and shall be given only at the times and places established by the departmental chairman and the Registrar.

(b) At the end of the term in which a student is expected to be graduated, his major department may examine him in the field of the major, may excuse him from final examinations in courses offered by the department during that term, and with the approval of the Committee on Courses, may assign a credit value to such general examination. (Variance 15 June 71.)

(c) An instructor shall, if he or she wishes, release to individual students their original final examinations (or copies). Otherwise, the instructor shall retain final examination materials, or a copy thereof, for a period of not less than 13 months after the date of the examination, during which period students shall have access to their examination.

A-340 Undergraduate Honors

Each College or School shall establish its criteria for honors at graduation and quarterly honors subject to the following minimum standards and procedures:

(a) Honors at Graduation: Students eligible for award of honors shall be those who have completed 90 or more units, for a letter grade, at the University of California and have attained, as a minimum, a GPA which places them in rankings in their College as follows: Highest Honors, top 5%; High Honors, next 5%; Honors, next 10%. At the end of each calendar year, the Registrar shall determine for each College the average minimal GPAs required for graduating in the top 5%, next 5% and next 10% during that calendar year. These GPAs, announced in January and published in the catalog for the next academic year, shall serve each College as minimal criteria for the above honors at graduation during the next academic year.

(b) Quarterly Honors: Students named on the quarterly honors list by each College shall be those who have completed, for a letter grade, a minimum of 12 units in that quarter with a GPA equal to or greater than GPA levels in effect for their College for honors at graduation.

Repeating Courses

Repetition of courses is subject to the policies of the departments offering the courses and the following conditions: (1) You may repeat only those courses in which you received a grade of "C-", "D+", "D", "D-", "F", "NP"; however, the appropriate Dean may authorize repetition of courses graded Incomplete; (2) Repetition of a course more than once requires approval by the appropriate Dean in all instances; (3) Degree credit for a course will be given only once, but the grade assigned at each enrollment shall be permanently recorded. Courses in which a grade of "C-", "D+", "D", "D-" or "F" has been earned may not be repeated on a Passed/Not Passed basis.

Incomplete Grades

The grade Incomplete may be assigned when your work is of passing quality but is incomplete. You must file a "Petition for Removal of Incomplete Grade" to complete the work in a way authorized by the instructor (fee: $5). Appropriate grade points and units will be assigned upon completion. If the Incomplete grade was assigned Fall Quarter 1972 or thereafter and the work is not completed by the end of the next quarter you are in academic residence, the grade "I" will automatically be lapsed to a grade of "F".

It is your responsibility to present the petition to your instructor detailing the reasons why you should be assigned an "I" grade. If the instructor is willing to grant the "I" grade, a contract for the makeup of the "I" is written on the petition form which is signed by you and the instructor. If you neglect to do this, you may receive a nonpassing grade in the course. Once the terms of your contract have been met, the instructor will forward the petition to the Registrar's Office to have the "I" grade changed to the earned letter grade. Under extraordinary circumstances, the Dean of your College may grant an extension of time on removal of the "I" grade.

Courses Taken Passed/Not Passed

An undergraduate student enrolled in at least a minimal program may take courses on a Passed/Not Passed basis subject to the following regulations:

(1) Except as provided in (3), (4) and (5) below, a student in good standing may enroll in one course each quarter on a Passed/Not Passed basis. Courses thus passed shall be counted in satisfaction of degree requirements.

(2) A grade of Passed shall be awarded only for work which would otherwise receive a grade of "C" or better.

(3) A student who has received two Not Passed grades shall be excluded from enrolling in a course on a Passed/Not Passed basis for the next term in residence.

(4) A department or School may designate any course or courses as ineligible for election by its majors on a Passed/Not Passed basis and may at its option require a student who has received a Passed in such a course before changing his major to repeat the course for a letter grade.

(5) A student who has not elected the Passed/Not Passed option in a preceding quarter may take two courses Passed/Not Passed.

(6) With the permission of the Dean of your College or School, you may change your enrollment in a particular course from the Passed/Not Passed basis to the regular letter grade basis at any time up to the final date for dropping the course.

Grade Points

For purposes of computing scholarship standing, a full course is counted as equivalent to 4 quarter units. Partial or multiple courses are counted proportionally.

Grade points per unit are assigned as follows: "A-" 4, "B-" 3, "C-" 2, "D-" 1, "F" - none and, prior to Fall Quarter 1972, "I" - none. The plus (+) notation adds 0.3 grade points per unit; the minus (-) notation subtracts 0.3 grade points per unit. Beginning Fall Quarter 1972, units attempted and grade points for work graded "I" (Incomplete) are excluded from grade-point computations for the quarter in which the "I" is assigned. Upon removal of grade "I", units and grade points are included in subsequent accumulated grade-point sum-
You can determine your grade-point average by dividing the number of grade points earned by the number of units attempted. A 2.0 ("C") grade-point average on all work undertaken at the University—all campuses—is required for satisfactory standing as an undergraduate; a 3.0 ("B") average for a graduate.

Courses taken on a Passed/Not Passed or Satisfactory/Unsatisfactory basis are disregarded in determining grade-point average. In computing the grade-point average of an undergraduate who repeats courses in which grades of "C-", "D+", "D", "D-" or "F" were assigned, only the most recently earned grade and grade points shall be used for the first 16 units repeated. In the case of further repetitions, the grade-point average shall be based on all grades assigned and total units attempted. Courses in which a grade of "D+", "D", "D-" or "F" has been earned may not be repeated on a Passed/Not Passed basis.

Students should be aware that external agencies which evaluate student records for the purpose of admission to graduate and professional school programs may not calculate grade-point averages in the same manner as the University, and students are advised to contact such agencies about their policies concerning the calculation of grade-point averages.

Minimum Scholarship Requirements

Students in all undergraduate Colleges and Schools are expected to maintain a grade-point average of 2.0 ("C" average) on all work undertaken at the University—all campuses. Failure to maintain this level normally results in probation. The following provisions apply to all undergraduate students at Los Angeles.

Academic Probation

You will be placed on probation if, while in good standing, you fail to maintain at least a grade "C" average for all courses included in the grade-point average in a quarter.

Probationary status can be ended only at the close of a regular quarter and then only if a "C" average has been attained both on the term's work and on all work taken at the University of California—all campuses.

Academic Dismissal

You will be subject to dismissal from the University (a) if your grade-point average falls below 1.5 for any quarter or (b) if after two quarters on probation you have not achieved a grade-point average of 2.0 ("C" average) for all courses undertaken at the University or (c) if while on probation your grade-point average for work undertaken during any quarter falls below 2.0 ("C" average) or (d) if you fail to pass at least 32 units in three consecutive regular quarters in residence (see "Minimum Progress").

Grade-point averages shall be computed on the basis of all courses undertaken at the University (all campuses), including courses graded "I" (Incomplete) prior to Fall Quarter 1972, but not including noncredit courses, courses taken in University Extension, or courses taken on a Passed/Not Passed basis.

If you fail to meet the minimum scholarship requirements, you are subject to such supervision as the faculty of your College or School may determine. The faculty or its designated representative may dismiss a student subject to dismissal; may suspend dismissal, continue probation; or may readmit on probation a dismissed student.

Minimum Progress

Undergraduate students in the College of Fine Arts and the College of Letters and Science should refer to the information given on minimum progress in the sections on each respective College.

Final Examinations

If a final examination is one of the regular requirements in a course, there can be no individual exemptions. Final written examinations shall not exceed three hours duration and shall be given only at the times and places established by departmental chairmen and the Registrar.

Reexaminations are permitted only for the purpose of removing the grade "I".

About Student Conduct

Most of this catalog is devoted to the academic regulations which govern membership in the UCLA community. But, in addition to these, your conduct as a student is also subject to standards of behavior consistent with the role of UCLA as an institution dedicated to the pursuit of knowledge.

Just as you are subject to the provisions of the California Penal Code regardless of whether or not you are aware of each statute it contains, so, too, are you responsible for the provisions published in the University of California Policies Applying to Campus Activities, Organizations and Students (Parts A and B) and UCLA Activity Guidelines—and to the standards of conduct spelled out in these books.

You can get a copy of each of these by contacting the Dean of Student Relations Office, 2224 Murphy Hall or the Campus Programs and Activities Office/Student Relations, 161 Kerckhoff Hall.

The Dean of Student Relations Office plays a central role in the interpretation, administration and application of the standards of citizenship which you are expected to follow at UCLA.

Since UCLA is large and diversified, the UCLA Daily Bruin is another source of general information. "Official Notices" run twice a week (Monday and Thursday), and you are held responsible for the information in them.

Disclosure of Student Records

Pursuant to the Federal Family Educational Rights and Privacy Act of 1974, the California Education Code as amended in 1976 and the University of California Policies Applying to the Disclosure of Information from Student Records, students at UCLA have the right: (1) to inspect and review records pertaining to themselves in their capacity as students, except as the right may be waived or qualified under the Federal and State Laws and the University Policies; (2) to have withheld from disclosure personally identifiable information from their student records, except as provided by the Federal and State Laws and the University Policies; (3) to inspect records maintained by the University of disclosures of personally identifiable information from their student records; (4) to seek correction of their student records through a request to amend the records and subsequently through a hearing; and (5) to file complaints with the Department of Health, Education and Welfare regarding alleged violations of the rights accorded them by the Federal Act.

The University may publish, without the student's prior consent, items in the category of "public information," which are name, address, telephone number, date and place of birth, major field of study, dates of attendance, degrees and honors received, the most recent previous educational institution attended, participation in officially recognized activities (including but not limited to intercollegiate athletics) and the name, weight and height of participants in intercollegiate athletic teams. Students who do not wish all or part of the items of "public information" disclosed may, with respect to address and telephone number, so indicate on the Student Data card in the "Registration Packet," and with respect to the other items of information, by filling out a "Decline to Release Public Information" form available in the Registrar's Office, 1105 Murphy Hall.

Student records which are the subject of the Federal and State Laws and the University Policies may be maintained in a wide variety of offices. Students are referred to the UCLA Directory, pages 1 through 26, which lists all the offices which may maintain student records, together with their campus address, telephone number and unit head. Students have the right to inspect their student records in any such office subject to the terms of the appropriate Federal and State Laws and the University Policies.
A copy of the Federal and State Laws, the University Policies and the UCLA Directory may be inspected in, and information concerning these matters and the students' hearing rights may be obtained from the Records Management Coordinator, 2256 Murphy Hall.

Leaving UCLA

Transfer to Other UC Campuses

Undergraduate students currently registered at any campus of the University in a regular session (or those previously registered who have not since registered at any other school) may apply for transfer to another campus by filing an "Intercampus Transfer Application" on their present campus. This application must be obtained and filed at the Registrar's Office Information Window A in Murphy Hall. There is a $25 nonrefundable fee. The deadlines are the same as the admission applications deadlines given under the "Admissions" section. Transcripts required for the processing of the application for transfer are provided without additional charge. For details regarding particular campus admission provisions, visit the Intercampus Transfer Clerk at the Registrar's Office Information Window A in Murphy Hall.

Cancellation

Prior to the first day of classes, you may cancel registration by submitting a written notice, together with the current Registration Card and Student Photo ID Card to the Cancellation Clerk, Registrar's Office, 1134 Murphy Hall. If you return to the University for the following quarter, you are eligible to preregister and preenroll as a continuing student. If you return subsequent to the following quarter, you must apply for readmission.

Withdrawal

A student discontinuing attendance in all courses at the University within the course of a quarter must file an acceptable "Notice of Withdrawal." Failure to do so will result in nonpassing grades in all courses, thus jeopardizing your eligibility to reenter the University of California or your admission by transfer to another institution. Forms containing complete instructions are issued in the office of the Dean of the student's College, School or Graduate Division. File the "Notice of Withdrawal," Registration Card and Student Photo ID Card at your College (Letters & Science or Fine Arts students) for the withdrawal to take effect. Engineering, Nursing and Public Health students, after securing proper clearances, should file this form at the Registrar's Office Information Window A in Murphy Hall. Failure to attend classes, neglect of courses or stopping payment on checks tendered for registration do not constitute notice of withdrawal. If you return to the University for the following quarter, you are eligible to preregister and preenroll as a continuing student. If you return subsequent to the following quarter, you must apply for readmission.

One Quarter Absence

If after completing a quarter you do not register for the following quarter, you may return to the University the next subsequent quarter as a continuing student and will be eligible to preregister and preenroll.

Readmission

If you wish to return to the University after an absence of more than one quarter, you must file an "Application for Readmission." During the academic year 1981-82 applications for readmission are required as follows:

For Fall Quarter 1981—All students returning in the same status (graduate or undergraduate) who did not complete Winter Quarter 1981.

For Winter Quarter 1982—All students returning in the same status (graduate or undergraduate) who were not registered in Spring Quarter 1981.

For Spring Quarter 1982—All students returning in the same status (graduate or undergraduate) who did not complete Fall Quarter 1981.

Undergraduate students may obtain application forms from the Registrar's Office Information Window A in Murphy Hall. The completed application along with a $25 application fee (nonrefundable) and transcripts of records from other institutions (including University Extension) attended during their absence must be filed with the Registrar on or before August 1 for Fall Quarter, November 15 for Winter Quarter and February 15 for Spring Quarter.

Transcript of Record

Upon formal application to the Registrar, you may have issued on your behalf transcripts of your record of work taken at UCLA in either regular session or Summer Sessions. A fee* of $2 is charged for the first copy ($1 for each additional copy ordered at the same time) of each transcript—undergraduate, graduate or Summer Session. Transcripts required for the intercampus transfer of undergraduate students within the University are provided without charge.

Change of Address/Name

The Registrar should be notified as soon as possible of any change in address that occurs after the return of the Student Data card (from the "Registration Packet"). Forms for this purpose are available at the Registrar's Office Information Window A or in 1134 Murphy Hall. Veterans receiving benefits must also notify the Office of Special Services/Veterans Affairs.

In case of change of name, forms available at the Registrar's Office Information Window A should be filed before the beginning of the next quarter. Since changes require approximately three months to be processed, you should continue to use your former name until notified that the records reflect the change.

Graduation from UCLA

Students at UCLA have very high aspirations, and most of them reach their educational goals. This is because UCLA's admission requirements are designed to select those students who, on the basis of their academic records, have the best chance of success in meeting their educational goals. While those with higher high school GPAs and SAT scores are more likely to succeed, every individual admitted to UCLA has the ability and the potential to graduate. In general, the students most likely to graduate and to be satisfied with their educational experience are those who take their academic program seriously and who also participate in the cultural, recreational and other activities that comprise the total University experience.

The traditional undergraduate program assumes that the degree will be awarded after four years of full-time enrollment, and many students are able to follow this pattern. However, many others find it beneficial to interrupt their studies or "stop out" for one or more quarters in order to accommodate employment or family responsibilities or for other personal reasons. Students in good standing who interrupt their studies in this way should experience no difficulty in reentering the University and completing their academic program. In summary, about 3 of 10 students admitted to UCLA as freshmen graduate in four years, and another 3 will graduate from UCLA after a longer period of time.

In addition to those who remain to complete their degrees at UCLA, some students find it desirable, for either academic or personal reasons, to transfer to another institution. Another 2 of 10 students admitted as freshmen do this and eventually receive their degrees from another campus of the University of California or some other college or university. Therefore, 8 of 10 UCLA freshmen will eventually receive the baccalaureate degree, and most will go on to graduate school.

*Fees are subject to change without notice.
Commencement

Commencement exercises honoring candidates for undergraduate and graduate degrees are held in mid-June—either one or two days following the end of final examinations. During the early part of Commencement Day, individual departments, Colleges and Schools hold small, informal gatherings at which prizes and honors are awarded and students and their families meet faculty members. In mid-afternoon, all students, faculty, parents and friends gather in Drake Track and Field Stadium for formal exercises and the conferring of degrees. This academic pageant is a colorful affair—planned by the Committee on Public Ceremonies—featuring music, degree banners, student speakers and the wearing of gold fourragere by undergraduate candidates who have achieved high academic distinction (upper 15 percent of the seniors graduating each quarter).

Diplomas are not distributed at Commencement. During the period between final checking of degrees and the distribution of diplomas, a "Certificate of Completion" is sent to every student entitled to receive a diploma. Recipients are notified when their diplomas are available (at the Registrar's Office Information Window A in Murphy Hall). There is no diploma fee. Upon request, diplomas are sent to the student by certified mail, with a mailing charge of $3 ($6 abroad).

Need to Know More?

You will find a full discussion of academic regulations as they relate to your specific program in the sections of this catalog concerned with "Undergraduate Education."

Graduate

Education at

UCLA

If you're interested in finding out about the various degree programs in the Graduate Division at UCLA—including the Professional Schools like Law, Medicine, Architecture and Urban Planning and others—you'll need to get a copy of the UCLA Graduate Catalog, for sale in the ASUCLA Students' Store in Ackerman Union. Copies may also be ordered by mail from the "Book Mail Out" department at the Students' Store, 308 Westwood Plaza, Los Angeles, CA 90024.

Courses

The following symbols are used in the departmental faculty rosters and course listings:

Faculty Roster Symbols

1. In Residence summer only.
2. In Residence fall only.
3. In Residence winter only.
4. In Residence spring only.
5. On leave summer.
6. On leave fall.
7. On leave winter.
8. On leave spring.
9. On leave summer and fall.
10. On leave fall and winter.
11. On leave fall and spring.
12. On leave winter and spring.
13. On leave spring and summer.
15. Recalled to active service.
16. Member of Brain Research Institute.
17. Member of the Institute of Geophysics and Planetary Physics.
18. Joint Appointment.

Course Listing Symbols

*Not offered 1981-82.
*2Given alternate years; not offered 1981-82.
*3Offered as schedule and staff allow.
*4Not offered every year.
*5Given alternate years; offered 1981-82.
*6Offered Fall 1981 only.
*7Offered Winter 1982 only.
*8Offered Spring 1982 only.
*9Offered on request depending upon enrollment.
*10Consult department for details.
*11Not applicable to M.A. degree.
*12Native speakers not normally eligible.
*13A and B offered in alternate years.
*14Enrollment is limited. Consult Undergraduate Office.
*15Determined on basis of change in course content.
*16Only course C to be offered.
*17Courses A and B to be offered.
*18Open only to Engineering Executive Program students.
*19Not offered Fall 1981.
*20Not offered Winter 1982.
*21Not offered Spring 1982.
*22This course may not be applied toward the requirements of any graduate degree offered by SEAS in the School of Engineering and Applied Science.

Undergraduate Courses

Undergraduate courses are classified as lower division and upper division. Lower division courses (numbered 1-99) are open to freshmen and sophomores and are also open to upper division students but without upper division credit. Upper division courses (numbered 100-199) are ordinarily open to students who have completed at least one lower division course in the given subject or two years of college work. Courses in the 100 series may be offered in partial satisfaction of the requirements for the master's degree by a student registered in graduate status if taken with the approval of the major department.

Courses numbered 98 and 198 are structured special studies courses for groups. They are not listed in the catalog because they vary in content and are offered irregularly.

Graduate Courses

Graduate courses (numbered 200-299, 400-499, 500-599) are normally open only to students admitted in graduate status. Under special circumstances some courses in the 200-299 series are open to undergraduate enrollment with proper departmental and instructor consent. For information and complete descriptions of all graduate-level courses, please refer to the UCLA Graduate Catalog.

Professional Courses

Teacher-training courses (numbered 300-399) are highly specialized courses dealing with methods of teaching and are acceptable toward the bachelor's degree only within the limitations prescribed by the various Colleges or Schools. Please refer to the UCLA Graduate Catalog for descriptions of these courses.
University Extension Courses

University of California Extension courses bearing numbers 1-199 (prefixed by X, B, XD, XI, XL, XR, XSB, XSC or XSD) yield credit toward the bachelor's degree. They are rated with respect to the general and specific requirements for the degree on the same basis as courses taken in residence at collegiate institutions of approved standing. Concurrent enrollment in resident courses and in University Extension courses (or courses at another institution) taken with a view to credit toward a degree is permitted only when the entire program has been approved in advance by the Dean of the student's College.

Cross-Listed Courses

Concurrently Scheduled Courses: Concurrent scheduling is defined as pairs of courses (usually within a single department or program) that are offered at the same time and place with the same instructor; credit is given at two levels—usually undergraduate and graduate. Activities and/or standards for performance and evaluation are applied separately for each level.

A capital "C" before the initial number of a course indicates concurrent scheduling.

Multiple-Listed Courses: A capital "M" before the initial number identifies courses (usually of the same level) that are listed in two or more different departments. These courses are taught at the same time and place with the same instructor, but students receive credit from the department or program in which they enrolled.

Course Listings

Each course in the following listings by departments, as in the samples that follow, has the credit value of a full course unless otherwise noted. Thus a listing, History 1A-1B-1C, Introduction to Western Civilization, indicates three full courses, 1A, 1B and 1C, while a listing, Dance 114A-114F, Advanced Contemporary Dance (1/4 course each), indicates six half courses, 114A, 114B, 114C, 114D, 114E and 114F.

Where noted, credit for a specific course is dependent upon completion of a subsequent course.

Air Force Reserve Officers’ Training Corps (Air Force ROTC)

Air Force ROTC provides selected students the opportunity to develop those attributes essential to their progressive advancement to positions of high responsibility as commissioned officers in the U.S. Air Force. This includes understanding Air Force history, doctrine and operating principles, demonstrating ability to apply modern principles of management and human relations in the Air Force environment and mastery of leadership theory and techniques.

Scholarship Program

Scholarships are available to qualified cadets in both the four-year and two-year programs. Scholarships cover full tuition, laboratory expenses, incidental fees, allowances for books and a stipend of $100 per month.

Four-Year Program

The four-year program is open to beginning freshmen. It consists of an initial two-year General Military Course (GMC) described below, followed by a two-year Professional Officer Course (POC) described under “Two-Year Program.”

Leadership Laboratory

All Air Force ROTC students must enroll each quarter in the Leadership Laboratory as published in the UCLA Schedule of Classes.

Freshman Year

1A-1B-1C. U.S. Military Forces in the Contemporary World (1/4 course each). Prerequisite: course 1A is prerequisite to 1B and 1B is prerequisite to 1C. This sequence of courses examines the role of the Air Force in the contemporary world by studying the total force structure, strategic offensive and defensive forces, general purpose forces and aerospace support forces. Capt. Beno

Sophomore Year

20A-20B-20C. The Developmental Growth of Air Power (1/4 course each). Lecture-seminar, one hour. Prerequisite: courses 1A-1B-1C. These courses examine the development of air power over the past sixty years. They trace the development of various concepts of employment of air power and focus upon factors which have prompted research and technological change. Key events and elements in the history of air power are stressed, especially where these provide significant examples of the impact of air power on strategic thought. Capt. Croston

Two-Year Program

The two-year Air Force ROTC program is offered to accommodate those students who have attained at least junior standing and have two years remaining at the University, either as an undergraduate or graduate student. A prerequisite for students entering this program is successful completion of a six-week field training course on an Air Force base during the summer preceding their enrollment in the program.

Four-Week Field Training Course

Students who complete GMC and wish to enter POC attend a four-week field training course the summer following GMC completion. At field training, students are provided meals, quarters, clothing and travel expenses and are paid about $450 to cover 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.

Field Training Course Staff

130A-130B-130C. Concepts of Air Force Management and Leadership (% course each). Lecture-seminar, three hours. Prerequisite: course 130A is prerequisite to 130B and 130B is prerequisite to 130C. This is a three-part course. An analysis of the principles and functions of management, leadership and organizational behavior with special reference to the Air Force as a model. The course includes problem solving, information systems and models, quantitative methods and computer systems. Group discussions, case studies, films and role-playing will be used as teaching devices. Communicative skills will be strengthened through preparation of written reports and oral presentations.

Maj. Westemeier

140A. Military Judicial System (% course). Seminar, three hours. Prerequisite: course 130C. An introduction to the foundation of the military profession and the Military Judicial System. Oral and written student reports will be expected.

Maj. Westemeier

140B. The Military in American Society (% course). Seminar, three hours. Prerequisite: course 140A. Examines forces and issues in the social context that affect the functioning of the U.S. military. Influence of social norms, societal pressures and cultural factors on the functioning of the military profession in the United States is analyzed. Communication techniques are strengthened and communicative abilities are oriented to Air Force requirements through preparation of papers, classroom presentations and discussion.

Maj. Westemeier

140C. American Defense Policy (% course). Seminar, three hours. Prerequisite: course 140B. Examines U.S. security policy with respect to factors that influence its formulaton, the bureaucracy that formulates and implements it, and the forms it has taken and may take in the future. Communication techniques are strengthened, and communication abilities are oriented to Air Force requirements through preparation of papers and classroom presentation and discussion.

Maj. Westemeier
African Studies

(Interdepartmental)

(Program Office: 10244 Bunche Hall)

The African Area Studies Program does not offer an undergraduate degree. For detailed information on graduate degrees offered by this program, please refer to the UCLA Graduate Catalog.

African Studies

(Interdepartmental)

(Program Office: 10244 Bunche Hall)

Special Program in African Studies

This program is designed primarily for (1) students who plan to live and work in Africa or who are interested in government and public service careers involving African affairs and (2) students who plan to pursue graduate work in one of the social sciences or Near Eastern and African languages with primary concentration on the African field.

The philosophy of the Program in African Studies is that people with a firm grounding in one of the established disciplines can make the best contribution to an understanding of Africa and its problems. Thus, the Special Program in African Studies can be taken only jointly with work toward a bachelor's degree in one of the following fields: anthropology, economics, geography, history, Near Eastern and African languages, political science or sociology. The student completing this special program will receive a degree with a major in a chosen discipline and specialization in African Studies. The chairperson of the Committee in Charge will certify completion of the Special Program in African Studies.

Preparation for the Program

The introductory courses listed here in three of the following departments: Anthropology 5 and 6; Economics 1 and 2 or 100; Geography 1 and 3; History 10A and 10B; Linguistics 5; Sociology 1 or 101. Training in Arabic, French, Portuguese or an African language is highly recommended.

Upper Division

The student is required to take a departmental major in the social sciences, or by special arrangement with the Committee chairman, in the humanities or arts. In addition, he is required to take a course related to Africa in each of four departments, one of which must be African Languages 190. African Languages 190 and one of the other three required upper division courses related to Africa may, however, be replaced by a three quarter sequence of any African language.

For more information, contact Joy Williams, African Studies Center, 10244 Bunche Hall (825-2944) or Professor Christopher Ehret, 6265 Bunche Hall (825-4093).

Afro-American Studies

(Interdepartmental)

(Program Office: 3101 Campbell Hall)

Claudia Mitchell-Kernan, Ph.D., Associate Professor of Anthropology
Haldor H. Fairchild, Ph.D., Assistant Professor of Psychology
Pierre-Michel Fontaine, Ph.D., Assistant Professor of Political Science
Robert Hill, M.Sc., Assistant Professor of History
Melvin Oliver, Ph.D., Assistant Professor of Sociology
Richard Yarborough, Ph.D., Assistant Professor of English

The major in Afro-American Studies is designed to provide students with a program of courses leading to a Bachelor of Arts degree in Afro-American Studies. The major offers an opportunity to systematically study the origins, experiences and conditions of people of African descent in the United States and elsewhere in the New World.

The fundamental goal of the curriculum is to provide students with a comprehensive and multidisciplinary introduction to the crucial life experiences of Afro-Americans. This goal is achieved in two primary ways. First, it provides majors with an interdisciplinary exposure to particular features of the Afro-American experience. Majors are able to gain a depth of understanding that includes the historical, anthropological, sociological, psychological, economic and political aspects of Africa. The curriculum also provides opportunities to study the literary and artistic heritage of peoples of African descent. Second, majors are required to gain expertise in the concepts, theories and methods of a traditional academic discipline. Majors are required to select an area of concentration in one of the following fields: anthropology, economics, English, history, philosophy, political science, psychology and sociology (concentrations in departments not listed must be approved by the program advisor).

The multidisciplinary emphases of the program are its principle feature. These emphases are designed to overcome the limitations attendant to the study of people within a single disciplinary framework. At the same time, the emphasis on the required departmental concentration recognizes the value of acquiring the conceptual and analytical tools of a traditional discipline. This curricular structure ensures students of a well-rounded liberal arts education which combines the acquisition of academic skills useful for continuing education in graduate and professional schools and practical skills useful in the world of work.

In order to accomplish the program's goals, students should plan their course work in close consultation with the major's faculty advisor. Upon entering the major, four lower division and six upper division courses must be taken within the chosen department (in some cases, the required lower division courses are in related departments). Two additional upper division courses must be taken in departments outside of the student's field of concentration. Finally, Afro-American Studies majors are required to complete two seminars, a junior seminar (Afro-American Studies 100) and a senior colloquium (Afro-American Studies 197) to be offered by the program. The content of these latter two courses may vary between sections and may be repeated for credit.

Preparation for the Major

History 10A and four lower division courses in any one concentration: anthropology: Anthropology 1, 2, 5, 6; economics: Economics 1, 2, 4, Mathematics 3A; English: English 3, 4, Linguistics 1, 2; history: History 6A-6B-6C, 10B; philosophy: Philosophy 4, 5B, 6, 22; political science: Political Science 1, 6, Sociology 1, Economics 1; psychology: Psychology 10, 41, Biology 2, Anthropology 11 (students may substitute Mathematics 50A or Economics 40 for Psychology 41, although Psychology 41 is recommended); sociology: Sociology 1, Linguistics 1, 2, Sociology 18 (students may substitute Mathematics 50A, Psychology 41, Economics 40 or Public Health 100A for Sociology 18, although Sociology 18 is recommended). Students concentrating in psychology or sociology are strongly urged to complete the required lower division quantitative course at the earliest possible moment.

The Major

(1) Anthropology M164, History 158B-159C;
(2) two upper division electives outside the department of concentration selected from the approved list of courses (see item 4 below); (3) two seminars offered by the Afro-American Studies Program (Afro-American Studies 100 and 197); (4) six upper division electives within the department of concentration from the following list of approved courses (recommended

Honors Option
An Honors Option is also available. Students participating in this option are required to complete an independent research paper or project. Normally, this paper or project would receive three quarters of credit and would be undertaken with the guidance of a faculty member.

Double Major Option
Some students elect to complete the requirements for two majors (Afro-American Studies and another). Students interested in this option should seek counseling at the earliest possible moment.

Upper Division Courses
M100A. Government and Politics in the Caribbean. (Same as Political Science M169.) A comparative study of the political structures, processes and movements of the Caribbean area with special emphasis on the dependency relationships, the forces that maintain them and the attempts to transform them. The course will also explore such topics as social classes and politics, political institutions and political systems, transnational relations (including relations between governments and multinational corporations) and historical models of Caribbean liberation.

Mr. Fontaine

100B. Psychology from an Afro-American Perspective. A survey of psychological literature relevant to Afro-Americans. Contributions of Afro-American psychologists are emphasized. Topics include the history of psychology, testing and intelligence, the family, personality and motivation, racism and race relations, education, community and the future of Afro-American psychology.

Mr. Fairchild

145. Ellingtonia. The course will explore the music of Duke Ellington, his life and the far-reaching influence of his efforts. Ellington's music, known as "Ellingtonia," is one of the largest and perhaps most important bodies of music ever produced in the United States. The course will also cover the many contributions of other artists who worked with Ellington, such as composer Billy Strayhorn and musicians Johnny Hodges, Coolies Williams and Mercer Ellington.

Mr. Burrell

M164. The Afro-American Experience in the United States. (Same as Anthropology M164.) This course assumes a broad understanding of contemporary sociocultural forms among Afro-Americans in the United States by presenting a comparative and diachronic perspective on the Afro-American experience in the New World. We will be concerned with the utilization of anthropological concepts and methods in understanding the origins and maintenance of particular patterns of adaptation among Black Americans.

Ms. Mitchell-Kernan

M197A. Contemporary Afro-American Fiction. (Same as English M197.) An examination of the dominant stylistic, thematic and ideological trends in Afro-American fiction written in the 60's and 70's. Writers to be covered include Ernest J. Gaines, Ishmael Reed, Nathan Heard, Cecil Brown, James Alan McPherson, Alice Walker, Elease Southerland and Toni Morrison. We will locate the works of fiction within the American fictive tradition and also will discuss the critical controversy surrounding contemporary Afro-American literature (focusing upon Addison Gayle's The Black Aesthetic). Finally, we will examine the ways in which these works of fiction reflect important recent developments in Afro-American culture. A familiarity with Afro-American history and literature would be useful in this course, but it is not essential.

Mr. Yarborough

197B. Special Studies in Comparative Literature: Caribbean Literature. A general introduction to the literature of the English-speaking Caribbean by reviewing its historical and geographical background. To analyze the historical process towards self-determination in the literature, the following topics will be given major concern: (1) alienation and the search for identity, (2) "external" relationships (the ancestor, the kinship, the other) and (3) form and language.

The Staff

Anatomy

(Department Office: 73-255 Center for Health Sciences)

The Department of Anatomy does not offer an undergraduate degree. The following upper division courses are offered with enrollment restrictions as indicated:

Upper Division Courses
101. Microscopic Anatomy (2 courses). Four three-hour sessions per week in Fall Quarter. Prerequisite: enrollment in School of Medicine or consent of instructor. Microscopic study of the tissues and organs of the human body.

Ms. Dirksen and the Staff

102A-102B. Gross Anatomy of the Human Body (4 course, 2 courses). Formerly numbered 100 and 102.) One hour of lecture and four of lab per week in Winter Quarter; four hours of lecture and twelve of lab in Spring. Prerequisite: enrollment in School of Dentistry or consent of instructor. Course 102A is prerequisite to 102B. This course is offered on an in Progress basis, which requires students to complete the full two-quarter sequence, with the end of which time a grade is given for all quarters of work. Systemic and topographical human anatomy with dissection of the human cadaver. Emphasis on head and neck.

Mr. Harper and the Staff

M103A-M103B. Basic Neurology (4 course, 4 course). (Same as Physiology M103A-M103B). Two four-hour sessions and one three-hour session per week in the last three weeks of Winter Quarter, two two-hour sessions and two three-hour sessions per week in Spring Quarter. Prerequisite: Medical School status or consent of instructor. Lectures, conferences, demonstrations and laboratory procedures necessary for an understanding of the functions of the human nervous system. In Progress grading.

Mr. Schlip and the Staff

104. Mammalian Histology (Dental) (11 courses). Three three-hour sessions per week in Fall Quarter. Prerequisite: enrollment in School of Dentistry or consent of instructor. Lectures, demonstrations and laboratories dealing with the structural organization of tissues and organs at the microscopic level.

Mr. Campbell and the Staff

105A-105B. Gross Anatomy (2 courses, 1 course). Four four-hour sessions per week in Fall Quarter; one three-hour, one four-hour and one five-hour session per week in Winter Quarter (first seven weeks). Prerequisite: consent of instructor. Offered on an In Progress basis. Lectures and dissection of the human body.

Mr. Sawyer and the Staff

106. Mammalian Neurology (Dental). One hour session per week in Fall Quarter and one hour session per week in Winter Quarter. Prerequisite: enrollment in School of Dentistry or consent of instructor. Lectures, demonstrations and laboratories dealing with the functional structure and functional organization of the nervous system.

Mr. Kruger and the Staff

Graduate Courses
For complete descriptions of graduate-level courses offered by this department, please consult the UCLA Graduate Catalog.

Medical History Division

Upper Division Courses
107A-107B. Historical Development of Medical Sciences. Three hours per week in Winter and Spring Quarters. The major contributions of medicine and medical personalities from earliest times. 107A concerns the contributions of medicine and medical personalities from earliest times through 1650; 107B deals with the subject in the period from 1650 through the 19th century. Illustrated lectures, class discussion and required readings from selected texts.

Mr. Agnew, Ms. O'Neil

M108A-M108B. History of Biological Sciences. (Same as History M195F-M195G.) Three hours per week in Fall and Winter Quarters. Prerequisite: upper division standing. M108A: Biological sciences from ancient times to the early nineteenth century. M108B: Biological sciences from the early nineteenth century to the mid-twentieth century.

Mr. Frank

110. Medicine and Society in 20th-Century America. Three hours per week in Spring Quarter. Prerequisite: consent of instructor. Preference given to health sciences students. Reading and conference course on social aspects of the growth of medical care, education and research in the United States since the mid-nineteenth century.

Mr. Frank

197. The Biomedical Sciences in the 19th Century. Three hours per week in Spring Quarter. Readings and discussions. Prerequisite: consent of instructor. Topics in the growth of the biomedical sciences and their institutions in Europe and America, from the French Revolution to approximately 1900.

Mr. Frank

Graduate Courses
For complete descriptions of graduate-level courses offered by this department, please consult the UCLA Graduate Catalog.
Anesthesiology

(Program Office: 56-125 Center for Health Sciences)

The Department of Anesthesiology does not offer an undergraduate degree. For detailed information on graduate degrees offered by this department, please refer to the UCLA Graduate Catalog.

Anthropology

(Chairman of the Department)

Clement W. Meighan, Ph.D., Professor of Anthropology

(Chairman of the Department)

Clement W. Meighan, Ph.D., Professor of Anthropology

Wendell H. Oswalt, Ph.D., William O. Bright, Ph.D., and others mentioned.

James N. Hill, Ph.D., Professor of Anthropology

Jacques Marquet, Ph.D., Emeritus Professor of Anthropology

Henry B. Nicholson, Ph.D., Emeritus Professor of Anthropology

Wendell H. Oswalt, Ph.D., Emeritus Professor of Anthropology

Johannes Wilbert, Ph.D., Emeritus Professor of Anthropology

Bobby J. Williams, Ph.D., Emeritus Professor of Anthropology

Joseph C. Birdsell, Ph.D., Emeritus Professor of Anthropology

Hilda Kuper, Ph.D., Emeritus Professor of Anthropology

William A. Lessa, Ph.D., Emeritus Professor of Anthropology

Christopher Donnan, Ph.D., Associate Professor of Anthropology

Timothy Earle, Ph.D., Associate Professor of Anthropology

Allen W. Johnson, Ph.D., Associate Professor of Anthropology

Claudia Mitchell-Keman, Ph.D., Associate Professor of Anthropology

Philip L. Newman, Ph.D., Associate Professor of Anthropology

Dwight Read, Ph.D., Associate Professor of Anthropology

James R. Sackett, Ph.D., Associate Professor of Anthropology

Robert Byles, Ph.D., Assistant Professor of Anthropology

Gail E. Kennedy, Ph.D., Assistant Professor of Anthropology

Paul Kroskrity, Ph.D., Assistant Professor of Anthropology

Nancy E. Levine, Ph.D., Assistant Professor of Anthropology

Eugene L. Mendonsa, Ph.D., Assistant Professor of Anthropology

Carlos G. Velez-I, Ph.D., Assistant Professor of Anthropology

Bernard G. Campbell, Ph.D., Adjunct Professor of Anthropology

Brian Dillon, Ph.D., Lecturer in Anthropology

Robert B. Edgerton, Ph.D., Professor of Anthropology and Psychiatry

John G. Kennedy, Ph.D., Associate Professor of Psychiatry and Anthropology

L.L. Langness, Ph.D., Professor of Anthropology and Psychiatry

Merrick Posansky, Ph.D., Professor of History and Anthropology

Douglas Price-Williams, Ph.D., Professor of Anthropology and Psychiatry

Thomas S. Weisner, Ph.D., Assistant Professor of Anthropology and Psychiatry

Anthropology as a Major

Anthropology is today classed as a social science, but its roots are in both the biological sciences and humanistic studies. It still constitutes a bridge linking these three areas of knowledge, and the department has strong ties with other disciplines ranging from anatomy and genetics to linguistics and classics. An understanding of the department offerings must take cognizance of this special characteristic of the subject.

A major in Anthropology is particularly valuable for students planning careers in which an understanding of human behavior and cultural diversity is necessary or desirable. This is obviously the case for persons engaged in international relationships (whether in the public or private sector) and for people who intend to engage in the helping professions, such as medicine, public health, nursing, law, education and social welfare. Because of its breadth of outlook, anthropology also offers an ideal basis for a student seeking a general education in our ever shrinking and increasingly interdependent world.

The department recognizes five fields in anthropology: Archaeology, Biological Anthropology, Cultural Anthropology, Linguistic Anthropology and Social Anthropology. Faculty members tend to specialize in one field, though several teach courses in two. A brief description of these five fields is provided below:

Archaeology is the study of cultures of the past, where knowledge of their characteristics is obtained primarily from material evidence left in the ground, supplemented in some cases by historical and inscriptive records. Courses in this field illuminate the nature and content of diverse past cultures, their ecological adaptations and historical development. Other courses examine the methodology of scientific archaeology, including proper means of excavation, laboratory analysis, dating techniques (including obsidian data which has been largely developed at UCLA) and methods of analysis. The archaeology program offers two core courses: one focusing on the history of human culture and the other on methodology.

Biological Anthropology is the general study of the diversity of the physical characteristics of the human animal and the biological characteristics underlying human behavior. The faculty in this field specializes in one of four subfields:

(a) primatology or the study of the physical and behavioral characteristics of monkeys and apes; (b) paleoanthropology, the study of fossil hominids and the evolution of man; (c) human genetics which examine genetic diversity in modern populations throughout the world; and (d) evolutionary ecology of human and nonhuman primates.

Cultural Anthropology is the investigation of the perceptions, attitudes and behavioral characteristics of peoples as they are found throughout the world, and as these attitudes and behaviors are established by tradition and transmitted from generation to generation. Courses in cultural anthropology fall into three categories: psychological anthropology, aesthetic anthropology and the study of idealational systems including religious beliefs and mythologies, philosophical concepts, world views, and art and technologies.

Linguistic Anthropology examines the diversity of natural languages and their relationship to the cultural knowledge of their speakers and to processes of communication in their associated speech communities.

Social Anthropology directs its attention to the structure of the social order and the institutionalized patterns of human collaboration. It examines the diverse forces of family and kinship, governance and political systems, law and the resolution of conflict, economic collaboration, social status and role, and those aspects of religion which serve to reinforce institutional behavior. The distinction between cultural anthropology and social anthropology is a conceptual one and there is necessarily much overlap, but essentially the former directs attention to the perception and sentiments of individuals as they are acquired in the process of growing up within a community, while the latter directs its attention to social interaction systems. The former ties more closely to psychology and the humanities; the latter to sociology and the other social sciences.

Three other categories of course offerings are recognized by the department; the courses are not limited to one field:

Regional Cultures includes courses which describe the contemporary peoples, cultures and civilizations of major areas of the world as they were found at the time of discovery and as they exist today.

The Anthropology of Social Action includes those courses that direct attention to the anthropological understanding of diverse matters pertaining to the modern world. These courses should sensitize students to programs of action on issues and programs of change in some felt problem area, and enable them to predict the social outcome of innovations. The following topics are included: development in Third World countries, health issues, ethnic relations and the role of women in society.
History and Theory are courses that deal with the history of anthropological thought and general problems of anthropological methods of research (as distinct from courses in field work or laboratory methods special to the several fields).

Advising

Students majoring in Anthropology are expected to contact the departmental student counseling office in order to be assigned a faculty advisor at the time they declare their major, but at any rate not later than the first quarter of their senior year. The breadth of anthropological interests makes it possible and necessary for students to formulate a program of studies appropriate to their special interests, and this can best be achieved through regular consultation with the faculty advisor. Faculty advisors are responsible for guiding students in their final years as Anthropology majors by examining the students' record and directing them to those courses necessary for completion of the major, while assisting each student in developing a program suited to his or her special interest within the regulations of the department and the University.

Preparation for the Majors

Required: Anthropology 1 (formerly 1A), 2 (formerly 1B), 5 (formerly 5A), 6 (formerly 5C). All courses taken in preparation for the major must be taken on a letter grade basis.

The Majors

The Department of Anthropology offers a choice between two undergraduate majors: (1) the General major and (2) the Preprofessional major. In order that the student majoring in Anthropology may have a comprehensive understanding of the disciplines as a whole, each must take at least one course in each of the five fields. One core course is offered in each field (archaeology offers a choice of two), but the student may take any course to fulfill this requirement if the prerequisites have been met. Students taking either major must also meet the requirements of the University and the College of Letters and Science for graduation.

The General Major in Anthropology is designed for students interested in an anthropological understanding of human behavior who have plans to use such knowledge in pursuit of personal goals or professional goals other than those of anthropologists. Students taking the General major must complete fourteen (4-unit) upper division courses on a letter grade basis as follows: (1) one course in each of the five fields: Archaeology, Biological Anthropology, Cultural Anthropology, Linguistic Anthropology and Social Anthropology; (2) one course in the category of Regional Cultures; (3) four additional upper division courses in anthropology; (4) four upper division courses in related fields drawn from a list maintained in the department.

The Preprofessional Major is designed primarily for students planning to make a career in anthropology and is expected of students entering the graduate program in anthropology at UCLA. Students taking the Preprofessional major must complete a total of sixteen (4-unit) upper division courses on a letter grade basis. The requirements for this major are specifically distributed as follows: (1) one course in each of the five fields: Archaeology, Biological Anthropology, Cultural Anthropology, Linguistic Anthropology and Social Anthropology; (2) one course in the category of Regional Cultures; (3) two courses in the category of History and Theory; (4) one course in statistics (may be taken at either the lower or upper division levels); (5) three or four additional courses in anthropology; (6) three or four upper division courses in related fields drawn from a list maintained by the department; (7) competence in a foreign language (see below).

Foreign Language

For the Preprofessional major the department requires demonstration of proficiency in one foreign language to insure that its graduates have the communication skills and cultural insights offered by such proficiency. Any spoken language or any extinct language with a substantial body of literature is acceptable. Proficiency is equated with the skill level attained through course work in a language. Specifically, this requirement may be met in one of two ways: (1) by completion of the fifth quarter of one foreign language or (2) by a demonstration of foreign language proficiency at level 5. Courses taken to satisfy the foreign language requirements may be taken on Passed/Not Passed basis and may be applied toward satisfaction of the College of Letters and Science breadth requirements in the humanities. For additional information, consult the department counselor.

Other Relevant Information

The Undergraduate Student Association is important to the departmental program and organization. Through this association students have the opportunity to take a direct part in departmental administration and to select speakers and programs. Undergraduate students are encouraged to acquaint themselves with this organization and with the departmental library, museum study collections, reading room, typing room and the Archaeological Survey.

Lower Division Courses

1. The Principles of Human Evolution: Genetic Basis. (Formerly numbered 1A.) Lecture, three hours; discussion, one hour. Students cannot receive credit for both courses 1 and 2 (formerly numbered 1B) and 11, Human population biology in the conceptual framework of evolutionary processes. Course 1 emphasized the genetic basis of evolution, population biology and diversity among living populations. This course is required as preparation for the major.

The Staff

2. The Principles of Human Evolution: Comparative Analysis. (Formerly numbered 1B.) Lecture, three hours; discussion, one hour. Students cannot receive credit for both courses 1 (formerly numbered 1A) and 2 and 11. Human population biology in the conceptual framework of evolutionary processes. Course 2 emphasizes comparative primate behavior, structural anatomy and the fossil record. This course is required as preparation for the major.

The Staff

5. Principles of Cultural Anthropology. (Formerly numbered 5A.) Lecture, three hours; discussion, one hour. Students cannot receive credit for both courses 2 (formerly numbered 2A) and 5 and 22. The character of culture and nature of social behavior as developed through anthropological study of contemporary peoples. This course is required as preparation for the major.

The Staff

11. The Evolution of Man. Lecture, three hours; discussion, one hour. Students cannot receive credit for course 11 and both courses 1 (formerly numbered 1A) and 2 (formerly numbered 1B). This course does not satisfy major or preprofessional requirements.

The Staff

22. General Cultural Anthropology. Lecture, three hours; discussion, one hour. Students cannot receive credit for both courses 22 and 5 (formerly numbered 5A). An introduction to the cultural understanding of human behavior designed for students who do not plan further work in anthropology. Stress is placed on those concepts and theories that are applicable to the everyday life and professional activities in the modern world. Examples of institutions and individual behavior of modern America are counterpointed against studies of primitive life.

The Staff

33. Culture and Communication. Lecture, three hours. This course examines the role of culture in structuring how people communicate with one another and emphasizes the importance of language as a symbolic guide to one's culture. Topics to be treated include cultural differences in verbal and nonverbal behavior, imagined and actual differences in male and female speech, language and education, verbal style and interactional strategy, language taboos, and the effects of cultural factors which promote and retard language change. The course thus emphasizes patterns of language use rather than details of language structure.

Mr. Kroskry, Ms. Mitchell-Kerman

Upper Division Courses

Courses 1 and 2 (formerly 1A and 1B), 5 (formerly 5A), 6 (formerly 5C) or upper division standing are prerequisite to all upper division courses, except as otherwise stated. All upper division courses with letter designations (A, B, P, Q, etc) may be taken independently except as otherwise stated.

ARCHAEOLOGY

110. World Archaeology. (Formerly numbered 123.) Prerequisite: upper division standing or consent of instructor. A broad survey of human culture history from its Stone Age beginnings down to the establishment of the primary civilizations of the Old and New Worlds. Intended for students with a general interest in archaeology and in an anthropological approach to the study of the past. (Alternate CORE COURSE for Anthropology.)

Mr. Sackett

111. The Study of Archaeology. A survey of contemporary prehistoric archaeology. Emphasis is on what archaeologists do, and how and why they do it. Contributions of archaeology to the modern world are also examined. Intended for students with a desire to explore the nature of anthropological archaeology. (Alternate CORE COURSE for Archaeology.)

Mr. Hill
112. Old Stone Age Archaeology. (Formerly numbered 108.) Prerequisite: course 6 (formerly numbered 5C) or consent of instructor. The development of Paleolithic art and culture in Europe, the Near East, and the New World. Emphasizing the ordering and interpretation of archaeological data, Pleistocene geology and chronology, and the relationship between human cultural and biological evolution.

Mr. Sackett

113P. Archaeology of North America. (Formerly numbered 106D.) Prerequisite: course 5 (formerly numbered 5A), 6 (formerly numbered 5C) or consent of instructor. Prehistory of the North American Indian from earliest times to (and including) contemporary Indians; approaches and methods of American archaeology. Mr. Meighan

113Q. The Prehistory of California Indian Culture. (Formerly numbered 108B.) Examination of the California archaeological record from earliest human evidence to historical times, with emphasis on the development of cultural diversity. Mr. Meighan

113R. Southwestern Archaeology. An examination of prehistoric and historical cultures of the American Southwest with special emphasis on the role of agriculture and the evolution of Indian societies in the American Southwest. Mr. Meighan

114P. Ancient Civilizations of Western Middle America (Nahua Sphere). (Formerly numbered 123C.) Pre-Hispanic and Conquest period native cultures of Western Middle America as revealed by archaeology and early colonial writings in Spanish and Indian languages. Toltec-Aztec and Mixteca civilizations and their predecessors, with emphasis on sociopolitical systems, economic patterns, religion, and esthetic and intellectual achievements. Mr. Nicholson

114Q. Ancient Civilizations of Eastern Middle America (Maya Sphere). (Formerly numbered 123C.) Pre-Hispanic and Conquest period native cultures of Eastern Middle America as revealed by archaeology and early colonial writings in Spanish and Indian languages. Lowland and Highland Maya civilizations and their predecessors, with emphasis on sociopolitical systems, economic patterns, religion, and esthetic and intellectual achievements. Mr. Nicholson

114R. Ancient Civilizations of Andean South America. (Formerly numbered 123E.) Prerequisite: course 5 (formerly numbered 5A), 6 (formerly numbered 5C) or 22. Pre-Hispanic and Conquest period native cultures of Andean South America as revealed by archaeology and early Spanish writing. The Inca and their predecessors in Peru, with emphasis on sociopolitical systems, economic patterns, religion, and esthetic and intellectual achievements. Mr. Donnan

115P. Archaeological Field Training. (Formerly numbered 170A.) Prerequisite: consent of instructor. Procedures of archaeological excavation, mapping, stratigraphy, collecting and recording of archaeological data. This is a field class conducted off campus.

Mr. Dillon

115Q. Archaeological Research Techniques. (Formerly numbered 175B.) Prerequisite: course 8 (formerly numbered 5C) or consent of instructor. An introduction to the techniques of discovery and analysis that archaeologists have found useful in research. Special attention is given to sampling, typology and locational analysis. Techniques for the measurement of such important variables as population size, diet, seasonality, specialization and exchange are also considered. Mr. Hill

115R. Strategy of Archaeology. (Formerly numbered 175A.) Prerequisite: course 6 (formerly numbered 5C) or consent of instructor. An introduction to problem solving in the field of Paleolithic research. The study of the evolution of human culture in Asia and the New World. Emphasizing the ordering and interpretation of archaeological data, Pleistocene geology and chronology, and the relationship between human cultural and biological evolution. Mr. Meighan

115S. Historical Archaeology. (Same as History M103.) A survey of the aims and methods of Historical Archaeology, as practiced on both sides of the Atlantic, with case studies drawn from North America, the Caribbean, Africa and Europe. Mr. Posnansky

116P. Laboratory Analysis in Archaeology. (Formerly numbered 175E.) Prerequisite: consent of instructor. Description and classification of archaeological collections: cataloging, typology, documentation. Preparation of archaeological reports for publication. Mr. Meighan

M116Q. Dating Techniques in Environmental Sciences and Archaeology. (Formerly numbered M175C.) Prerequisite: course 115P or 118A and the Museum Staff. Mr. Posnansky

118A. Museum Studies. (Formerly numbered 178A.) Prerequisite: consent of instructor. Method and theory of museum operation. Acquisition accession, storage, photography, conservation and exhibition are discussed and demonstrated. Museum research, publication and teaching as well as museum administration and funding are analyzed. Lectures and demonstrations are structured to illustrate how the various aspects of museum operation are interrelated. Mr. Donnan and the Museum Staff

118B. Museum Studies. (Formerly numbered 178B.) Prerequisites: course 118A (formerly numbered 178A) and consent of instructor. Two areas of museum operation are selected by the student from those discussed and demonstrated in Anthropology 118A (formerly numbered 178A). The student is then required to develop expertise in these areas through a combination of library research and a series of assignments carried out in the museum.

Mr. Donnan and the Museum Staff

119. Archaeology of Southern California: Field Studies. Saturday field class, 8-5. This course is designed primarily for nonmajors and is a survey of Southern California archaeology from the Historical period back to the holy diseased time of “Early Man.” Classroom lectures will be combined with weekly field study trips to archaeological sites in the greater Los Angeles area, with the aim of exposing students to primary archaeological evidence in a variety of contexts. Mr. Dillon

BIological ANTHroPology

120. Survey of Biological Anthropology. Prerequisites: courses 1 (formerly 1A) and 2 (formerly 1B) or equivalent. Restricted to majors and graduate students in Anthropology. A survey of biological anthropology including all major subareas. A lecture/seminar format requires attendance at a recitation section in addition to lectures. (CORE COURSE for 132G)

Mr. Williams

**121A. Fossil Man and His Culture. (Formerly numbered 111A.) Prerequisites: courses 1 (formerly numbered 1A), 2 (formerly numbered 1B) recommended. Anthropology 121A also recommended before students are enrolled. Introduction to method and theory in paleoanthropology. Prior evolution, Cretaceous through the Miocene. Ms. Kennedy

**121B. The Australopithecines. (Formerly numbered 111B.) Prerequisites: courses 1 (formerly numbered 1A), 2 (formerly numbered 1B), 121A (formerly numbered 111A), and 121B (formerly numbered 111B) recommended. Consent of instructor required. The morphology, ecology and behavior of the genus Australopithecus. The history of their discoveries and their place in human evolution will also be discussed. Mr. Kennedy

122. Evolution of the Genus Homo. (Formerly numbered 111C.) Prerequisites: courses 1 (formerly numbered 1A), 2 (formerly numbered 1B), 121A (formerly numbered 111A), 121B (formerly numbered 111B) recommended. Consent of instructor required. The origin and evolution of the genus Homo, including the archaic sapients and the neanderthals. The morphology, ecology and behavior of these groups will be included. The course will end with the appearance of modern Homo sapiens. Ms. Kennedy

123. Human Genetics. Prerequisite: course 1 (formerly numbered 1A) recommended. This course includes an introduction to the field of human genetics. Evolutionary models of genetic and phenotypic changes will be developed and compared. Geographical and cultural contributions to the development of observed patterns of human biological variation are emphasized. Mr. Byles

124. Evolution and Behavior of Human Behavior. (Formerly numbered 131.) A comparative survey of the behavior patterns of primate and Paleolithic peoples and those of modern humans. The biological variables fundamental to human and primate behavior will be assessed with regard to theories on the evolution of human culture. The Staff

**125A-125B. The Genetics of Human Diversity. (Formerly numbered 130A-130B.) Prerequisite: course 125A recommended. Upper division standing. A survey of human biological diversity. Emphasis is on genetics at the population level for both discrete and quantitative variation. Analytic methods and evolutionary hypotheses are considered. Mr. Byles

126P. Anatomy for the Humanities: Mind, Body and Behavior. A discussion of the structure and workings of the human machine for students with little or no knowledge of biology. Human form and function will be studied from a functional and developmental perspective illustrated with relevant examples of behavior and dysfunction (disease). Mr. Russell

**127P. Primate Evolution. (Formerly numbered 135A.) Prerequisite: upper division standing. A survey of the primate paleontological and evolutionary record, including New and Old World monkeys and hominoids. Attendant aspects of paleoecology and behavior will be discussed. Mr. Russell

**127Q. Introduction to Primate Anatomy (1st year courses). (Formerly numbered 135B.) Anthropology 127P (formerly numbered 135A) is desirable but not required. Lecture, two hours; laboratory, four hours. Lab: anatomical terms and principles of dissection of a monkey. The anatomy of the upper limb is discussed. Osteological material. Lecture: introduce basic developmental anatomy; the evolution of gross structure; allometry, morphological and physiological scaling; and the morphological correlates of posture, locomotion and diet. Mr. Russell

**127R. Introduction to the Comparative Morphology and Physiology of Primates (1st courses). (Formerly numbered 135C.) Anthropology 127P, 127Q (formerly numbered 135A, 135B) are desirable but not required. Lecture, two hours; laboratory, four hours. This series will cover the functional, evolutionary and taxonomic studies of primate anatomy and physiology. Lecture: compare functional systems (e.g., locomotion) through the primate series. Lab: students will dissect several unrelated specimens and perform their own comparative analysis. Mr. Russell
128A-128B. Primate Behavior Nonhuman to Hu-
man (2 courses). (Formerly numbered 133A-133B.)
Prerequisite: upper division standing. Course 128A
(formerly numbered 133A) is prerequisite to 128B
(formerly numbered 133B). Review of primate be-
havior as known from laboratory and field studies. Stres-
ses theoretical issues and the evolution of causal pro-
cesses in the function of animal behavior with special
reference to nonhuman primates. Human be-
havior will be discussed as the product of such evolu-
tionary processes. This course is offered on an in
Progress basis. Credit is given only after completion of
the full 2-quarter sequence. The Staff

*129P. Laboratory Methods in Biological Anthro-
pology: Skeletal. (Formerly numbered 171A.) Pre-
requisites: courses 1 (formerly numbered 1A) and 2
(formerly numbered 1B), restricted to majors and
graduate students, consent of instructor. Laboratory
methodology and analysis of human variation on skel-
etial material.
The Staff

*129Q. Laboratory Methods in Biological Anthro-
pology: Living Populations. (Formerly numbered 171B.)
Prerequisites: courses 1 (formerly numbered 1A) and
2 (formerly numbered 1B), restricted to majors and
graduate students, consent of instructor. Laboratory
methodology and analysis of human variation in liv-
ing populations. The Staff

*129R. Laboratory Methods in Biological Anthro-
pology: Biological Anthro-
poloy. (Formerly numbered 171C.)
Prerequisites: courses 1 (formerly numbered 1A) and
2 (formerly numbered 1B), restricted to majors and
graduate students, consent of instructor. Laboratory
methodology and analysis of human variation invol-
volving biochemical methods. The Staff

CULTURAL ANTHROPOLOGY

130. The Study of Culture. This course will focus on
the 20th century evolution of the concept of culture from
the Boasian period to the present, thereby surveying the
major schools of anthropological thought such as his-
torical particularism, psychological anthropology, functionalism,
cultural materialism, structuralism and symbolic anthro-
pology. It will also examine the utility of the concept culture in
more applied areas of anthropology. (CORE COURSE for Cultural.)
Mr. Langness

131. American Culture. Prerequisite: upper division standing.
An examination of American life in historical and
contemporary terms with special reference to the
individual life cycle. The goal is to offer an systematic
analysis of American culture and society in a cross-
cultural perspective. Ms. Levine, Mr. Mendonsa

132. Technology and Environment. (Formerly
numbered 122C.) Significance of material culture in
archaeology and ethnography; problems of invention
and the acceptance of innovations; the ecological and
sociological concomitants of technological systems;
selected problems in material culture. The Staff

133P. Social and Psychological Aspects of Myth
and Ritual. (Formerly numbered 141.) This course is
aimed at understanding the social and psychological
significance of myth, ritual and symbolism with par-
cular attention given to anthropological theories and
interpretations of religious belief systems.
Ms. Levine, Mr. Mendonsa

133Q. Symbolic Systems. (Formerly numbered
138.) Prerequisite: upper division standing or consent of
instructor. An analysis of the anthropological re-
search and theory on the cultural systems of thought,
behavior and communication expressed in a symbolic
mode (as distinguished from the discursive, instru-
mental and causal modes). Methods for the study of
symbolic meaning, including the expression of
approach. Mr. Maquet

133R. Aesthetic Anthropology. (Formerly num-
bered 144.) Prerequisite: upper division standing.
Elaboration of a cross-cultural notion of visual aes-
thetic phenomena that meets the requirements of an-
thropological research. Aesthetic phenomena as cul-
tural, their integration in a cultural system; their rela-
tionships with other elements in the interplay of social
forces. Mr. Maquet

134. Personality and Cultural Systems: Encult-
uration. (Formerly numbered 148.) Prerequisite: upper
division standing or consent of instructor. The course
evaluates the role of individuals in the cultural
system by focusing on enculturative learning as modality
of personality forms and internal dynamics of culture
change. Major emphasis on cultural influences of
communication, thought processes, socialization,
differentiation and development of self. Mr. Wilbert

135P. Introduction to Psychocultural Studies.
Prerequisite: upper division standing or consent of
instructor. A survey of the history and development of
psychocultural studies. Topics are examined as they
relate to the cross-cultural study of such things as
personality, pathology and deviance, fantasy, altered
states of consciousness, cognition, perception, moti-
vation and other similar phenomena. The Staff

135Q. The Individual in Culture. (Formerly
numbered 143.) Prerequisite: upper division anthropol-
ogy, sociology or psychology students. The course
considers the balance for freedom and determination
for individuals and societies in the relation of per-
sonality, social structure and culture. It surveys the
nature and limits of human plasticity; the variability
and uniformity of personality within and between cul-
tures; the relation of normal and abnormal conformity
deviance. The Staff

135R. Comparative Study of Socialization. (For-
merly numbered 142.) Introduction to ethnographic
data on socialization and child training. Theories ex-
plaining cross-cultural variability in socialization prac-
tices. Current methods and research topics in the field.
The Staff

136P. Ethnology: Field Training. (Formerly
numbered 170B.) Training in ethnographic field meth-
ods. Execution of individual and group ethnographic field
research projects. The Staff

M136Q. A Laboratory for Naturalistic Observa-
tions: Developing Skills and Techniques. (Former-
ly numbered M176.) (Same as Psychiatry M155.) Prerequisite:
consent of instructor. The skill of observing and recording behavior in
natural settings will be taught, emphasizing field train-
ing and practice in observing behavior. Group and
individual projects will be included. Some of the uses
of observations and their implications for research in
the social sciences will also be discussed. The Staff

137. Ethnography on Film. (Formerly numbered
179.) Intensive examination of filmed and written eth-
ography of a wide range of the world's peoples with the
purposes of (a) comparing visual with written data and
evidences and (b) developing criteria for ade-
quate written and film ethnography. Mr. Moerman

(Formerly numbered 172.) Introduction to the prob-
lems and procedures of extracting cultural data from
documentary sources and their interpretation and
analysis. The relevant documentary sources of vari-
ous New World regions will be selected as case
histories to illustrate more concretely the problems and
challenges in this major area of anthropological con-
cern. Mr. Nicholson

LINGUISTIC ANTHROPOLOGY

M140. Language in Culture. (Formerly numbered
M146.) (Same as Linguistics M146.) Prerequisite: upper
division standing or consent of instructor. The study of
language as an aspect of culture: the relation of
habitual thought and behavior to language; and
language and the classification of experience. The course
offers a holistic approach to the study of lan-
guage, looking at language as a part of human
Anthropology to the fields of Biological, Cultural and
Social Anthropology, as well as Archaeology. (CORE COURSE for Linguistics.) Mr. Kroskrity

141. The Ethnography of Communication: Intro-
duction and Practicum. (Formerly numbered 180.)
Prerequisite: upper division standing or consent of
instructor. The course has two components: (1) to
introduce students to the ethnography of com-
munication—the description and analysis of situated
communicative behavior—and the sociocultural
knowledge of the American Indian; and (2) to train students to
recognize, describe and analyze the relevant linguis-
tic, proxemic and kinesic aspects of face to face inter-
action. Mr. Kroskrity

142A-142B. Human Social Ethology. (Formerly
numbered 149A-149B.) Prerequisite: consent of in-
structor. An analysis of social behavior and communi-
cation of nonhuman primates. Emphasis is placed on
the purposes of (a) comparing visual with written data and
evidences and (b) developing criteria for ade-
quate written and film ethnography. Mr. Moerman

143A. Field Work in Linguistic Anthropology:
Practical Phonetics. (Formerly numbered 177A.)
Practice in elicitation from informants for the purposes
of analysis of phonological systems and development of
practical transcription, as a preliminary to learning to
speak the native language and to the recording of
ethnographic materials in native language. No pre-
vious experience in linguistics is assumed. Mr. Moerman

143B. Field Methods in Linguistic Anthropology:
Syntax, Semantics, Textual Content. (Formerly
numbered 177B.) Prerequisite: course 143A (form-
ery numbered 177A), equivalent experience or consent of
instructor. This course attempts to supply students
with the skills and strategies necessary for conducting
in-depth cross-cultural studies of language, text and
(or discourse) structures of field languages. Practice
with native speakers of various non-Indo-European
languages is an important aspect of student participa-
tion. Mr. Kroskrity

144. American Indian Ethnolinguistics and Socio-
linguistics. Prerequisite: previous course work in ei-
ther anthropology, linguistics or American Indian
studies. The course provides an introduction and com-
prehensive analysis of the sociocultural aspects of
language use in Native North American Indian
language communities. Specific foci include both
micro- and macro-sociolinguistic topics. Micro-sociolinguis-
tic topics are comprised of such issues as multilingu-
ism, cross cultural differences regarding appropriate con-
municative behavior and variation within speech com-
munities (e.g., male and female speech, baby talk,
ceremonial speech, etc.). Macro-sociolinguistic con-
siderations include language contact and its relation-
ship to language change and language in American Indian education. Mr. Kroskrity

145. Afro-American Sociolinguistics: Black En-
gle. Prerequisite: consent of instructor. This course
aims to provide basic information on Black American
English, an important minority dialect in the United
States. The social implications of minority dialects will
be examined from the perspectives of their genesis,
maintenance and social functions. General problems
and issues in the area of sociolinguistic analysis will be ex-
amined through a case study approach.
Ms. Mitchell-Kenan

SOCIAL ANTHROPOLOGY

150. Comparative Society. (Formerly numbered
122A.) Prerequisite: course 5 (formerly numbered
5A), 6 (formerly numbered 5C) or Sociology 1 or con-
sent of instructor. The general principles of the organi-
sation of society: the relation of theory to the techni-
cological complexity and ecocultural conditions of the
culture; the principles of evolutionary development of
social systems. (CORE COURSE for Social.)
Mr. Goldschmidt
South America

174P. Ethnography of South American Indians. (Formerly numbered 105A.) Introduction to the ethnography of South American Indians with special emphasis on Lowland South America. The course surveys the history and development of man and society in this world area and examines exemplary cultures symptomatic of the various levels of cultural achievement. Mr. Wilbert

174Q. Ethnology of South American Indians. Prerequisite: course 174P (formerly numbered 105A) or consent of instructor. Introduction to the ethnology of South American Indians with special emphasis on Lowland South America. The course details the methods and theories applied to the study of man and culture on the continent, including biological anthropology, linguistics and sociocultural anthropology. Mr. Wilbert

Asia

175P. Civilizations and Cultures of Southeast Asia. (Formerly numbered 103B.) An introduction to the understanding and appreciation of the cultures and societies of The Philippines, Indonesia, Malaysia, Thailand, Burma, Laos, Cambodia and Vietnam seen against their historical and ecological backgrounds. Slides and other media will be used along with texts, lectures and discussion. Mr. Moerman

175Q. Civilizations of South Asia. (Formerly numbered 103A.) Examination of the civilizations of Sri Lanka, India, Pakistan, Bangladesh and the Himalayan states. Idealization systems, social institutions and techniques of production will be discussed in the framework of a few contemporary civilizations, each focused on a major religious tradition (Hinduism, Buddhism and Islam). Ms. Levine, Mr. Macquet

175R. Civilizations of Inner Asia. (Formerly numbered 103E.) The course will provide an overview of culture and society among the diverse peoples of Inner Asia, including Mongolia, Tibet and Soviet Central Asia. Topics to be covered include: environment and economic adaptation, politics in traditional isolation and within the framework of recent national integration, kinship, forms of marriage and the status of women, religion and the social order in Hindu-Buddhist culture, the contact zone and current problems of modernization. Ms. Levine

175S. Japan. (Formerly numbered 103C.) Prerequisite: course 22. An 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 change. The Staff

Middle East

176. Cultures of the Middle East. (Formerly numbered 110.) Prerequisite: course 5 (formerly numbered 5A) or consent of instructor. This course will delineate the area of "Arab Peoples" through an examination of their historical background, their language and their belief system. It will attempt to uncover the structural principles shared by the Arab people of North Africa and Southwest Asia which underlie Arab culture. The Staff

Pacific

177. Cultures of the Pacific. (Formerly numbered 108.) This course covers the four major culture areas of Australia, Melanesia, Polynesia and Micronesia. General geographical features, prehistory and language distribution of the whole region are discussed. Distinctive sociocultural features of each culture area are presented in the context of their adaptive significance. Mr. Newman

HISTORY AND THEORY

182. The History of Anthropology. (Formerly numbered 182A-182B.) A brief survey of the development of Western social science, particularly anthropology, from Greek and Roman thought to the emergence of evolutionary theory and the concept of culture in the late 19th century. The course will examine the "root paradigm" of Western social science and examine its influence on such notables as Durkheim, Freud, Hall, Lombraso, Marx, Piaget, Terman and others. It will in turn consider how this influences Ethnocentrism and Eurocentrism, sexism, racism, the perception of deviance, and our view of culture in general. Mr. Langness

183. History of Archaeology. Prerequisite: at least one upper division course in archaeology or consent of instructor. The development of world archaeology from the Renaissance to the present. Particular care is taken to show how each of the major branches of archaeology has evolved a special character determined by the peculiarities of its own data, methods and intellectual affiliation. Mr. Sackett

184. History of Human Evolutionary Theory. The men, the events and the spirit of the time which mark man's attempts to understand his origins and diversity. Mr. Williams

185. History of Social Anthropology. (Formerly numbered 105A) Prerequisites: course 5 (formerly numbered 5A) or 22 or Sociology 1 or 101 and upper division standing in anthropology or sociology. A systematic survey of the development of social anthropology in France and Britain from the Enlightenment to the present. Reviews major early concepts of French sociology and British structuralist-functionalism and current concerns in social theory. Mr. Mendonsa

186A-186B. Quantitative Methods and Models in Anthropology. (Formerly numbered 150A-B) Prerequisite: upper division standing. This two-semester course is designed to provide an introduction to quantitative methods of data analysis and the modeling of sociocultural systems. 186A. (Formerly numbered 173A) will emphasize methods of data analysis and cover topics such as data description, sampling, estimation procedures and hypothesis testing. 186B (formerly numbered 173B) will cover topics from statistical modeling (e.g., linear regression models) and deterministic modeling (e.g., network models, kinship structures, systems, models). Mr. Read

SPECIAL STUDIES

191. Writing for Anthropology. (Formerly numbered 181.) Prerequisite: course 5 (formerly numbered 5A). Students learn writing skills in various academic forms including term papers, essay examinations, journal articles and reports. Class projects require student writing and evaluation of professional writing. Stress is placed on the organization and presentation of a scholarly argument. Mr. Earle

199. Special Studies in Anthropology (1/2 to 2 courses). Prerequisite: consent of instructor. Two courses of 199 may be applied to the upper division anthropology courses required for the major. The Staff

Graduate Courses

For complete descriptions of graduate-level courses offered by this department, please consult the UCLA Graduate Catalog.

Applied Linguistics

(Interdepartmental)

(Program Office: 3306 Rolfe Hall)

The Applied Linguistics Program does not offer an undergraduate degree. For detailed information on graduate degrees offered by this program, please refer to the UCLA Graduate Catalog.

Archaeology

(Interdepartmental)

(Program Office: 288 Kinsey Hall)

An interdepartmental committee administers graduate degree programs leading to the M.A. and Ph.D. in Archaeology, in addition to the individual departmental programs in which archaeological specialization is possible. There is no undergraduate program in archaeology leading to a B.A. degree. For detailed information on graduate degrees offered by this program, please refer to the UCLA Graduate Catalog.

Architecture and Urban Planning

(School Office: 1317 Architecture)

The School of Architecture and Urban Planning does not offer an undergraduate degree. The following upper division courses are offered with enrollment restrictions as indicated:

Upper Division Courses

187. Planning and Designing Our Cities. An introduction to urban planning and urban design with an emphasis on methods and tools used in practice. Starting with an overview of the planning field, the course addresses itself to physical planning for redevelopment, for projects in expanding areas and for new towns. Lectures (with illustrated examples), field visits and presentations of the students' own projects create the framework for expanding our understanding of the urban planning and design process. Mr. Kamnitzer
190. Pre-Modern and Post-Modern Architecture.
Consideration of nineteenth-century revivalism and the response of architects to a growing historical awareness. Issues of eclecticism within the Beaux Arts and Art Nouveau movements will be studied. These same themes will be reconsidered in terms of the post-modern era. Mr. Jencks

190. The Human Environment: An Introduction to Architecture and Urban Planning. This course aims to introduce students to the kinds of problems that arise in creating and maintaining an environment for urban activities, and the approaches and methods of architecture and urban planning in helping to cope with such problems. The students are exposed to the complexities involved in giving expression to human needs and desires in the provision of shelters and movement systems; to the possibilities and limitations of technology and building forms; and the issues involved in relating the human-made to the natural environment. The students are encouraged to comprehend the major urban issues both as citizens and as potential technical experts. Mr. Perloff

191. Modern Architecture. A brief examination of the tenets of Western Architecture after the Renaissance, the accelerating eclecticism of the nineteenth century, and the basis of the revolutionary movements of the twentieth century in Germany, Holland, Austria, Italy, France, Russia and the United States, and the subsequent extension and rejection of those movements after World War II. Though the “International Style” is the central figure of this drama, its ancestors occupy the stage as well. Mr. Moore

192. Housing and Settlement Patterns. Patterns of spatial organization in housing and small settlements in a rural context. An exploration of spatial patterns and prevailing social attitudes toward the individual, the family, land ownership and toward authority, aggression and communalism. Mr. Rand, Mr. Vreeland

M185. Engineering and Environmental Geology. (Same as Earth and Space Sciences M139.) Prerequisite: Earth and Space Sciences 1 or 100; 111A recommended. Principles and practice of soil mechanics and foundation engineering in light of geologic conditions, recognition, prediction and control or abatement of subsidence, landslides, earthquakes, and other geologic aspects of urban planning and subsurface disposal of liquids and solid wastes. Mr. Merfield

M186. Geomorphology. (Same as Geography M102.) Lecture, three hours; reading period, one hour. Prerequisite: Geography 1 or equivalent or junior standing or consent of instructor. A study of the processes responsible for shaping the world’s landforms with emphasis on the relationship between the energy and materials involved and the magnitude and organization of the surface forms produced. Mr. Orme

197. Planning for Minority Communities. This course will introduce the student to inner city policy issues on three separate levels: (1) each student will develop a comprehensive inner city urban program using materials from the Alternatives Inner City Future Exercise, (2) each student is expected to identify the value assumptions and theories of social justice implicit or explicit in alternative intervention programs, and (3) each student is expected to participate in class discussions which emphasize minority issues which affect implementation. Mr. Estrada

199. Special Studies. Independent study. Prerequisite: consent of instructor. Independent research or investigation on a selected topic to be arranged with a faculty member. May be repeated for credit. The Staff

Graduate Courses
For complete descriptions of graduate-level courses offered by this School, please consult the UCLA Graduate Catalog.

The departmental major offered in the College of Fine Arts leads to the degree of Bachelor of Arts with the opportunity to specialize in one of three areas: (1) Art History, (2) Art and (3) Design.

Preparation for the Major
Art History: Six courses selected from courses 50, 51, 52, 53, 54, 55, 56.
Art: Courses 5A, 5B, 5C, 15, 21, 22 and one course selected from 50, 51, 52, 53, 54, 55, 56.

The Major
Art History (12 courses of upper division art history required):

(A) A total of nine courses from the following nine areas (at least three courses in one area for the concentration, at least one course each in four of the remaining areas and two additional courses from any of the nine areas):

1. (1) 101A, 101B, 101C, 102
2. (2) 103A, 103B, 103C, 103D, 103E
3. (3) 104A, 104B, 104C
7. (7) 112A, 112B, 112C

(B) Three courses of art history electives which may include Classics 151A, 151B, 151C, Art 125, 197, 199 (design or studio courses do not apply as electives).

In addition to the 12 courses (48 units) of upper division art history, three upper division courses from other departments related to the area of concentration are to be selected in consultation with a faculty advisor.

(C) Two quarters of one foreign language or the equivalent. The language should be in relation to the concentration area and is in addition to the foreign language which is part of the general College requirements.

Art: A minimum of 14 upper division courses selected in consultation with an advisor, including one course each in courses 130, 133, 137, 140, 145, 147, 148 and 149, one course selected from courses 101-122 and five courses of art electives.

Design: A minimum of 12 upper division courses selected in consultation with an advisor including eight courses from 161A-172B, at least one course from 192, 193 and three courses of art electives.

Note: Check the Schedule of Classes for courses restricted to majors only.
Lower Division Courses

Art courses are supervised by the following faculty, augmented by visiting staff: Amato, Brice, Elgart, Mullican, Nunes, Stussy and Valério.

5A. Introduction to Art. Studio, eight hours; five hours arranged. Selected creative work in fine arts related to historical and contemporary art; select-ed from media such as drawing, painting, sculpture, printmaking, photography, and new forms and concepts (performance, video, nonobject art).

The Staff in Art

5B. Introduction to Art. Studio, eight hours; five hours arranged. Prerequisite: courses 5A, 5B, 5C. Continuation of 5A, 5B.

The Staff in Art

5C. Introduction to Art. Studio, eight hours; five hours arranged. Prerequisites: courses 5A, 5B. Continuation of 5A, 5B, 5C with increased emphasis on individual creative development.

The Staff in Art

21. Analysis and Criticism. Discussion, four hours. Prerequisites: courses 5A, 5B, 5C, 15. Analysis and criticism of individual creative work and ideas.

The Staff in Art

22. Art and Artists/History and Theory. Lecture/discussion, three hours. Discussion and analysis of artists and art, historical and contemporary.

The Staff in Art

30A. Introduction to Design and Technology. Lecture, three hours; discussion, one hour. Understanding the design process with emphasis on development of visual awareness; a study of technological, economic, environmental and cultural factors influencing the design of objects. Open to nonmajors and available to Art majors for credit.

The Design Staff

31A. Fundamentals of Design. Lecture, two hours; laboratory, four hours. Exploration of color in theory and practice. Development and articulation of sensory concepts. May be taken concurrently with 32A. Not open for credit to those who have had Art 150A.

Mr. Vasa in charge

31B. Fundamentals of Design. Lecture, two hours; laboratory, four hours. Exploration of color in theory and practice. Development and articulation of sensory concepts. May be taken concurrently with 32B. Not open for credit to those who have had Art 150B.

Mr. Vasa in charge

32A-32B. Visual Presentation. Demonstration, discussion and laboratory, four hours. Introduction to processes and media in design. Forming and processing techniques in traditional and contemporary ceramics. May be repeated once.

Mr. Saxe in charge

33A. Materials and Processes: Ceramics (½ course). Demonstration, discussion and laboratory, four hours. Introduction to processes and media in design. Forming and processing techniques in traditional and contemporary ceramics. May be repeated once.

Mr. Saxe in charge

33B. Materials and Processes: Visual Representation (½ course). Demonstration, discussion and laboratory, four hours. Introduction to processes and media in design. Photograph as a means of depicting and recording design concepts. Introduction to photographic techniques and photographic generation of images; introduction to graphic presentation production. May be repeated once.

Mr. Neuhart in charge

Upper Division Courses

HISTORY AND THEORY OF ART

101A. Egyptian Art and Archaeology. Lecture, three hours. A study of architecture, sculpture, painting and minor arts during the predynastic period and Old Kingdom.

Mr. Badawy

101B. Egyptian Art and Archaeology. Lecture, three hours. A study of architecture, sculpture, painting and minor arts during the First Intermediate Period, Middle Kingdom and Second Intermediate Period.

Mr. Badawy

101C. Egyptian Art and Archaeology. Lecture, three hours. A study of architecture, sculpture, painting and minor arts during the Empire (of New Kingdom).

Mr. Badawy

102. Art of the Ancient Near East. (Formerly numbered 101D.) A study of architecture, sculpture, painting and minor arts in Mesopotamia, Asia Minor, North Syria, Phenicia, Palastina. Art from the iconoclasts of the 8th century B.C. to the 7th century B.C.

Mr. Badawy

103A. Greek Art. Lecture, three hours. Prerequisite: course 50. A survey of the art and architecture of Greece from the archaic period through the 5th century B.C.

Ms. Downey

103B. Hellenistic Art. Lecture, three hours. Prerequisites: courses 50, 103A. The art and architecture of the Greek world from the fourth century through the first century B.C., including the transmittal of Greek art forms to the Roman world.

Ms. Downey

103C. Roman Art. Lecture, three hours. Prerequisite: course 50. The art and architecture of Rome and its Empire from ca. 300 B.C. to A.D. 300.

Ms. Downey

103D. Etruscan Art. Lecture, three hours. Prerequisite: course 50. The arts of the Italic peninsula from ca. 1000 B.C. to the end of the Roman Republic.

Ms. Downey

103E. Late Roman Art. Lecture, three hours. Prerequisites: courses 50, 103C. The art of the Roman Empire from the second through the fourth centuries A.D.

Ms. Kalavrezou-Maxeiner, Mr. Werckmeister

104B-104C. Architectural and the Minor Arts of Islam in the Middle Ages. Lecture, three hours. Prerequisites: course 104B for course 104C; course 104C for 104D.

Mr. Kester in charge

105A. Early Christian Art. Lecture, three hours. Prerequisite: course 51 or consent of instructor. The origins and development of the architecture, sculpture and painting of early Christianity to the Iconoclastic controversy. (Not open to students who have had credit for 105A.)

Ms. Kalavrezou-Maxeiner

105B. Early Medieval Art. Lecture, three hours. Prerequisite: course 51 or consent of instructor. The art and architecture of Western Europe from the Migration period until 1000 A.D.

Mr. Werckmeister

105C. Romanesque Art. Prerequisite: course 51. Art and architecture of Western Europe in the 11th and 12th centuries.

Mr. Werckmeister

105D. Gothic Art. Lecture, three hours. Prerequisite: course 51. Art and architecture of Europe in the 13th century.

Mr. Werckmeister

105E. Byzantine Art. Lecture, three hours. Prerequisite: course 51 or consent of instructor. The theory and art of Byzantium. Byzantine iconolatry to 1453, and the diffusion of Byzantine Art in Armenia, Georgia, the Caucasus and Russia. Not open to students who have received credit for Art 105A prior to Spring 1971.

Ms. Kalavrezou-Maxeiner

106A. Italian Art of the Trecento. Lecture, three hours. Prerequisites: course 52 or consent of instructor. Art and architecture of the 14th century.

Ms. Pedratti, Ms. Weisz

106B. Italian Art of the Quattrocento. Lecture, three hours. Prerequisite: course 106A. Art and architecture of the 15th century.

Mr. Pedratti, Ms. Weisz

106C. Italian Art of the Cinquecento. Lecture, three hours. Prerequisite: course 52. Art and architecture of the 16th century.

Mr. Pedratti, Ms. Weisz

108A. Northern Renaissance Art. Lecture, three hours. Prerequisite: course 52. Painting and Sculpture in the Northern Renaissance.

Ms. Weisz

108B. Northern Renaissance Art. Lecture, three hours. Prerequisite: course 52. Painting and Sculpture in the Northern Renaissance.

Ms. Weisz

109A. Baroque Art. Lecture, three hours. Prerequisite: course 53. Art and architecture of Italy and Spain, 16th to late 17th century.

Mr. Pedratti, Ms. Weisz

109B. Baroque Art. Lecture, three hours. Prerequisite: course 109A. Art and architecture of Northern Europe, 16th to late 17th century.

Mr. Kunze
109C. European Art of the 18th Century. Lecture, three hours. Prerequisite: course 53. Painting, architecture and sculpture of the 18th century will be examined in the light of political and intellectual developments. Special emphasis will be given to the role of the rise of democratic institutions, especially the French Revolution.

Mr. Kunze


Mr. Wark

110A. Euro-American Art of the 19th Century. Lecture, three hours. Prerequisite: course 54. Neoclassicism and Romanticism, with emphasis upon France—the influence and development of David, Ingres and Delacroix.

Mr. Kunze

110B. European Art of the 19th Century: Realism and Impressionism. Lecture, three hours. Prerequisite: course 54. An inquiry into the problem of realism with emphasis on French Art, but including developments in England and Germany.

Mr. Kunze

110C. European Art of the 19th and 20th Century: Post Impressionism to Surrealism. Lecture, three hours. Prerequisite: course 54. A study of the major developments in Modern Art. 1890's-1930., including the 

Mr. Kunze

110E. Political Perspectives on Contemporary Art (Post World War II). Prerequisite: course 54. Includes vanguard painting in the U.S. (Picasso, Abstract Expressionism and Pop Art, etc.), and the popular media of posters, comic strips and murals, all of which will be analyzed considering the dominant values under capitalization, consumerism, racism, imperialism and sexism. Antidotal emphasis on protest art and women's art in the U.S. and the art of the socialist cultures of Cuba since 1959 and Chile, 1970-73.

Ms. Klein

112A. American Art. Lecture, three hours. Architecture in the United States from the Colonial period to the 19th century.

Mr. Bloch

112B. American Art. Lecture, three hours. Painting and sculpture in the United States from the Colonial period to the 19th century.

Mr. Bloch

112C. American Art. Lecture, three hours. Art and architecture in the United States in the 20th century.

Mr. Bloch

114A. The Early Art of India. Lecture, three hours. Prerequisite: not to freshmen. Survey of Indian Art from the Indus Valley cultures to the 10th century. Consideration of the influence which developed in the area between (and including) Mexico and Peru, from ca. 1000 B.C. until the Conquest.

Ms. Klein

114B. Chinese Art. Lecture, three hours. Prerequisite: not to freshmen. Survey of the arts of China from the Neolithic times to the 18th century. The various arts will be related to the developing historical background of the country.

Mr. Powers

114C. Japanese Art. Lecture, three hours. Prerequisite: not to freshmen. Japanese art from its beginning in pre-history through the 19th century. Emphasis will be placed on the development of Buddhist art and its relationship to secular art of the same period.

Ms. Kunze

114D. The Later Art of India. Lecture, three hours. Prerequisite: course 114A or consent of instructor. Survey of Indian Art from the 10th century to the 19th century. The decline of Buddhist art, the last efflorescence of Hindu architecture, Mughal painting and architecture, and Rajput painting.

Ms. Kunze

115A. Advanced Indian Art. Lecture, three hours. Prerequisite: course 114A. Study in Indian sculpture and architecture, political and social development.

Ms. Kunze

115B. Advanced Chinese Art. Lecture, three hours. Prerequisite: course 114B. Study in Chinese painting and sculpture.

Mr. Powers

115C. Advanced Japanese Art. Lecture, three hours. Prerequisite: course 114C. Study in Japanese painting and sculpture.

Mr. McCaulum

117A. Contemporary Art: Mexican. Lecture, three hours. Prerequisites: course 118B or consent of instructor. A study of the art of selected cultures of northern Mesoamerica from ca. 1200 B.C. to the Conquest, with an emphasis on stylistic and iconographic problems.

Ms. Klein

117B. Advanced Studies in Pre-Columbian Art: Central America. Lecture, three hours. Prerequisite: course 118B or consent of instructor. A study of the art of selected cultures of southern Mesoamerica and the remainder of Central America, from ca. 2000 B.C. to the Conquest, with particular emphasis on the history and iconography of the art of the Maya.

Ms. Klein

117C. Advanced Studies in Pre-Columbian Art: The Andes. Lecture, three hours. Prerequisite: course 118B or consent of instructor. A study of the art of selected cultures of Colombia, Ecuador, Peru and Bolivia, from ca. 4000 B.C. to the Conquest, with particular emphasis on the history and iconography of the art of Peru.

Ms. Klein

118A. The Arts of Oceania. Lecture, three hours. Prerequisite: course 55 or consent of instructor. Survey of the arts of the major island groupings of the Pacific, emphasizing style-regions and broad historical relationships.

M. Klein, Mr. Rubin

118B. The Arts of Pre-Columbian America. Lecture, three hours. Prerequisite: course 55 or consent of instructor. A study of the sequence of cultures which developed in the area between (and including) Mexico and Peru, from ca. 1000 B.C. until the Conquest.

Ms. Klein

118C. The Arts of Sub-Saharan Africa. Lecture, three hours. Prerequisite: course 55 or consent of instructor. A study of the arts of Africa, emphasizing style-regions and broad historical relationships.

Ms. Klein, Mr. Rubin

119A. Advanced Studies in African Art: Western Africa. Lecture, three hours. Prerequisite: course 118C or consent of instructor. A study of the network of stylistic, historical and cultural relationships existing among the peoples of the upper Niger River Valley and adjacent portions of the Western Guinea Coast.

Mr. Rubin

119B. Advanced Studies in African Art: Central Africa. Lecture, three hours. Prerequisite: course 118C or consent of instructor. A study of the arts of Cameroon and the Ogowee River Basin.

Mr. Rubin

120A. History of Prints. Lecture, three hours. Prerequisite: course 118C or consent of instructor. A study of the network of stylistic, historical and cultural relationships existing among the peoples of the upper Niger River Valley and adjacent portions of the Western Guinea Coast.

Mr. Rubin

120B. History of Prints. Lecture, three hours. Prerequisite: course 118C or consent of instructor. A study of the network of stylistic, historical and cultural relationships existing among the peoples of the upper Niger River Valley and adjacent portions of the Western Guinea Coast.

Mr. Rubin

120C. History of Prints. Lecture, three hours. Prerequisite: course 118C or consent of instructor. A study of the network of stylistic, historical and cultural relationships existing among the peoples of the upper Niger River Valley and adjacent portions of the Western Guinea Coast.

Mr. Rubin

121A. Critical and Historical Studies in Drawing. Lecture, three hours. Prerequisite: course 118C or consent of instructor. A study of the network of stylistic, historical and cultural relationships existing among the peoples of the upper Niger River Valley and adjacent portions of the Western Guinea Coast.

Mr. Rubin

121B. Critical and Historical Studies in Drawing. Lecture, three hours. Prerequisite: course 118C or consent of instructor. A study of the network of stylistic, historical and cultural relationships existing among the peoples of the upper Niger River Valley and adjacent portions of the Western Guinea Coast.

Mr. Rubin

122. History of Style and Ornament. Lecture, three hours. Prerequisite: course 118C or consent of instructor. A study of the network of stylistic, historical and cultural relationships existing among the peoples of the upper Niger River Valley and adjacent portions of the Western Guinea Coast.

Mr. Rubin

125. Tutorial Conferences. Discussion, two hours. Prerequisites: courses 50, 51, 52, 53, 54. Restricted to undergraduate Art History majors. Discussion of selected art topics and emphasis on related readings in museum literature, history and philosophy. Oral reports. Course grading will be on Passed/Not Passed basis only.

The Art History Staff

ART

Art courses are supervised by the following faculty, augmented by visiting staff: painting, drawing and sculpture, Arman, Brice, Elgart, Mullican, Nunes, Stussy and Valerio; printmaking, Brown, photography, Heinecken.

130. Drawing. Studio, eight hours; five hours arranged. Prerequisites: courses 5A, 5B, 5C, 15, 21 or consent of instructor. May be repeated for a maximum of four courses. Varied media and subject; drawing as an intrinsically expressive mode.

Mr. Mullican, Mr. Stussy

133. Painting. Studio, eight hours; five hours arranged. Prerequisites: courses 5A, 5B, 5C, 15, 21 or consent of instructor. May be repeated for a maximum of four courses. Varied media, purposes, subjects, structures, presentation, style, other approaches to art and non-art, objects, events, installations, and non-studio pieces, film and video.

Mr. Burden and the Staff

140. Printmaking. Studio, eight hours; five hours arranged. Prerequisites: courses 5A, 5B, 5C, 15, 21 or consent of instructor. May be repeated for a maximum of four courses. Varied media, purposes, presentation, style, other approaches to art and non-art, objects, events, installations, and non-studio pieces, film and video.

Mr. Guy Dill and the Staff

147. Photography. Studio, eight hours; five hours arranged. Prerequisites: courses 5A, 5B, 5C, 15, 21 or consent of instructor. May be repeated for a maximum of four courses. Varied media, purposes, presentation, style, other approaches to art and non-art, objects, events, installations, and non-studio pieces, film and video.

Mr. Guy Dill and the Staff

148. Critical and Historical Studies in Drawing. Discussion, three hours. Prerequisite: course 5A. Survey of the arts of Africa, emphasizing style-regions and broad historical relationships. May be repeated for a maximum of four courses. Selected studies in fine printmaking, historical and contemporary: woodcut, etching and engraving, lithography, silk-screen, mixed media.

Mr. Heinecken and the Staff

149. Advanced Analysis and Criticism. Discussion, three hours. Prerequisite: course 5A. Survey of the arts of Africa, emphasizing style-regions and broad historical relationships. May be repeated for a maximum of four courses. Selected studies in fine printmaking, historical and contemporary: woodcut, etching and engraving, lithography, silk-screen, mixed media. Photography and photography: forms of artistic expression.

The Staff

AGRICULTURE

(II) COMPARATIVE STUDIES IN DESIGN

161A. Ceramics. Lecture, three hours; laboratory, to be arranged. The evolution of ceramic form through geographic, social and technological influences.

Mr. Saxe

161B. Clothing. Lecture, three hours; laboratory, to be arranged. Clothing and body ornamentation; symbolic significance and evolving forms within their social, cultural and geographic contexts.

Ms. McCluskey
161C. Graphics. Lecture, three hours; laboratory, to be arranged. Symbols, signs and images, within social, cultural and historical contexts.  
Mr. W. Brown, Mr. Jennings, Mr. Neuhart

161D. Glass. Lecture, two hours; laboratory, to be arranged. The evolution of glass form and technology through geographic and sociological influences.  
Mr. Roberts

161E. Industrialization. Lecture, three hours; laboratory, to be arranged. Industry, design and society; their changing relationships.

161F. Landscape. Lecture, three hours; laboratory, to be arranged. The analysis of concepts affecting the aesthetic and ecological quality of the landscape.  
Mr. Kester in charge

161G. Shelter. Lecture; three hours; laboratory, to be arranged. An analysis of dwelling types and forms; the forces affecting them.

161H. Textiles. Lecture, three hours; laboratory, to be arranged. Concepts of construction, ornamentation, expression and utility.  
Mr. Kester in charge

161J. Video Imagery. Lecture, three hours; laboratory, to be arranged. Electronic audigraphics in relation to pictorial forms; nonderivative "process level" characteristics and content-level perception.  
Mr. Kataoka, Mr. Neuhart

161K. Historic Fashions. Lecture, three hours; discussion, two hours. Fashions and stylistic changes in western dress from the late Medieval period to the present time, studied in relationship to the social and cultural background of each era.  
Mr. McCloskey

(II) CONCEPT AND FORM IN DESIGN

162A. Ceramics. Lecture, two hours; laboratory, four hours. Prerequisites: courses 31A, 31B, 32A-32B, 34A-34B or equivalent. Introduction to creative development of ceramic materials and processes.

162B. Ceramics. Lecture, two hours; laboratory, four hours. Prerequisites: courses 31A, 31B, 32A-32B, 34A-34B, 162A or equivalent. The interaction of ideas, structure and process. May be repeated once.

163A. Clothing. Lecture, two hours; laboratory, four hours. Prerequisite: courses 31A, 31B, 32A-32B, 34A-34B or equivalent. Introduction to the creative process in designing contemporary clothing.

163B. Clothing. Lecture, two hours; laboratory, four hours. Prerequisites: courses 31A, 31B, 32A-32B, 34A-34B, 163A or equivalent. Further development of the design process, with emphasis on the symbolic aspect of clothing. May be repeated once.

164A. Fiber Structure. Lecture, two hours; laboratory, four hours. Prerequisites: courses 31A, 31B, 32A-32B, 34A-34B or equivalent. Design and technology of woven forms; essential elements, tools and processes.

164B. Fiber Structure. Lecture, two hours; laboratory, four hours. Prerequisites: courses 31A, 31B, 32A-32B, 34A-34B or equivalent. The derivation of non-koom processes utilizing pliable elements. May be repeated once.

165A. Graphics. Lecture, two hours; laboratory, four hours. Prerequisites: courses 31A, 31B, 32A-32B, 34A-34B, 165A or equivalent. Empiric and systematic graphic concepts, including methods, symbols and media technology. May be repeated once.

166A. Glass. Lecture, two hours; laboratory, four hours. Prerequisites: courses 31A, 31B, 32A-32B, 34A-34B or equivalent. The development of forms in glass; off-hand methods including blowing, molding and coldworking.

166B. Glass. Lecture, two hours; laboratory, four hours. Prerequisites: courses 31A, 32A-32B, 34A-34B, 166A or equivalent. Theories of glass forming; colorants, lustres, acids and surface delineation. May be repeated once.

167A. Industrialized Materials. Lecture, two hours; laboratory, four hours. Prerequisites: courses 31A, 31B, 32A-32B, 34A-34B or equivalent. The influence of diverse media, structures and systems on form development.

167B. Industrialized Materials. Lecture, two hours; laboratory, four hours. Prerequisites: courses 31A, 31B, 32A-32B, 167A or equivalent. Theories of newly developed technological materials and processes as conceptual influences. May be repeated once.

168A. Landscape. Lecture, two hours; laboratory, four hours. Prerequisites: courses 31A, 31B, 32A-32B, 34A-34B or equivalent. The modification, conservation and utilization of natural land.  
Mr. Roberts

168B. Landscape. Lecture, two hours; laboratory, four hours. Prerequisites: courses 31A, 31B, 32A-32B, 34A-34B or equivalent. The specific relationship of modified natural elements to human requirements. May be repeated once.  
Mr. Roberts

169A. Product. Lecture, two hours; laboratory, four hours. Prerequisites: courses 31A, 31B, 32A-32B, 34A-34B or equivalent. Theoretical evolution of form factors influencing concept interpretations for industry. May be repeated once.  
Mr. Shapira

170A. Shelter. Lecture, two hours; laboratory, four hours. Prerequisites: courses 31A, 31B, 32A-32B, 34A-34B or equivalent. The determination of criteria for designing spatial enclosures.  
Mr. Shapira

170B. Shelter. Lecture, two hours; laboratory, four hours. Prerequisites: courses 31A, 31B, 32A-32B, 34A-34B, 170A or equivalent. The definition of structure and space in relation to human needs. May be repeated once.  
Mr. Shapira

171A. Textiles. Lecture, two hours; laboratory, four hours. Prerequisites: courses 31A, 31B, 32A-32B, 34A-34B or equivalent. Surface modification through ornament.  
Ms. Breitenbach

171B. Textiles. Lecture, two hours; laboratory, four hours. Prerequisites: courses 31A, 31B, 32A-32B, 34A-34B, 171A or equivalent. Dyeing theories and processes; natural and synthetic colorants. May be repeated once.  
Mr. Bassler, Ms. Breitenbach

172A. Video Imagery. Lecture, two hours; laboratory, four hours. Prerequisites: courses 31A, 31B, 32A-32B, 34A-34B or equivalent. Introduction to electronic image-making, videotape and "live" representation.  
Mr. Kataoka, Mr. Neuhart

172B. Video Imagery. Lecture, two hours; laboratory, four hours. Prerequisites: courses 31A, 31B, 32A-32B, 34A-34B or equivalent. Electronic audio-graphic recording explored for its sensory potential; videotape as record of process and content levels. May be repeated once.  
Mr. Kataoka, Mr. Neuhart

(III) PROSEMINARS IN DESIGN

192. Proseminar in Design: Resources. Proseminar, three hours. Prerequisite: consent of advisor. Investigation of resources for creativity as an introduction to research. Concurrent enrollment in one course in Concept and Form recommended. Enrollment through design faculty advisors. Can be repeated once. 
The Design Staff

193. Proseminar in Design: Senior Studies. Proseminar, three hours. Prerequisite: consent of advisor. Members of the faculty will examine specific problems relevant to design theory and performance. Topics for investigation will be announced in advance. Open to senior and advanced students through design faculty advisors. May be repeated for a maximum of three courses. 
The Design Staff

Special Studies for All Majors

197. Honors Course. Hours to be arranged. Prerequisites: 3.0 overall, 3.5 in major, consent of instructor, junior or senior standing. Individual studies for majors. Maximum two courses. 
The Staff

199. Special Studies in Art (1/2 to 2 courses). Hours to be arranged. Prerequisites: 3.0 in major, consent of instructor, senior standing. Individual studies for majors. Maximum two courses. 
The Staff

Graduate Courses

For complete descriptions of graduate-level courses offered by this department, please consult the UCLA Graduate Catalog.

The Department of Art 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.

UCLA FREDERICK S. WIGHT ART GALLERY

The UCLA Frederick S. Wight Art Gallery, adjacent to Dickson Art Center, presents a program of changing exhibitions of regional, national and international significance, including a range of historical, ethnic and contemporary forms of art. Included in this program are exhibitions by faculty and students of the Art and Design areas, and exhibitions assembled from the extensive collections of the Museum of Cultural History, focusing on non-Western and folk art. The Grunwald Center for the Graphic Arts maintains a print study collection and presents a series of exhibitions related to the Art Department’s program of advanced studies in the graphic arts and art history.

Asian American Studies

(Interdepartmental)

(Program Office: 3232 Campbell Hall)

Special Program in Asian American Studies

The Program in Asian American Studies is intended to promote the study of Asian and Pacific peoples in the United States from several disciplines. It provides a general introduction to Asian American studies for those who anticipate advanced work at the graduate level or careers in research and community work related to the Asian American.

Students may participate in the program by undertaking a course of study which focuses on the special roles and experiences of Asian and Pacific peoples in the United States through a department major or the interdepartmental major in East Asian Studies.
Preparation for the Program
Asian American Studies 100A-100B. Introduction to Asian American Studies.

Upper Division
Since Asian American Studies is not a degree-granting program, students participating in it must complete an organized major.

For further information, contact Tim Dong, Asian American Studies Center, 3232 Campbell Hall (825-2974).

Upper Division Courses
100A-100B. Introduction to Asian American Studies. This survey sequence is an introduction to Asian American studies. The first quarter of the course will deal with the history of Asians in America. The second quarter will examine Asian American communities today.

The Staff

103. Asian Americans and the Law. The course will survey major Federal and California case law and legislative law directed specifically toward Asian Americans, from 1850 to World War II and relocation. Major subject areas are Japanese relocation orders, anti-Asian labor legislation, legal prohibitions against Asians' right to testify, case law on Asian women and equal educational opportunity for Asians. 

Mr. Iwasaki
107. Topics in Asian American Studies.

Graduate Courses
For complete descriptions of graduate-level courses offered by this program, please consult the UCLA Graduate Catalog.

Related Upper Division Courses
in Other Departments
The following courses pertaining to Asian American studies are offered by the departments listed:
Anthropology 163. Women in Culture and Society.


166. Comparative Minority Relations.

167. Urban Anthropology.

172T. Ethnohistory of Hispanic Cultures in the U.S. Southwest.

175P. Civilizations and Cultures of Southeast Asia.

175Q. Civilizations of South Asia.

175S. Japan.

177. Cultures of the Pacific.

History 153. The United States and the Philippines.

154A-154B. United States Urban History.

155A-155B. American and European Working Class Movements.

159A-159B. History of the Chicano Peoples.

160. The Immigrant in America.


163. History of California.

183. Modern China.

187C. Japanese History.

Political Science 135. International Relations of China.

136. International Relations of Japan.

147. Minority Group Politics.

159. Chinese Government and Politics.


Psychology 175. Community Psychology.

175S. Experimental Community Psychology.


125. Urban Sociology.

129. White Racism.

134. Comparative Social Institutions of East Asia.

155. Intergroup Conflict and Prejudice.

Astronomy

(Department Office: 8979 Math Sciences)

George O. Abell, Ph.D., Professor of Astronomy.

Lawrence H. Aller, Ph.D., Professor of Astronomy.

Ferdinand Coroniti, Ph.D., Professor of Physics and Astronomy.

Harland W. Epps, Ph.D., Professor of Astronomy.

Holland C. Ford, Ph.D., Professor of Astronomy.

Miroslav Pavcev, Ph.D., Professor of Astronomy.

Roger K. Ulrich, Ph.D., Professor of Astronomy (Chairman of the Department).

Danieil M. Popper, Ph.D., Emeritus Professor of Astronomy.

Michael A. Jura, Ph.D., Associate Professor of Astronomy.

Jonathan I. Katz, Ph.D., Associate Professor of Astronomy and IGPP.

Steven A. Grandi, Ph.D., Assistant Professor of Astronomy.

Donald E. Osterbrock, Ph.D., Director of Lick Observatory.


classes for Nonmajors

Astronomy 3 and 4 are essentially nonmathematical courses open to the general University student normally not intending to major in the physical sciences. Astronomy 4 covers special topics to a somewhat greater depth and requires some preliminary elementary background in astronomy (e.g., Astronomy 3).

Students who have had at least two courses in high school algebra and one course in trigonometry are strongly advised to take, instead of Astronomy 3, the parallel honors course, Astronomy 3H. While the level of required mathematical skills in 3H is still elementary, the class is smaller and more challenging. Similarly, students who have already taken some college course in physics and mathematics should take Astronomy 4H instead of 4. In particular, declared or potential majors in Astronomy or in physical and related sciences should take courses 3H and 4H, not 3 or 4.

Astronomy 101 is a general survey course recommended for science majors who wish to get a good general picture of astronomy and astrophysics in one course. Astronomy 4H is on about the same level, but has the form of a seminar focused on several selected topics and is recommended mainly to lower division students who already have had an astronomy class.

Students of junior and senior standing in physics or related sciences are invited to choose any of these classes: 103, 104, 106, 115, 117, 127, 130, 180.

Advising

Every student enrolled in the curriculum in astronomy is required each quarter to have a program approved by a departmental advisor.

Preparation for the Major


The Major


Honors Program in Astronomy

Senior majors in Astronomy with a 3.4 grade-point average in all astronomy, mathematics and physics courses are eligible for the Honors Program in Astronomy. In addition to completing all courses required for the major, the honors student must complete two quarters of 199. To receive honors and highest honors at graduation, the grade-point average must remain 3.4 or higher and the work in 199 must reflect original research and be accepted by the departmental honors committee.

Lower Division Courses

3. Astronomy: The Nature of the Universe. Lecture, three hours; discussion, one hour. Not open to students who have taken or are taking Astronomy 3H or 101. A course for the general University student normally not intending to major in physical sciences on the development of ideas in astronomy, and what has been learned of the nature of the universe, including recent discoveries and developments. No special mathematical preparation is required beyond that necessary for admission to the University with freshman standing.

The Staff

3H. Introductory Astronomy and Astrophysics. Lecture, three hours per week; discussion, one hour per week. Not open to students who have taken or are taking Astronomy 3. Introduction to astronomy and astrophysics for freshmen who are seriously interested in science. Course requires the ability to understand mathematical and physical concepts, but high school algebra and trigonometry classes provide sufficient qualification. Particularly recommended to declared or potential majors in Astronomy or in physical and mathematical sciences.

The Staff

4. Topics in Modern Astronomy. Lecture, three hours; discussion, one hour. Prerequisite: course 3 or 3H or the equivalent. Not open to students who have taken or are taking Astronomy 4H. For the general University student with previous introduction to astronomy. Selected topics (such as evolution of the solar system and stars, and cosmology) are treated in some depth, but without formal mathematics, emphasizing their significance and relationships to other sciences.

The Staff
4H. Topics in Contemporary Astrophysics. Pre-requisites: Astronomy 3 or 3H, Physics 8A, Mathematics 31A, or equivalents. Open to qualified transfer students with upper division credit. Course 10 may be elected for observatory and laboratory work in connection with this course. A survey of the whole field of astronomy, designed primarily for students majoring in a physical science or mathematics. 

The Staff

Upper Division Courses

101. General Astronomy and Astrophysics. Meets four hours per week. Pre-requisites: Physics 8A and Mathematics 31A. Topics in astronomy or physics of interest to radiative processes in the interstellar medium and aspects of star formation. 

The Staff

102. Practice In Observing (½ course). Meets one evening per week for one and one-half hours. Pre-requisite: knowledge of plane trigonometry and some previous or concurrent course in astronomy or consent of instructor. Practical work for beginners, including telescopic observation and laboratory exercises cogitate to an introductory course in astronomy. 

The Staff

127. Stellar Interiors and Evolution. Meets three hours per week. Prerequisite: senior standing in astronomy or physics or consent of instructor. Recommended: Astronomy 115. Physical conditions in stellar interiors. Energy production in stars. Stellar evolution from star formation through the normally observed stages to white dwarfs, neutron stars, and black holes. Novae, supernovae, other variable stars. Synthesis of chemical elements.

Mr. Plavec, Mr. Ulrich

130. High Energy Astrophysics. Meets three hours per week. Prerequisite: senior standing in astronomy or physics or consent of instructor. Theory and observation pertaining to astronomical sources of high energy radiation. Theory of synchrotron radiation. Compton scattering; interaction of matter with compact objects. Solar flares, X and gamma ray sources, the Crab nebula, nuclei of peculiar galaxies, quasars.

Mr. Katz

180. Introduction to Modern False Object Measurement in Astronomy. Laboratory, six hours. Prerequisites: junior or senior standing in astronomy or physics and consent of instructor. Introduction to modern astronomical instrumentation. Experiments will cover photography, phototubes, image tubes, spectrophotometry, solid-state detectors and microprocessor-controlled instrumentation.

Mr. Abell, Mr. Ford, Mr. Grandi

190. Senior Symposium on Topics in Modern Astronomy. Meets three hours per week. Prerequisite: senior standing in astronomy or physics or consent of instructor. Lectures by instructors in astronomy and related fields to supplement the regular course lectures. Topics may include: radio, infrared, UV and X-ray astronomy, observational cosmology, variable stars, planetary physics, pulsars and quasars.

Mr. Ulrich

199. Special Studies (½ or 1 course). Pre-requisite: senior standing in astronomy or physics, with an outstanding record, and consent of instructor. Special studies with an individual faculty member. With prior approval, this course may be used to carry out a serious observing program at the UCLA Students' Observatory, or in special cases with the 24-inch reflector.

The Staff

Graduate Courses

For complete descriptions of graduate-level courses offered by this department, please consult the UCLA Graduate Catalog.

Atmospheric Sciences

(Department Office: 7127 Math Sciences)

Aiko Arakawa, D.Sc., Professor of Atmospheric Dynamics.

James G. Edinger, Ph.D., Professor of Meteorology.

Hans R. Pruppacher, Ph.D., Professor of Atmospheric Physics (Chairman of the Department).

George L. Siscoe, Ph.D., Professor of Atmospheric Physics.

Richard M. Thorne, Ph.D., Professor of Atmospheric Physics.

Sekhar Chatterjee, Ph.D., Professor of Atmospheric Physics.

Morton G. Wurtz, Ph.D., Professor of Atmospheric Dynamics.

Yale Mintz, Ph.D., Emeritus Professor of Meteorology.

Morris Neiburger, Ph.D., Emeritus Professor of Meteorology.

Kerry A. Emanuel, Ph.D., Assistant Professor of Meteorology.

Derek C. Montague, Ph.D., Assistant Professor of Atmospheric Chemistry.

Max J. Suarez, Ph.D., Assistant Professor of Atmospheric Dynamics.

Preparation for the Major


The Major

Required: Atmospheric Sciences 104A, 104B, M149; Physics 110A, 110B, 113A, 113B; two courses from Atmospheric Sciences 143, 144, 150, 151; one course from 160, 161; two courses from 152, 153, 154. In addition, students preparing for graduate studies in Dynamic and Synoptic Meteorology should take courses 150, 151 and Mathematics 140A; students preparing for graduate studies in Dynamics and Microphysics of Clouds and Precipitation should take as electives the following courses: Physics 112A, 140, Mathematics 140A, 135A-135B; students preparing for graduate studies in Radiation and Upper Atmospheric and Space Physics should take as electives the following courses: Physics 105A, 105B, M122.

Lower Division Courses

2. Air Pollution. Lecture, three hours; discussion, one hour. A breadth requirement course for all students interested in the causes and effects of harmful concentrations of pollution in the atmosphere. Topics covered will include the nature and sources of gaseous and particulate pollutants, their transport, dispersion, modification and removal, with emphasis on atmospheric processes on scales ranging from individual sources to global effects; interaction with the biosphere and the oceans; stratospheric pollution.

Mr. Montague

3. Introduction to the Atmospheric Environment. Lecture, three hours; discussion, one hour. A course specifically designed to satisfy in part the breadth requirement of students majoring outside the physical sciences. The nature and causes of weather phenomena, including winds, clouds, rain, lightning, tornados and hurricanes, solar and terrestrial radiation phenomena of the higher atmosphere; the ionosphere and the auroras; causes of air pollution; proposed methods and status of weather modification.

Mr. Edinger, Mr. Thomas

3H. Introduction to Atmospheric Sciences. Lecture, three hours; discussion, two hours. Prerequisite: Physics 8 or exceptional performance in high school mathematics and physics or consent of instructor. An introductory course in atmospheric phenomena and atmospheric processes, required for Atmospheric Sciences majors and recommended for honors students who are declared or potential majors in the physical sciences or engineering.

Mr. Montague

12. Forecasting Seminar (½ course). Objective forecasting of wind, temperature, and precipitation for Los Angeles as measured at UCLA, and for a major city east of the Rockies. Emphasis on developing forecasting experience and familiarity with the use of satellite and conventional observations, map analyses and numerical weather prediction guidance produced by National Meteorological Center. Forecasts are qualified and evaluated objectively. No previous experience required.

Mr. Emanuel
Upper Division Courses

104A. Atmospheric Thermodynamics and Introduction to Cloud Physics. Lecture, three hours; discussion, two hours. Prerequisites: Mathematics 33B, Physics 8D, Chemistry 11A. Basic thermodynamics including the first and second laws. Atmospheric statics. Dry adiabatic processes. Phase changes of water and moist adiabatic processes. Gravitational stability. Elementary cloud physics. Mr. Montague

104B. Introduction to Dynamic and Statistical Meteorology (115 courses). Lecture, three hours; laboratory, six hours. Prerequisite: course 104A. Kinematics. Equation of motion. Quasi-static balance and the transport, diffusion and transformation of atmospheric tracers. Mr. Yanai

106A. Synoptic Meteorology Laboratory. Laboratory, six hours. Prerequisite: course 104B or equivalent. Advanced synoptic and mesoscale analysis. Tropical synoptic and subsynoptic systems. Weather forecasting. Mr. Yanai

160. Laboratory in Atmospheric Dynamics. Laboratory, six hours. Prerequisites: concurrent with course 150; Engineering 10C or 10F; or consent of instructor. Numerical solution of problems selected from atmospheric dynamics. Introduction to numerical weather prediction. Mr. Suarez-Cardano

165. Laboratory in Meteorological Observation. Laboratory, six hours. Prerequisites: junior standing and consent of departmental undergraduate advisor. Theory and application of instrumentation in field and laboratory. The material covered will be partly determined by the students' interests. Mr. Edinger

198. Operational Meteorology (½ course). Prerequisite: junior or senior standing. Daily contact with weather data and forecasting, satellite, acoustic sounder and radar data. Introduction to weather forecasting for aviation, air pollution, marine weather, fire weather and public use. Includes daily weather map discussions and visits to observing, radiosonde and radar installations. Mr. Edinger

Special Studies in Meteorology (1/4 or 1 course). Prerequisite: consent of instructor. Special individual study. The Staff

Graduate Courses

For complete descriptions of graduate-level courses offered by this department, please consult the UCLA Graduate Catalog.

Related Upper Division Courses in Other Departments

105A. Introduction to Fluid Dynamics. Lecture, three hours; discussion, one hour. Prerequisite: course 105A. Analytical methods. Fluids at various scales. Applications to weather, oceanography, and geophysics. Mr. M. M. Velázquez

106. Geophysical Fluid Dynamics. Lecture, three hours; discussion, two hours. Mr. Yanai

112A. Physical structure of the oceans; observational and theoretical study. Mr. Yanai

150. Geophysical Fluid Dynamics. Lecture, three hours; discussion, two hours. Mr. Yanai

150. Introduction to Fluid Dynamics. Lecture, three hours; discussion, one hour. Prerequisite: course 150. Analytical methods. Fluids at various scales. Applications to weather, oceanography, and geophysics. Mr. M. M. Velázquez

150A. Geophysical Turbulence and Convection. Lecture, three hours; discussion, two hours. Mr. Yanai

152. Physics of Clouds and Precipitation. Lecture, three hours; discussion, one hour. Prerequisite: Mathematics 33B or consent of instructor. The nature and structure of clouds and precipitation; phase change of water in the atmosphere; condensation on nuclei; development of precipitation particles. Mr. Pruppacher


154. Solar Terrestrial Physics. Lecture, three hours; discussion, one hour. Prerequisite or concurrent: Physics 110B. Particle and electromagnetic emissions from the sun under quiet and under disturbed conditions. The solar wind. The magnetospheres and the ionospheres of the earth and other planets. Geomagnetic phenomena. Aurora and airglow. Mr. Thorne

Biology

(Department Office: 2203 Life Sciences)

Albert A. Barber, Ph.D., Professor of Cell Biology. George A. Bartolomeow, Ph.D., Professor of Zoology. Joseph A. Casarano, Ph.D., Professor of Cell Biology. David J. Chapman, Ph.D., Professor of Biology. William R. Clark, Ph.D., Professor of Cell Biology. Martin L. Cody, Ph.D., Professor of Biology. Nicholas E. Collins, Ph.D., Professor of Zoology. Wilbur T. Ebersold, Ph.D., Professor of Biology. Roger O. Eckert, Ph.D., Professor of Biology. Franz Engelmann, Ph.D., Professor of Biology. Jolde H. Fejersk, Ph.D., Professor of Molecular Biology.

George C. Gorman, Ph.D., Professor of Biology. Malcolm S. Gordon, Ph.D., Professor of Biology. Thomas R. Howell, Ph.D., Professor of Zoology. Thomas W. James, Ph.D., Professor of Cell Biology. J. Lee Kavanau, Ph.D., Professor of Biology. James A. Lake, Ph.D., Professor of Molecular Biology. Gordon G. Laties, Ph.D., Professor of Plant Physiology.

F. Harlan Lewis, Ph.D., Professor of Biology. O. Rayn Lunt, Ph.D., Professor of Biology. Austin J. Macinnis, Ph.D., Professor of Cell Biology. James I. Martin, Ph.D., Professor of Zoology. Leonard Muscatine, Ph.D., Professor of Biology. Park S. Noble, Ph.D., Professor of Biology. John D. O'Connor, Ph.D., Professor of Developmental Biology.

Bernard O. Pinney, Ph.D., Professor of Biology. Dan S. Ray, Ph.D., Professor of Molecular Biology. Winston A. Salser, Ph.D., Professor of Molecular Biology.

Richard W. Siegel, Ph.D., Professor of Biology. Larry Simpson, Ph.D., Professor of Cell Biology. Clara M. Szego, Ph.D., Professor of Biology. Henry J. Thompson, Ph.D., Professor of Botany. J. Philip Thornber, Ph.D., Professor of Molecular Biology.

Peter P. Vaughn, Ph.D., Professor of Zoology. David Appleman, Ph.D., Emeritus Professor of Plant Physiology. Gordon H. Ball, Ph.D., Emeritus Professor of Zoology. Jacob B. Biale, Ph.D., Emeritus Professor of Biology. Frederick Crescitelli, Ph.D., Emeritus Professor of Cell Biology. Eric B. Edney, Ph.D., Emeritus Professor of Biology. Karl C. Hamner, Ph.D., Emeritus Professor of Botany. Arthur W. Haupt, Ph.D., Emeritus Professor of Botany. Mildred E. Mathias, Ph.D., Emeritus Professor of Botany. Everett C. Olson, Ph.D., Emeritus Professor of Zoology.

Charles A. Schroeder, Ph.D., Emeritus Professor of Botany. Flora Murray Scott, Ph.D., Emeritus Professor of Botany. Fritid S. Stierson, M.D., Ph.D., Emeritus Professor of Molecular Biology. Boyd W. Walker, Ph.D., Emeritus Professor of Zoology. Vladimir Walters, Ph.D., Emeritus Professor of Zoology. Samuel G. Wildman, Ph.D., Emeritus Professor of Botany. Clifford F. Brunk, Ph.D., Associate Professor of Cell and Molecular Biology. Robert Goldberg, Ph.D., Associate Professor of Zoology. Michael Groene, Ph.D., Associate Professor of Biology. Henry A. Hesperneide, Ph.D., Associate Professor of Biology. Harumi Kasamatsu, Ph.D., Associate Professor of Biology. John R. Mertan, Ph.D., Associate Professor of Genetics.

Biochemistry

See the Department of Chemistry

Biological Chemistry

(532-257 Catalog for Health Sciences)

The Department of Biological Chemistry does not offer an undergraduate degree. For detailed information on graduate degrees offered by this department, please refer to the UCLA Graduate Catalog.
Advising

All incoming students (freshmen and transfers) must see a departmental advisor before they register for classes. In addition, all students majoring in Biology must confer with a departmental advisor by the start of the junior year and again during the senior year.

Pre-Biology Major

Students who have not completed all the courses required for preparation for the major are Pre-Biology majors. Upon completion of these courses with a grade of "C-" or better in each, students should petition to enter the Biology major in the Undergraduate Affairs Office.

Preparation for the Major

(1) Biology 5, 6, 6L, 7, 8, 8L
(3) Mathematics 3A, 3B, 3C or 31A, 31B, 32A; the 31A, 31B, 32A courses are strongly recommended for students intending to study ecology, evolution or population genetics.
(4) Physics 6A, 6B, 6C

Requirements for the Major

(1) Three courses from the core list, one from each of the following groups:
   (a) Morphology Systematics: Biology 100, 101, 105, 110, 153, Microbiology 101
   (b) Developmental and Molecular Biology: Biology 137, 138, 141, 144, 146
   (c) Physiology: Biology 15B, 162, 166
(2) Two additional upper division biology courses
(3) Four courses which may be chosen from upper division biology or any upper division course in microbiology, chemistry, mathematics (except 100 through 107), physics or the approved list which may be obtained in the Student Affairs Office. A maximum of 4 units of Biology 199 may be applied toward the major. 199's from other departments cannot be applied.

Additional Requirements

(1) Six unit courses (1½ courses) count as only one course on requirements for the major.
(2) A maximum of eight units of Biology 190 or four units of Biology 199 may be used for fulfillment of the major.
(3) Courses taken to fulfill requirements for preparation for the major and the major must be taken for a letter grade.
(4) Biology majors must earn a "C-" or better in each core course, a 2.0 average in all upper division biology courses and a 2.0 average in the nine courses comprising the major.

Transfer Students

In order to be admitted as Pre-Biology majors, transfer students who have 80 units or more must have completed one year of general chemistry with laboratory, Biology 5 and 7 or their equivalent and one of the following sequences:
(1) One year of calculus,
(2) One year of calculus-based physics or
(3) Two courses in organic chemistry with laboratory

Honors in Biology

Requirements for graduation with Honors in Biology are an overall GPA of 3.4 and a 3.4 in the Biology major. Highest honors in Biology are awarded to those Biology majors who have a GPA of 3.6 overall and a 3.6 GPA in the major at graduation and who have satisfactorily completed Biology 190.

Lower Division Courses

2. Principles of Biology. Lecture, three hours; laboratory, one and one-half hours. Lecture: structure and chemical composition of cells, animal structure and diversity, cellular respiration, photosynthesis, major organ systems with emphasis on human cell division, reproduction, development, ecology, population growth, genetics, evolution. Laboratory: structure and function of cells, morphology of plants and animals, circulatory and nervous systems, embryology, plant diversity and adaptation, human genetics. Offered for students other than majors in the biological sciences. Not open to students who have had Biology 5 and 7.

5. Biology of Organisms. Lecture, three hours; discussion/demonstration, two hours. Comparative morphology and embryology of the major plant and animal phyla; function of organ systems including gas exchange, transport, regulation of the internal environment, hormones, coordination, and the nervous system.

6. Ecology and Evolution. Lecture, three hours; discussion, two hours. Prerequisites: course 5 and Mathematics 3A or 31A. A survey of the principles of population growth and ecology, competition, predation, community ecology, environmental physiology, population genetics, natural selection, and speciation. The Staff

6L. Organismic and Environmental Biology Laboratory (½ course). Laboratory, three hours. Prerequisites: course 6 (may be taken concurrently with Biology 6). Introductory Biology Laboratory including basic cell and microorganism organization, morphology and diversity of organisms, population biology, evolution, and community ecology. The Staff

7. Introductory Cellular and Molecular Biology. Lecture, three hours; discussion/demonstration, two hours. Prerequisite: course 5; Chemistry 23 is strongly recommended. An introduction to cellular and subcellular biology, including cells and organelles, molecular biology, cell cycles, and developmental biology. The Staff

8. Introductory Genetics. Lecture, three hours; discussion/demonstration, one hour. Prerequisite: course 7. Principles of Mendelian inheritance, including gene interactions, introductory biochemical genetics, chromosome changes, and mutations genetics. The Staff

8L. Cellular and Molecular Biology Laboratory (½ course). Laboratory, three hours. Prerequisite: course 8 (may be taken concurrently with Biology 8). Introductory laboratory experience including bacterial genetics, mitosis and meiosis, genetics, molecular biology, and developmental biology. The Staff

10. Plants and Civilization. Lecture, three hours; lecture-demonstration, one hour. The origin of crop plants; man's role in the development, distribution, and modification of food, fiber, medicinal and other plants in relation to their natural history. Designed for nonmajors. Mr. Schroeder (F,Sp)

11. Field Botany. Lecture, two hours; laboratory, six hours; required field trips. An introduction to the systematic, morphology, and ecology of the local flora (native and cultivated). Use of keys for identification and morphological characteristics of common families of vascular plants; plant communities and environmental factors affecting their distribution; emphasis on California. Designed for nonmajors.

Mr. Thompson (Sp)

12. Taxonomy and Ecology of Ornamental Plants. Lecture, one hour; laboratory and field trips, six hours. The origin, classification and identification of the more important ornamental plants in Southern California with special emphasis on their environmental requirements and adaptation. Designed for nonmajors.

Mr. Lewis

13. Evolution of Life. Lecture, three hours; discussion, one hour. Limited to 100 students. Not open to life sciences majors. An introduction to biology within the framework of evolutionary theory. The relationships of evolutionary thought to other areas of knowledge and society. Natural selection and the origin of variation are examined in the context of genetics, molecular biology, physiology, phylogeny, population dynamics, behavior and ecology. Stress is laid upon the critical role of historical processes.

The Staff

20. Introduction to Human Heredity. Lecture, two hours; discussion, one hour; laboratory, two hours. This course is not open to students with a previous college course in genetics, nor is it intended to satisfy the requirements of medical or dental schools. Man's inheritance and its biological basis will be introduced through lectures, readings and laboratory exercises with Drosophila. Topics will include prenatal development, Mendelian factors, the role of chromosomes in heredity and the role of genes in disease and population structure.

The Staff

21. Field Biology. Lecture, three hours; required field trips. Prerequisite: course 20. An introduction to the natural history and ecology, interrelationships, and classification of the common animals and plants with emphasis on western North America.

The Staff
25. The Oceans. Lecture, three hours; discussion, one hour. Not open to students in the sciences or to students who have taken Earth and Space Sciences 15. Limited to 20 students. Physical and chemical processes that take place in the oceans with emphasis on their effects on organisms. The Staff (W)

30. Biology of Cancer. Lecture, four hours. An introduction to molecular, cellular and clinical aspects of cancer and the potential for chemotherapy and psychological impact of cancer on the individual and society. Each lecture-discussion period will be given by an invited lecturer who is prominent in cancer research or treatment. (Credits may not be applied toward fulfillment of the Biology major.) PN5

35. Mathematical Ideas in Biology. Lecture, three hours; discussion, one hour. Prerequisites: one year of calculus and consent of instructor. The use of mathematical ideas and analysis in the formulation and evaluation of theories of biological phenomena, such as growth, growth control, biological rate processes and applications of random walk theory. Coverage of topics will be tailored to specific student interests. Mr. Kavanau

Upper Division Courses

Upper division standing and completion of Biology 5, 6, 7 and 8 or equivalent and consent of instructor are required for admission to all upper division courses.

100. Biology of Lower Plants (1½ courses). Lecture, four hours; laboratory, six hours. Prerequisite: course 5 or equivalent or consent of instructor. An introduction to the biology of algae, fungi, and bryophytes, with an emphasis on form, function and development, and the role of lower plants in the environment. Students are strongly encouraged to take both 100 and 101 since these represent a course sequence to survey the entire plant kingdom as appropriate background for upper division courses in plant biology. Mr. Chapman

101. Biology of Vascular Plants (1½ courses). Lecture, three hours; laboratory, six hours. Prerequisite: course 5 or equivalent or consent of instructor. An introduction to the diversity in form and reproduction of vascular plants with emphasis on development, evolution, and function. Students are strongly encouraged to take both 100 and 101 since these represent a course sequence to survey the entire plant kingdom as appropriate background for upper division courses in plant biology. Mr. D. Walker

102. Biology of Marine Invertebrates (1 or ½ courses). Lecture, five hours; laboratory, fifteen hours (five-week intensive course). Prerequisites: "Preparation for the Major" and consent of instructor. Systematics, morphology, ecology, and physiology of marine invertebrates; emphasis on local invertebrates of Southern California and their habitats. Course to be given at the Catalina Marine Science Center. Mr. Morin, Mr. Muscaline, Mr. Vance

103. Taxonomy of Flowering Plants. Lecture, two hours; laboratory and field trips, six hours. The evolution, systematic and distribution of the families of flowering plants. Major groups: morphological and chemical phylogentic systems, nomenclature, modern methods of investigation. The Staff

104. Biology of Marine Vertebrates (1 or 1½ courses). Prerequisites: completion of "Preparation for the Major" and consent of instructor. Selected aspects of the natural history, ecology, physiology and behavior of vertebrates living in marine environments. To be offered as a concentrated five or seven week course for four or six units credit as part of the Catalina Marine Biology Quarter. Mr. B. Gordon, Mr. B. Walker

105. Biology of Invertebrates (1½ courses). Lecture, three hours; laboratory, six hours (includes field trips). Prerequisite: completion of all courses listed under "Preparation for the Major," Introduction to the systematics, evolution, natural history, morphology and physiology of the invertebrates.

Mr. Morin, Mr. Muscaline (F)

106A-106B. Experimental Marine Invertebrate Zoology (1½ courses each). Lecture, two hours; laboratory, twelve hours. Prerequisites: courses 105 and 166 (latter may be taken concurrently with 106A) or equivalent and consent of instructor. Course 106A is a prerequisite to 106B. An advanced course of natural history, physiology, biochemistry of marine invertebrates with emphasis on independent laboratory and field investigations. Mr. Morin, Mr. Muscaline

107. Entomology. Lecture, three hours; laboratory, six hours; field trips. An introduction to the morphology, ecology and classification of insects. The Staff

108. Terrestrial Arthropods. Lecture, three hours; laboratory, six hours; several field trips. Prerequisite: course 107 or consent of instructor. Systematics, distribution, and biometrics of hexapods and arachnids. The Staff

109. The Development of Evolutionary Theory. Lecture, three hours; discussion, one hour. A study of the historical development of the physical and biological concepts which have led to current evolutionary theory. These concepts are considered in context of the social circumstances in which they originated. Enrollment limited to 80 students. The Staff

110. Vertebrate Morphology. Lecture, three hours; laboratory, four hours. Prerequisites: courses 5, 6, 6L. A study of vertebrate morphology and evolution from the viewpoint of comparative anatomy of adult forms, developmental anatomy, and paleontology. Laboratory study of selected vertebrates. Ms. Peterson, Mr. Vaughn (F/W)

111. Biology of Vertebrates. Lecture, three hours; demonstration, field trips, discussion, three hours. Prerequisites: courses 5, 6, 6L. The adaptations, behavior, and ecology of vertebrates. Mr. Bartholomew, Mr. Howell (F, Sp)

112. Ichthyology. Lecture, two hours; laboratory, six hours; field trips. Prerequisites: courses 5 and 111 or consent of instructor. The biology of fresh-water and marine fishes with emphasis on their evolution, systematics, morphology, zoogeography, and ecology. Field trips will examine the fishes of the Southern California coast and other coastal areas. Enrollment limited to 24 students. Mr. Ruth

113. Herpetology (1 or 2 courses). Prerequisites: one of the following: Biology 111, 120 or 122 and course 112 or consent of instructor. A concentrated one or two-quarter course alternately as a 4-unit course to be given during a conventional academic quarter, or as an 8-unit course as part of the Field Biology Quarter. The 4-unit course has lecture, three hours, laboratory, six hours, and approximately 4 weekend field trips. This is a highly concentrated course designed to cover the biology of amphibians and reptiles by focusing on the natural history, ecology, and behavioral adaptations of these animals. Mr. Morin, Mr. Muscaline, Mr. Vance

114. Ornithology. Lecture, two hours; laboratory, demonstration, field trips, discussion. Prerequisites: courses 111 and consent of instructor. Limited enrollment. The systematics, distribution, physiology, behavior and ecology of birds. Mr. Gorman

115. Mammalogy. Lecture, two hours; laboratory and field trips, six hours. Prerequisites: course 111 or equivalent and consent of instructor. The biology, systematics, ecology, behavior and physiology of mammals. The Staff

116. The Evolution of Mammalian Dentitions. Lecture, two hours; laboratory, six hours. Prerequisite: consent of instructor. Limited enrollment. The origin and adaptive radiation of mammalian dentitions considered with special emphasis upon morphological aspects of change relative to function. Tooth histology and embryology are studied. Laboratory work involves study of dental morphology and histology.

The Staff

M117. Vertebrate Paleontology. (Same as Earth and Space Sciences M117.) Lecture, three hours; laboratory, three hours. Prerequisite: course 110. Recommended: a course in general geology. Limited enrollment. The fossil record of the evolution of the vertebrates, with emphasis on the morphology of primitive forms in the series from fish to mammal. Mr. Vaughn

M118. Paleobotany. (Same as Earth and Space Sciences M118.) Lecture, three hours; laboratory, three hours. Prerequisite: one course in biological science or consent of instructor. Recommended: Earth and Space Sciences 2 or equivalent. Survey of morphology, paleobotany, and evolution of vascular and nonvascular plants during geologic time, and particular emphasis on major evolutionary events. Mr. Schopf

120. Evolutionary Biology. Lecture, three hours; laboratory, two hours. Prerequisite: completion of all courses listed under "Preparation for the Major." Mathematics 31A, 31B, 32A are highly recommended. Recommended for Biology majors specializing in environmental and population biology. Introduction to the mechanics and processes of evolution with emphasis on natural selection, population genetics, speculation, evolutionary rates, and patterns of adaptation. Mr. Cody, Mr. Hespenheide (W)

121. Seminar in Ecology (1½ course). Discussion, two hours. Prerequisites: course 120 or 122 and consent of instructor. Undergraduate seminar in ecology: reading and discussion of current research, including preparation of review paper or annotated bibliography. May be repeated twice for credit.

122. Ecology. Lecture, three hours; laboratory, three hours. Prerequisite: completion of all courses listed under "Preparation for the Major." Mathematics 31A, 31B, 32A are highly recommended. Recommended for Biology majors specializing in environmental and population biology. Introduction to population and community ecology, with emphasis on the growth and distribution of populations, interactions between species, and the structure, dynamics and functions of communities and ecosystems. Mr. Cody, Mr. Vance (F)

123. Ecology of Marine Communities (1 or 2 courses). Prerequisites: course 122, approval for scuba diving from UCLA diving officer and consent of instructor; courses 105 and 112 are recommended. This course will be offered either as a full quarter course for 4 units credit or in the Field Biology Quarter as a concentrated five-week course for 8 units credit. Field study of the natural history and ecology of marine organisms and communities. Field work will involve scuba diving. Part of the course will be devoted to an independent research project. Mr. Morin, Mr. Vance

124. Field Ecology (1 or 2 courses). Lecture, two hours; laboratory or field trip, ten hours. Prerequisites: course 120 or 122 and consent of instructor. Field and laboratory research in ecology, the collection, analysis and write-up of numerical data, with emphasis on design and execution of field studies. The course may be either given as a quarter-long course with weekend field trips or as a single field trip conducted between quarters followed by lectures and tutorials for three weeks. When the course is given as part of the Field Biology Quarter, it will be 8 units and will last for five weeks. Mr. Cody
125. Plant Population Ecology (1 or 2 courses). Lecture, two hours; laboratory, six hours; field trips. Prerequisites: course 120 and consent of instructor. This course will be offered either as a quarter course for 4 units credited in the Field Biology Quarter, or as a concentrated five-week course for 8 units credit. A study of ecological variation, structure, distribution and reproductive biology of plant populations emphasizing field studies of selected populations and ecosystems. Mr. Cody

M127. Soils, Plants, and Society. (Same as Geography M127.) Lecture, three hours; field trip. Prerequisites: Chemistry 11A, 11B, 11C or equivalent or consent of instructor. An introduction to the structural, functional, and cultural significance of soil and plant ecosystems. Soil resources, management, conservation and cultural aspects. Soil profiles examined on the field trip are used to explain developmental phenomena. Mr. Lunt

128. Plant Physiological Ecology (1 or 2 courses). Lecture, three hours; laboratory and field, three hours. A study of plant-environmental interactions under natural conditions. Emphasis is on transpiration and photosynthesis, leaf temperatures, and water movement in the soil-plant-atmosphere continuum. Individual student projects. When the course is given as part of the Field Biology Quarter, it will be 8 units and the individual research project will be correspondingly expanded. Mr. Nobel

129. The Behavior of Animals. Lecture, three hours; discussion, three hours. Prerequisite: course 111 or consent of instructor. Ecological significance, underlying mechanisms, and evolution of behavior, with special reference to animal sociology under natural conditions. Mr. Collas

130. Behavior Research Problems. Lecture, three hours; laboratory, two hours. Prerequisites: courses 5, 6, 11A, 11B, 11C or equivalent and nonobtrusive sensing procedures for behavior studies in the laboratory and field. Rationale, design, and limitations of laboratory studies of behavior. Mr. Kavanau

131. Insect Ecology (1 or 2 courses). Lecture, two hours; laboratory or field trip, eight hours. Prerequisites: course 120 or 122 and consent of instructor. Analysis of the ecological roles of insects in terrestrial communities, with emphasis on interactions between both plants and vertebrates. The course will pull groups and individual field projects. The course may either be given as a quarter-long course with weekend field trips or as part of the Field Biology Quarter. When given as part of the Field Biology Quarter, it will be 8 units and the amount of field work increased accordingly. Mr. Hespenheide

M134. Human Genetics. (Same as Biomechanics M134.) Lecture, three or four hours; discussion, one or two hours. Prerequisites: courses 5, 7, 8, 11A, 11B, 11C or equivalent. Introduction to the heritage and biology of the human species. Topics include mutation at the locus, chromosome, family and population levels; inborn errors of metabolism; ascertainment bias; linkage; X inactivation; gene regulation. Mr. Brunk, Mr. Fessler, Mr. Ray (F, W, Sp)

145A-145B-145C. Molecular Biology Laboratory. Laboratory, twelve hours. Prerequisite: consent of instructor. It is highly desirable that the student have already taken course 144. A course in experimental molecular biology. The student embraces original research under supervision. Space available is limited, and arrangements must be made in advance with the instructor. Mr. Sailer (F, W, Sp)

146. Physiological Biochemical Laboratory. Lecture, four hours. Prerequisites: courses 5, 7 or consent of instructor. A course in experimental molecular biology. The student embraces original research under supervision. Space available is limited, and arrangements must be made in advance with the instructor. Mr. Sailer (F, W, Sp)

147. Biological Oceanography. Lecture, five hours; laboratory, fifteen hours (five-week intensive course). Prerequisites: completion of "Preparation for the Major." Lecture: physical, chemical, and biological factors affecting the composition and distribution of plankton. Natural history of major phytoplankton and zooplankton taxa; production in marine food chains; adaptation to pelagic habitat. Laboratory: systems of morphology of major plankton taxa; experimental studies of local marine plankton with emphasis on measurement of feeding, primary and secondary productivity, and nutrient flux. Course to be given at the Catalina Marine Science Center. Mr. Muscatine

148. Biology of Marine Plants. (Formerly numbered 101.) Lecture, five hours; laboratory, fifteen hours. Prerequisites: "Preparation for the Major" and consent of instructor. An introduction to the general biology of marine plants; includes basic aspects of structure and reproduction, life histories, systematics and an introduction to the physiology and ecology of marine algae. Techniques in culture and laboratory investigation and utilization of algae to be studied at the Catalina Marine Science Center. Mr. Chapman

149. Plant Biochemistry and Photosynthesis. Lecture/discussion, four hours. Prerequisite: completion of all courses listed under "Preparation for the Major." A survey course emphasizing basic principles of biochemistry, including photosynthesis: nitrogen fixation and metabolism; sulfur metabolism; respiration; plant pigments, lipids, proteins and nucleic acids; the cell wall; terpenes; alkaloids and flavonoids.

150. Experimental Physiology and Mycology. Lecture, three hours; discussion, one hour; laboratory, six hours. Prerequisite: course 100 or equivalent or consent of instructor. Study of algae and fungi emphasizing basic concepts in such topics as photobiological phenomena, physiology of growth, nutrition and reproduction; physiological ecology. Laboratory includes isolation and culture techniques and experiments designed to introduce students to a wide range of experimental uses of algae and fungi. Mr. Chapman

152. Functional Plant Anatomy. Lecture, three hours; laboratory, six hours. Prerequisite: completion of all courses listed under "Preparation for the Major." An introduction to descriptive and functional histology, using light and electron microscope information. Discussion of histological research methods. Mr. Lake (Sp)

154. Functional Ultrastructure of Cells and Tissues. Lecture, three hours; discussion, one hour. Prerequisites: courses 5 or 7, Chemistry 21, 23, 25 or equivalent. Basic life processes at the supramolecular and molecular levels. Intrinsic and functional significance of the various cells and tissue types in higher plants, plus the patterns of growth and differentiation in roots, stems, leaves, flowers, and fruits. Mr. D. Walker

155. Histology. Lecture, three hours; laboratory, four hours. Prerequisite: completion of all courses listed under "Preparation for the Major." An introduction to qualitative and functional histology, using light and electron microscope information. Discussion of histological research methods. Mr. Lake (Sp)

156. Functional Ultrastructure of Cells and Tissues. Lecture, three hours; discussion, one hour. Prerequisites: courses 5 or 7, Chemistry 21, 23, 25 or equivalent. Basic life processes at the supramolecular and molecular levels. Intrinsic and functional significance of the various cells and tissue types in higher plants, plus the patterns of growth and differentiation in roots, stems, leaves, flowers, and fruits. Mr. Walker

157. Cell Biology (1 course). Lecture, three hours; laboratory, six hours. Prerequisites: completion of all courses listed under "Preparation for the Major" and Biology 8 or M134 or equivalent (genetics). The cell is an individual and autonomous cell with emphasis on the correlation of structure and function at the molecular, organelar, and cellular levels. Mr. Cascarano, Mr. James, Mr. Simpson

162. Plant Physiology. Lecture, three hours; laboratory, six hours. Prerequisite: completion of all courses listed under "Preparation for the Major." Water movement within the plant body and between the plant and its environment. Soil genesis, characteristics and plant-soil interrelations. Salt movement across membranes and through tissues. Hormonal control of growth and development. Photomorphogenesis. Photoperiodism and flowering. Photochemical and physiological aspects of photosynthesis. Mr. Laties, Mr. Thormbor (F)
183. Plant Physiology Laboratory. Lecture, one hour; discussion, one hour; laboratory, eight hours. Prerequisites: course 162. Students are introduced to the instrumentation used in Plant Physiology research by performing experiments based on the lecture material in 162. Subsequently, students working singly or in groups will undertake a research project of their own design under the supervision of the staff.

186. Animal Physiology (1½ courses). Lecture, three hours; laboratory, five hours. Prerequisite: completion of all courses listed under "Preparation for the Major." Normally to be taken after course 158. An introduction to physiological principles with emphasis on organ systems and intact organisms.

Mr. Eckert, Mr. Engelmann, Mr. Narins (F,Sp)

187. Comparative Physiology. Lecture, three hours; laboratory, four hours. Prerequisites: courses 158, 166 or equivalent. Survey of the physiology of insects with emphasis on functional adaptations.

Mr. Engelmann

190A-190D. Honors Research in Biology (1/2 to 1 course each). Prerequisites: senior standing and permission of the Undergraduate Advisor. Individual research designed to broaden and deepen the student's knowledge of some phase of biology. Must be taken for at least two quarters and for a total of at least two courses. Grade will only be given upon completion of 190B. Students may elect to enroll in additional research under 190C-190D for a letter grade. A report on progress must be presented to the Undergraduate Advisor each quarter a 190 course is taken. A maximum of eight units of 190 may be used to fulfill the requirements for the Biology major.

The Staff (F,W,Sp)

199. Special Studies (1/2 to 2 courses). Prerequisites: consent of instructor and Undergraduate Advisor. This consent is based on a written proposal outlining the study or research to be undertaken. The proposal should be worked out in consultation with the instructor and submitted for approval to the Biology Undergraduate Advisor. This course involves substantial biological consideration, either or both as background for policy and as consequences of policy.

Mr. Gordon, Ms. Tobin

BIOMATHEMATICS / 85

M185. Immunology. (Same as Microbiology M185 and Microbiology and Immunology M185.) Lecture, three hours; discussion, one hour. Prerequisite: course 8, Chemistry 23, 25. Concurrent enrollment in Chemistry 152 or 156 is recommended. Introduction to experimental immunobiology and immunochemistry, cellular and molecular aspects of humoral and cell immune reactions.

Mr. Clark, Mr. Sercarz

M186. Experimental Design in Immunology. (Same as Microbiology M186 and Microbiology and Immunology M186.) Laboratory, twelve hours. Prerequisites: course M185 and consent of instructor. This course will focus on a limited number of situations designed to train the student in organizing and evaluating immunological laboratory experiments. Must be taken concurrently with Biology M187.

Mr. Clark, Mr. Sercarz

190A-190D. Honors Research in Biology (1/2 to 1 course each). Prerequisites: consent of instructor. Investigations and discussions of important current issues involving substantial biological considerations, either or both as background for policy and as consequences of policy.

Ms. Tobin

199. Special Studies (1/2 to 2 courses). Prerequisites: consent of instructor and Undergraduate Advisor. This consent is based on a written proposal outlining the study or research to be undertaken. The proposal should be worked out in consultation with the instructor and submitted for approval to the Biology Undergraduate Advisor. This course involves substantial biological considerations, either or both as background for policy and as consequences of policy.

Mr. Gordon, Ms. Tobin

170. Physiological Ecology of Arthropods. Lecture, three hours; discussion, one hour. Prerequisite: course 166 or equivalent. The physiology of terrestrial arthropods, including their distribution and function in natural environments.

The Staff

171. Principles of Neurobiology. Lecture, three hours; discussion, one hour. Prerequisite: course 166 or consent of instructor. An introduction to basic principles of neurobiology, including a description of the structure of neurons and nervous systems; the ionic mechanisms responsible for generating membrane potentials, action potentials, and synaptic potentials; the properties of synaptic transmission, the information transduction and coding in sensory pathways, and the neural control of movement; development of and trophic interactions between cells of the nervous system.

Mr. Eckert, Mr. O'Lague

172A-172B. Introductory Laboratory in Neurophysiology. Laboratory, eight hours each. Prerequisite: course 171 or consent of instructor. Limited enrollment. Laboratory investigation of the function of central and peripheral nervous systems in invertebrates and vertebrates. Emphasis will be on electrophysiological approaches to basic neurophysiological problems. To be taken concurrently.

Mr. Eckert, Mr. O'Lague

173. Anatomy and Physiology of Sense Organs. Lecture, three hours; discussion, one hour. Prerequisite: course 166 or equivalent; one course in biochemistry or physical chemistry. Principles of chemical integration in biological systems.

Ms. Szego

175. Invertebrate Endocrinology. Lecture, three hours; discussion, one hour. Prerequisites: course 158 or 166 or equivalent; one course in biochemistry. A comprehensive treatment of invertebrate endocrinology.

Mr. Engelmann

180. Advanced Topics in General Endocrinology. Lecture, three hours; discussion, one hour. Prerequisite: course 177 or consent of instructor. Detailed consideration of selected mechanisms in endocrine control of growth and differentiation.

Ms. Szego

181. Parasitology and Symbiosis (1½ courses). Lecture, three hours; laboratory, six hours. Prerequisites: courses 5, 7, 13. An introduction to the principles, biology, and evolution of infectiousness, symbiosis, and parasitism, emphasizing major human parasites, including those of man.

Mr. Macniss

182. Experimental Parasitology. Laboratory, eight hours. Prerequisite: consent of instructor. Introduction to the use of parasites in experiments concerning basic biological problems and to problems concerning parasitism.

Mr. Macniss

Graduate Courses

For complete descriptions of graduate-level courses offered by this department, please consult the UCLA Graduate Catalog.

Biomathematics

(Office Department: AV-617 Center for Health Sciences)

The Department of Biomathematics does not offer an undergraduate degree. The following upper division courses are offered with enrollment restrictions as indicated:

Upper Division Courses

107. Introduction to Biomathematics in Genetics. Prerequisites: introductory genetics course and consent of instructor. Use of mathematical modeling in biology with specific reference to analysis of family data in genetics. Topics include linkage and polygenic inheritance.

Ms. Spence

110. Elements of Biomathematics. Prerequisite: Calculus. Analysis of deterministic models including some general approaches to the study of homeostasis. Conditions under which deterministic and probabilistic descriptions of biological phenomena are appropriate. Both approaches will be applied to selected examples in epidemiology and enzyme kinetics.

Mr. Peskov and the Staff

M134. Human Genetics. (Same as Biology M134.) Prerequisites: Biology 5, 7, elementary organic chemistry and biochemistry (equivalent to Chemistry 21 and 23 or equivalent). Survey of the physiology of insects with emphasis on functional adaptations. To be used to fulfill the requirements for the Biology major.

Mr. Gordon

170A-170B-170C. Selected Biomathematical Topics for Researchers in Medicine and Biology. Prerequisite: none for 170A, for 170B and 170C, elementary calculus. Basic techniques for examination of data, planning of experiments, comparison of theory and experiment. Commonly used models (e.g., compartment, transport) will be developed and used to determine the properties of specific models. Models may include use of computer.

The Staff

171A-171B. Selected Topics for Dental Researchers (1/2 course). Prerequisite: of particular interest to students in dentistry. Instruction in critical and efficient use of the experimental design, analysis of data using BMD programs, and some basic modeling techniques. Review of modern biomathematical techniques in craniofacial research and other areas of interest to dentistry.

The Staff

190A-190B. Honors Research in Biomathematics. Prerequisites: upper division standing, consent of instructor. Individual study of some aspect of biomathematics designed to acquaint the student in depth with mathematical models and computer applications in biology. Must be taken for at least two quarters and for a total of at least two courses. A report on completion of 190B. Students may elect to enroll in additional research under 190C-190D for a letter grade. A report on progress must be presented to the Undergraduate Advisor each quarter a 190 course is taken. A maximum of eight units of 190 may be used to fulfill the requirements for the Biology major.

The Staff (F,W,Sp)

Graduate Courses

For complete descriptions of graduate-level courses offered by this department, please consult the UCLA Graduate Catalog.
Business/Economics Major for Business Teachers

This major has been designed in accordance with the State law governing the Single Subject (Secondary) Teaching Credential with a Specialization in Secondary Teaching for business teachers. The program consists of a departmental major in Economics and Management.

Preparation for the Major

Economics 1, 2; Management 1A, 1B, 13; two courses in calculus (e.g., Mathematics 3A, 3B, 4A-4B or 31A, 31B) which must be passed with a grade of "C" or better; Economics 40, Mathematics 50A or Management 115A; Speech 1.

The Major

Economics 101A, 101B, 102, 160 and three courses selected from upper division economics courses; Management 108, 109 (or English 130 or 131 or 136A), 120, 130 and three courses selected from upper division management courses.

Upper Division Course

199. Special Studies (1/2 to 1 course). Prerequisites: senior standing and consent of instructor. The Staff

Requirements for Teaching Credentials

Students may earn credentials for teaching business, economics and other subjects in California elementary and secondary schools. Consult with the Graduate School of Education (201 Moore Hall) for information.

Chemistry

(Office: 3010 W.G. Young Hall)

Frank A. L. Anel, Ph.D., Professor of Chemistry; Daniel E. Atkinson, Ph.D., Professor of Chemistry; Emilio Baur, Ph.D., Professor of Chemistry; Kyle D. Bayes, Ph.D., Professor of Chemistry; Paul D. Boyer, Ph.D., Professor of Chemistry; Orville L. Chapman, Ph.D., Professor of Chemistry.

Donald J. Cram, Ph.D., Professor of Chemistry; David S. Eisenberg, Ph.D., Professor of Molecular Biology in Chemistry; Mostafa A. El-Sayed, Ph.D., Professor of Chemistry; Paul S. Farrington, Ph.D., Professor of Chemistry; Christopher S. Foote, Ph.D., Professor of Chemistry; William M. Gelbart, Ph.D., Professor of Chemistry; E. Russell Hardwick, Ph.D., Professor of Chemistry; M. Frederick Hawthorne, Ph.D., Professor of Chemistry; Herbert D. Kacso, Ph.D., Professor of Chemistry; Daniel Kavelon, Ph.D., Professor of Chemistry; Charles M. Knobler, Ph.D., Professor of Chemistry; William G. McMillan, Jr., Ph.D., Professor of Chemistry; John P. McTague, Ph.D., Professor of Chemistry; Malcolm F. Nicol, Ph.D., Professor of Chemistry; Howard Reiss, Ph.D., Professor of Chemistry; Verne N. Schumaker, Ph.D., Professor of Molecular Biology in Chemistry; Robert L. Scott, Ph.D., Professor of Chemistry; Robert A. Smith, Ph.D., Professor of Chemistry; Robert V. Stevens, Ph.D., Professor of Chemistry; Kenneth N. Trueblood, Ph.D., Professor of Chemistry; John T. Wasson, Ph.D., Professor of Geochemistry and Chemistry; Charles A. West, Ph.D., Professor of Chemistry; Francis E. Blacet, Ph.D., D.Sc., Emeritus Professor of Chemistry; Clifford S. Garner, Ph.D., Emeritus Professor of Chemistry; Thomas L. Jacobs, Ph.D., Emeritus Professor of Chemistry; James D. McCullough, Ph.D., Emeritus Professor of Chemistry; William G. Young, Ph.D., D.Sc., Emeritus Professor of Chemistry; Eric J. Heller, Ph.D., Associate Professor of Chemistry; John M. Jordan, Ph.D., Associate Professor of Molecular Biology in Chemistry; Michael E. Jung, Ph.D., Associate Professor of Chemistry; Jerome V. V. Kasper, Ph.D., Associate Professor of Chemistry; Charles E. Strouse, Ph.D., Associate Professor of Chemistry; Joan S. Valentine, Ph.D., Associate Professor of Chemistry; Richard L. Weiss, Ph.D., Associate Professor of Chemistry; Jeffery I. Zink, Ph.D., Associate Professor of Chemistry; John A. Glaetlyz, Ph.D., Assistant Professor of Chemistry; Jay D. Galla, Ph.D., Assistant Professor of Chemistry; Steven G. Clarke, Ph.D., Assistant Professor of Chemistry; Harold G. Martinson, Ph.D., Assistant Professor of Chemistry; Joseph R. Murdoch, Ph.D., Assistant Professor of Chemistry; Emil Reiser, Ph.D., Assistant Professor of Chemistry; Robert M. Sowet, Ph.D., Assistant Professor of Chemistry in Residence.

Sandra I. Lamb, Ph.D., Lecturer in Chemistry; Lawrence H. Levine, Ph.D., Lecturer in Chemistry; Arlene A. Russell, M.A., Lecturer in Chemistry.

Admission to Courses in Chemistry

Regular and transfer students who have the prerequisites for the various courses are not thereby assured of admission to those courses. The department may deny admission to any course if a grade of "D" was received in a course prerequisite to that course, or if in the opinion of the department the student shows other evidence of inadequate preparation. A student may not repeat a chemistry course if that student has credit for a more advanced course which has the first course as a prerequisite.

Preliminary Examination in Chemistry

Students who wish to enroll in course 11A or in course 11AH must take the Chemistry/Mathematics Preliminary Examination in Chemistry during the enrollment period for the quarter in which they intend to enroll in these courses. Enrollment usually will be limited to students who have passed the examination. During 1981-82, the Preliminary Examination is scheduled on September 21, 1981, for the Fall Quarter; January 6, 1982, for the Winter Quarter, and March 31, 1982, for the Spring Quarter. These dates may be changed. The time and location of the examination will be posted on the First Year Chemistry Bulletin Board located near 1054 Young Hall (Chemistry Building) about two weeks before the announced date of the examination.

The Majors in Chemistry

There are three majors available to the student interested in chemistry: the regular Chemistry major, the Biochemistry major and the General Chemistry major. Each of these programs is outlined below. Students may contact Dorothy Seymour, Undergraduate Counselor, for help and advice in the Chemistry Undergraduate Office, 4016 Young Hall.

Courses taken to fulfill any of the requirements for any of the Chemistry Department's majors must be taken for a letter grade and not Passed/Not Passed. Seminar courses, individual study courses and research courses (e.g., 190, 191) may not be used to satisfy the requirements for the major in Chemistry, Biochemistry or General Chemistry.

Chemistry Major

For students who intend to pursue a career in chemistry.

Preparation for the Major

Required: Chemistry 11A, 11B, 11BL, 11C, 11CL, 21, 23, 25; Physics 8A, 8B, 8C (0 strongly recommended); Mathematics 31A, 31B, 32A-32B, 32A (or former courses 31A-31B-31C, 32A, 32C). No specific foreign language is required; however, a reading knowledge of German (at least at the level of German 3) is strongly recommended for students planning to pursue graduate work in chemistry.

The Major

Chemistry 110A, 110B, 113A, 114 (or 114H), 133A, 133B, 133C, 173 and two other upper division or graduate courses in chemistry including at least one laboratory course selected from 136, 144, 154, 174, 184.
Biochemistry Major

The major in Biochemistry is intended for students preparing for careers in biochemistry or in other fields requiring extensive preparation in both chemistry and biology.

Preparation for the Major

Chemistry 11A, 11B, 11BL, 11C, 11CL, 21, 23, 25; Mathematics 31A, 31B, 32A, 32A (or former courses 31A-31B-31C and either 32A or 32C); three courses from Physics 6A*, 6B, 6C, 8A, 8B, 8C, 8D; Biology 5, 8, 8L.

*If physics courses from both the 6 and 8 series are taken, undue duplication must be avoided.

The Major

Chemistry 133A, 133B, 133C, 110A, 156, 157A, 157B, 154, plus one course from each of the following five categories: (1) Microbiology 101; (2) one course from Biology 137, 138, 140, 141, 153, 154, 156, Microbiology 111; (3) one course from Biology 158, 162, 166, Microbiology 113; (4) one upper division or graduate-level course in biology, biological chemistry or microbiology; (5) one upper division or graduate-level course in biology, biological chemistry, chemistry, microbiology, or physics. Courses chosen to satisfy categories 4 and 5 must be approved by the Biochemistry Undergraduate Advisor.

General Chemistry Major

The major in General Chemistry is intended for students who wish to acquire considerable chemical background in preparation for careers outside chemistry. The requirements are accordingly quite flexible. It may be appropriate for some students who plan to enter professional schools, such as those of medicine, dentistry or public health.

Preparation for the Major

Chemistry 11A, 11B, 11BL, 11C, 11CL, 21, 23, 25; Mathematics 31A, 31B, 32A, 33A (or former courses 31A-31B-31C and either 32A or 32C); three courses from Physics 6A*, 6B, 6C, 8A, 8B, 8C, 8D.

*If physics courses from both the 6 and 8 series are taken, undue duplication must be avoided.

The Major

Six upper division courses in chemistry, including at least one in physical chemistry and at least two with laboratory work, six additional upper division courses. A 2.0 average is required in all upper division chemistry courses. The program should be coherent in terms of the student's interests and objectives and must be based on a written proposal and approved by the Chemistry Undergraduate Advisor.

Transfer Students

Transfer students with more than 84 quarter units will be accepted into the Chemistry De-
23. Bioorganic Structure and Reactions. Lecture, four hours; discussion, four hours. Prerequisite: courses 11CL and 21 with grades of "C-" or higher or consent of instructor. Organic structures and reactions of biochemical interest. The classes of compounds most important to biochemical functions: amino acids, carbohydrates, etc. Sulfur, phosphorous, and arylidine chemistry. Methods of separation, purification and analysis of organic compounds: extraction, crystallization, distillation, and chromatography.

Mr. Clarke, Ms. Lamb, Mr. Stevens

25. Elementary Biochemistry. Lecture, three hours; discussion, one hour; laboratory, four hours. Prerequisite: course 23 with a grade of "C-" or higher or consent of instructor. Protein structure and function, metabolism; cell constituents; properties and biosynthesis of nucleic acids and proteins. Purification and characterization of biological macromolecules, spectrophotometry; catalysis; chromatography; viscosity; utilization of radioisotopes.

Mr. Atkinson, Mr. Gralla, Mr. Weiss (F,W,Sp)

96. Special Courses in Chemistry (% to 1 course). To be arranged. Prerequisite: consent of Chemistry Undergraduate Advisor. The Staff (F,W,Sp)

Upper Division Courses

103. Environmental Chemistry. Lecture, four hours. Prerequisites: courses 21, 23, 25 or consent of instructor. Chemical aspects of air and water pollution, solid waste disposal, energy resources, and pesticide effects. Chemical reactions in the environment, and the effect of chemical processes on the environment.

Mr. Baur (Sp)

110A. Physical Chemistry: Chemical Thermodynamics. Lecture, four hours; discussion, one hour. Prerequisites: Chemistry 11C, Physics 3B or 6C or may be taken concurrently; intermediate metabolism; cell components; thermodynamics of gases

Mr. Baur, Mr. McMillan, Mr. Nicol (F,W,Sp)

110B. Physical Chemistry: Chemical Equilibrium, Electrochemistry, and Kinetics. Lecture, four hours; discussion, one hour. Prerequisites: Chemistry 110A, Physics 6C. Introduction to statistical thermodynamics, kinetic theory of gases, chemical kinetics, enzyme catalysis, chemical equilibria in solutions, electrochemistry.

Mr. McTague, Mr. Trueblood (W,Sp)

110C. Physical Chemistry: Charges, Fields and Matter. Lecture and discussion, four hours. Prerequisite: course 110A. Selection of topics from: Electrostatic magnetic field in matter—susceptibilities, molar polarization and refraction, multipole, van der Waals forces; classical EM waves—propagation, refraction, scattering, absorption, optical rotation and rotary dispersion, magnetic effects; Radiation—multipole, black-body, Einstein coefficients, lasers; Scattering and diffraction—Rayleigh, Mie, Raman, X-ray, electron, neutron, nuclear—by particles, molecules, latc, biological phenomena—light, EPR, NMR, NOE, Mössbauer; Electrolytes—ion activity, conductivity, rate effects.

Mr. McMillan (Sp)

113A. Physical Chemistry: Introduction to Quantum Chemistry. Lecture, four hours; discussion, one hour. Prerequisites: Chemistry 11C, Physics 6C or 8C, Mathematics 31A, 31B, 32A, 32A (or former courses 31C and 32C). An introduction to the principles and applications of quantum chemistry: atomic structure and spectra; harmonic oscillator; rigid rotor, molecular spectra.

Mr. Gelbart, Mr. McTague (F,Sp)

113B. Physical Chemistry: Introduction to Molecular Spectroscopy. Lecture, four hours; discussion, one hour. Prerequisite: course 113A or equivalent. Spectroscopic applications of basic quantum chemistry, including light-matter interaction, origin of selection rules, rotation-vibration spectra, aromatic effects, resonance phenomena—light, EPR, NMR, laser spectroscopy and radiationless transitions.

Mr. Nicol (W)

114. Physical Chemistry Laboratory. Lecture, two hours; laboratory, eight hours. Prerequisites: courses 11C, 110A, 110B, 113A or consent of instructor. Laboratory: techniques of physical measurement, error analysis and statistics, special topics. Laboratory: spectroscopy, thermodynamic measurements, and chemical thermodynamics.

Mr. Bayes, Mr. Kasper, Mr. Scott (F,W,Sp)

114H. Physical Chemistry Laboratory—Honors Course. Lecture, two hours; laboratory, eight hours. Prerequisite: courses 11C, 110A, 110B, 113A with a grade of "B" or better or consent of instructor. Laboratory: techniques of physical measurement, error analysis and statistics, special topics. Laboratory: topics in physical chemistry to be selected in consultation with the instructor.

Mr. Bayes, Mr. Nicol, Mr. Strouse

115A-115B. Quantum Chemistry. Lecture, four hours. Prerequisites: Chemistry 113A, Mathematics 31A, 31B, 32A-32B, 33A (or former courses 31C and 32C). Recommended: Knowledge of differential equations equivalent to Mathematics 135A or Physics 131 and of analytic mechanics equivalent to Physics 105C. Course 115A or Physics 115B is prerequisite for course 115B. Postulates and systematic development of many-electron wave mechanics; expansion theorems; wells; oscillators; angular momentum; hydrogen atom; matrix techniques; approximation methods; time-dependent problems; potentials; spectroscopy; magnetic resonance; chemical bonding. Students are expected to take course 115B the following quarter. These two courses are designed for chemistry students with a serious interest in quantum chemistry.

Mr. Gelbart, Mr. Reiss (115A-W; 115B-SP)

*121. Special Topics in Physical Chemistry. Lecture, four hours. Prerequisite: course 110A (113A and Physics 8D recommended). Each offering of the course covers several topics that are of considerable research interest and will be presented at a level suitable for students who have completed the junior year courses in physical chemistry.

Mr. Gelbart, Mr. Knobler, Mr. Scott (F,Sp)

"125. Computers in Chemistry. Lecture, three hours. Prerequisites: courses 110A, 110B, 113 and a working knowledge of FORTRAN IV or PL/I. Discussion of computer techniques, including matrices manipulation, solution of differential equations, data acquisition and instrumentation control, and their applications to chemical problems in quantum mechanics, thermodynamics, and kinetics. Mr. Kasper (Sp)

133A. Intermediate Organic Chemistry. Lecture and quiz, three hours; laboratory, four hours. Prerequisites: courses 21, 23, 25 (25 may be taken concurrently) with grades of "C" or higher or consent of instructor. Lecture: Structure, reactivity and spectroscopy of organic compounds. Laboratory: Methods of organic reactions, synthesis, isolation and characterization.

Mr. Chapman, Mr. Mudrock (F,Sp)

133AG. Intermediate Organic Chemistry (% course). Lecture and quiz, three hours. Open to the Chemistry Graduate Advisor to graduate students who have not taken course 133A at this institution.

Mr. Chapman, Mr. Mudrock (F,W)

133B. Intermediate Organic Chemistry. Lecture and quiz, three hours; laboratory, four hours. Prerequisite: course 133B-133A or equivalent. Lecture: Reactions, mechanisms and synthesis in organic chemistry; common classes of compounds and reactions.

Mr. Chapman, Mr. Mudrock (W,Sp)

133BG. Intermediate Organic Chemistry (% course). Lecture and quiz, two hours. Open only by consent of the Chemistry Graduate Advisor to graduate students who have not taken course 133B at this institution.

Mr. Chapman, Mr. Mudrock (F,Sp)

133C. Intermediate Organic Chemistry. Lecture and quiz, three hours; laboratory, four hours. Prerequisite: course 133B with a grade of "C-" or higher. Lecture: Reactions, mechanisms and synthesis in organic chemistry; complex molecules and natural products; polymers. Laboratory: Methods of organic reactions, synthesis, isolation and characterization.

Mr. Chapman, Mr. Mudrock (F,Sp)

133D. Intermediate Organic Chemistry (% course). Lecture and quiz, four hours. Prerequisite: consent of Chemistry Graduate Advisor to graduate students who have not taken course 133D at this institution.

Mr. Chapman, Mr. Mudrock (F,Sp)

133E. Organic Structural Methods. Lecture and quiz, four hours. Prerequisites: courses 133A, 133B, 133C or equivalent with grades of "C-" or higher or consent of instructor. Laboratory course in organic structure determination by chemical and spectroscopic methods; microtechniques.

Mr. Foote (F)

143A. Structure and Mechanism in Organic Chemistry. Lecture, three hours; discussion, one hour. Prerequisites: courses 133C (may be taken concurrently), 110B, 113A or equivalent with a grade of "C-" or higher or consent of instructor. Mechanisms of organic reactions. Acidic and acid catalysis; linear free energy relationships; isotope effects. Molecular orbital theory; photochemistry; pericyclic reactions.

Mr. Boyer (W,Sp)

143B. Mechanism and Structure in Organic Chemistry. Lecture, three hours; discussion, one hour. Prerequisite: course 143A with a grade of "C-" or higher or consent of instructor. Mechanisms of organic reactions, structure and detection of reactive intermediates.

Mr. Anet (Sp)

144. Laboratory Methods in Organic Synthesis. Lecture, two hours; laboratory, eight hours. Prerequisite: course 133C or equivalent instruction including spectroscopic methods of organic chemistry with a grade of "C-" or higher or consent of instructor. Laboratory methods of synthetic organic chemistry including reactions under inert atmosphere, semimicroscale reaction techniques, synthesis of natural products and molecules of theoretical interest.

Mr. Jung (Sp)

152. Biochemistry. Lecture, four hours; discussion, one hour. Prerequisite: course 25. Survey of biochemistry. May not be used in the Chemistry or Biochemistry major. Not open to students with credit in Chemistry 157A.

Mr. Boyer (F)

154. Biochemical Methods. Lecture and quiz, two hours; laboratory, eight hours. Prerequisite: course 25; course 157A or 152 recommended. Applications of biochemical procedures to metabolic problems, properties of living systems; enzymes; Proteins; nucleic acids and other tissue constituents.

Mr. Gelbart, Mr. Jordan, Mr. Schumaker (F,Sp)

156. Physical Biochemistry. Lecture, four hours; discussion, one hour. Prerequisite: course 110A. Solution of biochemical problems by method of appropriate physical methods; properties of living systems; enzymes; Proteins; nucleic acids and other tissue constituents.

Mr. Eisenberg, Mr. Reisler, Mr. Schumaker (F,Sp)
157A. Biochemistry. Lecture, four hours; discussion, one hour. Prerequisites: courses 156, 133B (133B may be taken concurrently). Enzymes; metabolic pathways and their integration and regulation; biochemical energetics.

Mr. Atkinson, Mr. Jordan (W)

157B. Biochemistry. Lecture, four hours; discussion, one hour. Prerequisite: course 157A. Biosynthetic metabolism; synthesis of nucleic acids and proteins, and control of these processes.

Mr. Atkinson, Mr. Clarke, Mr. Jordan (Sp)

173. Structural Inorganic Chemistry. Lecture, three hours. Prerequisites: courses 113A; 110A (may be taken concurrently); 133B recommended. Introductory survey of structure and bonding in inorganic compounds; molecular stereochemistry; donor-acceptor interactions; coordination compounds of the transition metals; elements of crystal field and ligand field theory.

Mr. Hawthorne, Mr. Kaesz, Mr. Zink (F;Sp)

174. Inorganic and Metalorganic Laboratory Methods. Lecture, two hours; laboratory, eight hours. Prerequisites: courses 173, 133A or consent of instructor. Synthesis of inorganic compounds including air-sensitive materials; dry-box, vacuum line and high-pressure techniques; Schlenk methods; chromatographic and ion exchange separations.

Mr. Hawthorne, Mr. Kaesz (W)

175. Inorganic Reaction Mechanisms. Lecture and quiz, three hours. Prerequisites: courses 110A, 110B, 113 or consent of instructor. Survey of inorganic reactions; mechanistic principles; electronic structure of metal ions; transition-metal coordination chemistry; inner- and outer-sphere and chelate complexes; substitution, isomerization and racemization reactions; stereochemistry; oxidation—reduction, free—radical, polymerization and photochemical reactions of inorganic species.

Mr. Hawthorne (Sp)

176. Group Theory and Applications to Inorganic Chemistry. Lecture, three hours. Prerequisites: courses 113A, 173. Group theoretical methods; molecular orbital theory; ligand field theory; electronic spectroscopy; vibrational spectroscopy.

Mr. Zink (F)

184. Chemical Instrumentation. Lecture and quiz, two hours; laboratory, eight hours. Prerequisite: course 110A. 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.

Mr. Strouse, Mr. Wasson (F;Sp)

190. Undergraduate Thesis Research. Prerequisite: two quarters of Chemistry 199 on related material and approval of the Undergraduate Advisor and Research Director. Final quarter of an integrated one-year research project. Can consist of experimental and/or theoretical research or, in some cases, a comprehensive review of a given area. A thesis embodying the totality of the year's work is to be submitted, and an oral presentation will be made. This course is suggested, but not required, for those seeking departmental honors at graduation.

Mr. Strouse, Mr. Wasson (F;Sp)

198. Special Courses in Chemistry. (1 to 1 course). To be arranged. Prerequisite: consent of Chemistry Undergraduate Advisor.

Mr. Hawthorne (F;W;Sp)

199. Directed Individual Study or Research for Undergraduate Students (1 to 2 courses). To be arranged with individual faculty members involved. Each faculty member has a unique letter designation, which is the same for the 199 and 599 series. Prerequisite: advanced junior standing and 3.0 GPA in the major (or senior standing) and consent of Chairman of the Department of Chemistry. This consent must be based upon a written proposal outlining the study or research to be undertaken. The proposal should be worked out in consultation with the faculty member involved and submitted at the Chemistry Undergraduate Advisor's Office before the first day of the quarter. At the close of each quarter, a report describing the student's program of study or research and signed by the student and supervising faculty member must be submitted to the Chemistry Undergraduate Advisor, who should be consulted concerning the format of the report and deadlines for submission. A maximum of three 199 courses may be taken. Passed/Not Passed grades are used for this course. Approval of other than four units per quarter is allowed only under unusual circumstances.

Mr. Hawthorne, Mr. Kaesz, Mr. Zink (F;Sp)

Graduate Courses

For complete descriptions of graduate-level courses offered by this department, please consult the UCLA Graduate Catalog.

Chemistry/Materials Science

(Interdepartmental)

Major in Chemistry/Materials Science

This major is recommended for students who are interested in solid state chemistry, the preparation of engineering materials such as semiconductors, glasses, ceramics, metals and polymers, the reactivity of such materials in different environments and how chemical compositions affect properties. It provides appropriate preparation for graduate studies in many fields emphasizing interdisciplinary research involving chemistry, engineering and applied science.

Preparation for the Major

One course from each of the following departments: Anthropology 22, 5 or 6; Economics 1 or 2; History 6A, 6B or 6C; Political Science 1; Sociology 1; Spanish 5 or its equivalent.

The Major

This consists of three elements, one of which is optional:

(1) Major Core: Eight courses: Education 102; English 105; History 159A-159B, 197; Political Science 147; Sociology 124 or 155; Spanish 141 or M149.

(2) Major Concentration: Four courses in one discipline selected from the following: Anthropology 115, 135P, 135Q, 136P, 138, M140, 150, 154, 166, 167, 185; Economics 110, 120, 121, 150, 151, 152, 172; English 104, 106, 171, 172, 173, 174, 188, 189, 190; History 147B, 153, 154B, 160, 162, 163; Political Science 115, 142, 149, 171, 172B, 173, 174, 181, 182A, 186, 190, 191; Psychology 127, 130, 133D, 134, 135, 136, 137A, 137B, 137C, 143, 175; Sociology 109, 113, 120, 123, 125, 129, 140, 142, M143 and 155 or 124; Spanish 100, 103, 105, 109, 115, M118, 121A, 121B, 137, 139, 144A, 146A, 147A, three to four courses from 140D, 141, 142A, 143A, 145A, 146D, 147B, 147E, 148, two courses from 142L, 144L, 145L, 146L, 147M.

For further information, contact Professor John D. Mackenzie, 6531 Boelter Hall (825-3539).

Chicano Studies

(Interdepartmental)

(Program Office: 3132 Campbell Hall)

Major in Chicano Studies

This multidisciplinary program leading to the Bachelor of Arts degree in Chicano Studies is designed to provide systematic instruction for liberal arts and preprofessional majors who wish concentrated study of the Chicano experience. Viewed as developmental, the program subjects the Chicano reality to critical investigation and analysis, including the social, economic, educational, historical, political and psychological analysis of the Chicano.

This major is recommended for students who plan to prepare themselves for graduate study, as well as students preparing for public service careers. Students are encouraged to spend up to one year in either (a) a service agency in the Chicano community or (b) in a professional research project on the Chicano experience.

Preparation for the Major

One course from each of the following departments: Anthropology 22, 5 or 6; Economics 1 or 2; History 6A, 6B or 6C; Political Science 1; Sociology 1; Spanish 5 or its equivalent.

The Major

This consists of three elements, one of which is optional:

(1) Major Core: Eight courses: Education 102; English 105; History 159A-159B, 197; Political Science 147; Sociology 124 or 155; Spanish 141 or M149.

(2) Major Concentration: Four courses in one discipline selected from the following: Anthropology 115, 135P, 135Q, 136P, 138, M140, 150, 154, 166, 167, 185; Economics 110, 120, 121, 150, 151, 152, 172; English 104, 106, 171, 172, 173, 174, 188, 189, 190; History 147B, 153, 154B, 160, 162, 163; Political Science 115, 142, 149, 171, 172B, 173, 174, 181, 182A, 186, 190, 191; Psychology 127, 130, 133D, 134, 135, 136, 137A, 137B, 137C, 143, 175; Sociology 109, 113, 120, 123, 125, 129, 140, 142, M143 and 155 or 124; Spanish 100, 103, 105, 109, 115, M118, 121A, 121B, 137, 139,
Areas of Concentration

(1) Language and Society: Classics 180 (prerequisites: Greek 1-3 and Latin 1-3), 3 courses from either Latin 100-150 or Greek 100-130. Related courses: Anthropology M140, Communication Studies 100, Linguistics 100, M150, 170, Philosophy 127A, 127B, 172.


(4) Ancient Art, Architecture and Urbanism: Classics 150, 151A, 151B, 151C (new courses are under study and will be added). Related courses: Art 103A, 103B, 103C, 103D, 105A, Geography 151, Sociology 125, same History and Anthropology courses as above under 3.

Preparation for the Other Majors

Required: Greek 1, 2, 3 and Latin 1, 2, 3 or equivalent.

The Major in Greek

Required: (1) Nine upper division courses in Greek, including Greek 110; (2) one upper division course in Latin; (3) Classics 142 and either Classics 141 or 143; (4) two courses in Greek or Roman history (History 115B-115C, 116A-116B, 117A-117B); (5) two additional courses in one or two of the related areas: classical archaeology (Classics 151A, 151B, 151C, 151D), classical linguistics (Classics 180), classical mythology (Classics 161, 162, 168), Greek and Roman religion (Classics 166A, 166B), ancient philosophy (Philosophy 101, 102, Greek 121, 122, 123, 124), Byzantine civilization (Classics M170A, M170B), medieval Latin literature (Latin 131, 133). Total required: 16 courses.

The Major in Latin

Required: (1) Nine upper division courses in Latin, including Latin 110; (2) one upper division course in Greek; (3) Classics 143 and either Classics 141 or 142; (4) two courses in Greek or Roman history (History 115B-115C, 116A-116B, 117A-117B); (5) two additional courses in one or two of the related areas: classical archaeology (Classics 151A, 151B, 151C, 151D), classical linguistics (Classics 180), classical mythology (Classics 161, 162, 168), Greek and Roman religion (Classics 166A, 166B), ancient philosophy (Philosophy 101, 102, Greek 121, 122, 123, 124), Byzantine civilization (Classics M170A, M170B), m-
JOINT MAJOR FIELDS WITH OTHER DEPARTMENTS

Preparation for the English/Greek Major

English 2, 10A, 10B, 10C; Greek 1, 2, 3

The Major

(1) Seven courses selected from English 140-190 in consultation with an advisor in the Department of English; (2) seven upper division or graduate courses in Greek, including 100 and either 101A or 101B, chosen in consultation with an advisor in the Department of Classics (of these seven courses at least two will be in poetry and two in prose). Total required: 14 courses.

Preparation for the English/Latin Major

English 2, 10A, 10B, 10C; Latin 1, 2, 3

The Major

(1) Seven courses selected from English 140-190 in consultation with an advisor in the Department of English; (2) seven upper division or graduate courses in Latin, including 105A and 115, chosen in consultation with an advisor in the Department of Classics (of these seven courses, at least two will be in poetry and two in prose). Total required: 14 courses.

Courses Which Do Not Require a Knowledge of Greek or Latin


Classics

Lower Division Courses

10. Survey of Classical Greek Culture. Lectures, many illustrated, on Greek life and culture from the age of Homer to the Roman conquest. Discussion of art, literature, philosophy, and mythology. Readings in the Greek authors are suggested, but not required. A knowledge of Greek is not required.

Mr. Lattimore

20. Survey of Roman Civilization. A study of life and culture of Rome from the time of its foundation to the end of antiquity. A survey of art, literature, and political thought of the Romans. Selections from Latin authors are read in translation. A knowledge of Latin is not required.

Mr. Frischer

M70. Survey of Medieval Greek Culture. (Formerly numbered 146A.) (Same as History M70.) Classical roots and medieval manifestation of Byzantine civilization: political theory, Roman law, pagan critique of Christianity, literature, theology, and contribution to the Renaissance (including the discovery of America).

Mr. Dyck

Upper Division Courses

141. A Survey of Greek Literature in English. A study of classical Greek literature, exclusive of the drama, with readings in English.

Ms. Bergren, Mr. Haslam


Mr. Dyck, Mr. Haslam


Mr. Dyck, Mr. Frischer

144. A Survey of Greek and Roman Epic in Translation. Homer's Iliad and Odyssey, Vergil's Aeneid and Ovid's Metamorphoses will be studied in translation.

Ms. King

150. The Female in Antiquity. Lecture, three hours. An interdisciplinary analysis of the status of women in antiquity. Myth, art, literature and historical sources are studied through current anthropological and psychoanalytic methodology. Special emphasis on the concept of the female in Classical thought.

Ms. Bergren

151A. Classical Archaeology: Graeco-Roman Architecture. A general introduction to the study of Aegean, Greek, and Roman architecture.

Mr. Lattimore

151B. Classical Archaeology: Graeco-Roman Sculpture. A general introduction to the study of Aegean, Greek, and Roman sculpture.

Mr. Lattimore

151C. Classical Archaeology: Graeco-Roman Painting. A general introduction to the study of Aegean, Greek, and Roman painting.

Mr. Lattimore

151D. Classical Archaeology: The Aegaeon Bronze Age. The course is a survey of the prehistoric art and archaeology of the Greek lands. A knowledge of Greek is not required.

The Staff

161. Introduction to Classical Mythology. The origins of classical myth; the substance of divine myth and heroic saga; the place of myth in religion; a survey of the study of classical mythology.

Ms. Bergren, Mr. Lattimore, Mr. Puhevel

162. Classical Myth in Literature. The use of myth in the principal authors and genres of Greek and Roman literature with examples of its influence in later literatures.

Ms. Bergren, Mr. Lattimore

165. Ancient Athletics. A study of ancient Greek and Roman athletics and their connections with religion, politics, literature and art.

Mr. Frischer, Mr. Lattimore

168A. Greek Religion. A study of the religion of the ancient Greeks.

Mr. Dyck

168B. Roman Religion. A study of the religion of the ancient Romans.

Mr. Puhevel

168. Introduction to Comparative Mythology. Prerequisite: course 161 or consent of instructor. The religious, mythical, and historical traditions of Greece and Rome compared with each other and with those of other ancient Near Eastern and European societies.

Mr. Puhevel

M170A. Byzantine Civilization. (Same as History M122A.) Emphasis is laid on Byzantine Theology.

Mr. Dyck

M170B. Byzantine Civilization. (Formerly numbered 145C.) (Same as History M122B) Literature, relations with Rome, and the Renaissance.

Mr. Dyck


Mr. Puhevel

195. Senior Paper. Enrollment is limited to seniors majoring in Classical Civilization. Supervised through individual consultation with an appropriate member of the regular Classics faculty, the student will write a research paper on a topic of his own choosing within his area of concentration in the major.

The Staff

199. Special Studies in Classics (% to 2 courses). Prerequisites: senior standing and consent of instructor.

Graduate Courses

For complete descriptions of graduate-level courses offered by this department, please consult the UCLA Graduate Catalog.

Greek

Lower Division Courses

1. Elementary Greek. Lecture, five hours per week.

The Staff

2. Elementary Greek. Lecture, five hours per week. Prerequisite: course 1. The Staff

3. Elementary Greek. Lecture, five hours per week. Prerequisite: course 2.

The Staff

4. The Greek Element in English. A knowledge of Greek is not required. A study of the derivation and usage of English words of Greek origin; analysis into their component elements directed toward understanding of form and meaning.

The Staff

Upper Division Courses

Note: Greek 3 is prerequisite to 100. Greek 100 is prerequisite to 101-107 and 111-124, and prerequisite or corequisite to 110.

100. Readings in Greek Prose. Prerequisite: Greek 3. Plato's Apology or a text of comparable difficulty is read.

The Staff

101A. Homer: Odyssey.

Ms. Bergren, Ms. King, Mr. Puhevel

101B. Homer: Iliad.

Ms. Bergren, Ms. King, Mr. Puhevel

102. Lyric Poets. Selections from Archilochus to Bacchylides.

Ms. Bergren, Mr. Haslam

103. Aeschylus.

Ms. Bergren, Mr. Haslam

104. Sophocles.

Ms. Bergren, Mr. Haslam

105. Euripides.

Mr. Frischer, Mr. Haslam, Ms. King

106. Aristophanes.

The Staff
107. Theocritus. Mr. Frischer, Mr. Lattimore
108. The Study of Greek Prose. Work in sight reading and grammatical analysis of Attic prose texts; writing the Attic prose.
109. Herodotus. Ms. Bergren, Mr. Lattimore
110. Thucydides. Mr. Haslam, Mr. Lattimore
111. Plato. Mr. Dyck, Mr. Haslam
112. Aristotle. Poetics and Rhetoric. Mr. Haslam
113. Aristotle. Ethics. Mr. Dyck, Mr. Frischer
114. Readings in the New Testament. Prerequisite: Greek 3. Mr. Haslam
115. Readings in Later Greek. Prerequisite: Greek 100. Topics treated will vary from year to year; they will include “Longinus.” On the Sublime; Marcus Aurelius; Arius; Second Sophistic; Plutarch; Longinus, on epic; epigram; epistolographi Graeci. Mr. Dyck
116. Survey of Byzantine Literature. Prerequisite: Greek 100. Readings will be based on (1) Anthology of Byzantine Prose, ed. Nigel Wilson and (2) Oxford Book of Medieval and Modern Greek Verse, ed. C.A. Trypanis, or if this is unavailable, Poeti bizantini, ed. R. Cantarella. In addition, necessary historical and cultural background will be provided by readings and lectures. Mr. Dyck
117. Readings in Byzantine Literature. Prerequisite: Greek 132. Topics to be treated will vary from year to year; they will include Procopius, Agathias, Michael Psellus, the Alexiad of Anna Comnena and Digenis Akritas. Mr. Dyck
118. Greek Drama: Study and Performance (2 courses). Prerequisite: consent of instructor. Intensive critical study of a dramatic work in Greek, culminating in its performance in the original language and manner of presentation. May be repeated for credit whenever a different play is studied and performed. The Staff
119. Special Studies in Greek (1/2 to 2 courses). Prerequisites: senior standing and consent of instructor. The Staff

Graduate Courses
For complete descriptions of graduate-level courses offered by this department, please consult the UCLA Graduate Catalog.

Latin

Lower Division Courses
1. Elementary Latin. Lecture, five hours per week. The Staff
1G. Elementary Latin for Graduate Students (No credit). Offered concurrently with Latin 14, being identical in scheduling and content. The Staff
2. Elementary Latin. Lecture, five hours per week. Prerequisite: course 1. The Staff
2G. Intermediate Latin (Intensive) (No credit). Prerequisite: Latin 2 or 14 with a grade of “B” or better or consent of instructor. Review of grammar; reading of selected portions of Latin Prose ranging from Classical to Medieval, with emphasis on historical texts. The Staff
3. Elementary Latin. Lecture, five hours per week. Prerequisite: course 2. The Staff
14. Elementary Latin (Intensive) (2 courses). The intensive course in Latin will cover all the declensions of nouns and adjectives, all conjugations in the indicative mood and the primary uses of the subjunctive mood. Emphasis will be given to the development of the ability to read easy selections of classical prose. The Staff
15. Intermediate Latin (Intensive) (2 courses). Prerequisite: Latin 2 or 14 with a grade of “B” or better or consent of instructor. Intensive critical study of a dramatic work in Latin, culminating in its performance in the original language and manner of presentation. May be repeated for credit whenever a different play is studied and performed. The Staff

Graduate Courses
For complete descriptions of graduate-level courses offered by this department, please consult the UCLA Graduate Catalog.

Related Upper Division Courses in Other Departments
Art 103A. Greek Art.
103B. Hellenistic Art.
103C. Roman Art.
117A-117B. History of Rome.
121A. The Early Middle Ages.
121B. The Later Middle Ages.
123A-123B. Byzantine History.

Indian-European Studies 132. European Archaeology: The Bronze Age.
M150. Introduction to Indo-European Linguistics.
Philosophy 101A. Plato—Earlier Dialogues.
101B. Plato—Earlier Dialogues.
102. Aristotle.

Courses on Other Campuses
Exchange and resource-sharing programs make it possible for UCLA students to take classics and classics-related courses at other schools in the Southern California area, e.g., UCSB, USI, USC. The classics departments at all these schools should be consulted for specific details.

Communication Studies
(Interdepartmental)

(Program Office: 232 Royce Hall)

Donald E. Hargis, Ph.D., Emeritus Professor of Communication Studies.
Paul I. Rosenthal, Ph.D., Associate Professor of Communication Studies (Chairman).
Patrice French, Ph.D., Assistant Professor of Communication Studies and Psychology.

Janet Weathers, Ph.D., Lecturer in Communication Studies.

The major in Communication Studies seeks to provide the student with a comprehensive knowledge of the nature of human communication, the symbol systems by which it functions, the environments in which it occurs, its media and its effects. The major draws its resources from the social sciences, humanities and fine arts. The specialization in Mass Communication centers upon formal and institutional communication systems and the social contexts in which they function. The specialization in Inter-
personal Communication centers upon face-to-face communicative interaction in the small group environment. Students selecting the major must complete the required lower division prerequisites and a minimum of 16 upper division courses as set forth below.

Enrollment in the major is limited. Admission to the major will be by application to the Committee in Charge. Applications are available in 232 Royce Hall.

For purposes of breadth requirements, the Communication Studies major is classified within the social sciences division.

**Preparation for the Major**

Communication Studies 10, Linguistics 1, Psychology 10, Sociology 1. Linguistics 2 is required for students who elect to specialize in Interpersonal Communication.

**The Major**

**Required core courses:** Communication Studies 100 and 101 and one course from Anthropology M140, Communication Studies 102 or Linguistics 100.

**Specializations**

**Mass Communication:** (1) Theory and Method—Required courses: Communication Studies 140, 152 and either Communication Studies 147 or Sociology 122, and one course from Political Science 141, Psychology 137B or Sociology 150; (2) Modes of Mass Communication—Two courses chosen from Communication Studies 160, 165, 170; (3) Media and Media History—Two courses chosen from Journalism 192, Theater Arts 106A, 108, 110A and either Theater Arts 116 or Communication Studies 175; (4) Electives (five courses)—Two courses chosen from Communication Studies 120, 130, Psychology 135 or Sociology 154, Psychology 137A or Sociology 152, Sociology 155; three courses chosen from one of the following three groups: (a) Language Theory—Communication Studies 142, 150, Linguistics 100, 170, Philosophy 127, Psychology 123; (b) Media and Media History—Journalism 192, Theater Arts 106A, 108, 110A and either Communication Studies 175 or Theater Arts 116; (c) Social Systematics—Anthropology 133P, 133R, 135P, 142A, 142B, Sociology 144A, 144B or either Anthropology 134 or Sociology 151.

**Lower Division Course**

10. **Introduction to Communication Studies.** An introduction to the fields of mass communication and interpersonal communication. Study of modes, media, and techniques of mass communication, interpersonal processes, and communication theory.

_the Staff_

**Upper Division Courses**

100. **Communication Theory.** Prerequisite: Communication Studies 10, Linguistics 1, Sociology 1. Psychology 10 or consent of instructor. Analysis of the fundamental nature of human communication: its physical, linguistic, psychological and sociological bases. Study of theoretical models explicating the process and constituents of the communicative act. Mr. French

101. **Freedom of Communication.** Analysis of legal, political and philosophical issues entailed in the rights of free expression, access to an audience, and access to information. Study of court decisions governing freedom of communication in the United States. Mr. Cowan, Mr. Rosenthal

102. **The Code of Human Communication.** Prerequisite: Communication Studies 10, Sociology 1. Psychology 10, Linguistics 1 or consent of instructor. The structural analysis and description of human communication codes: the development of language; characteristics of the source, channels and destination in human communication. Ms. French

115. **Dyadic Communication and Interpersonal Relationships.** Prerequisite: course 100. This course will emphasize the developmental approach to the study of communication in dyadic relationships. Differences in the stages of relationships will be analyzed in terms of communication rules and verbal and nonverbal messages. Ms. Weathers

120. **Principles and Types of Group Communication.** Prerequisite: course 100 or consent of instructor. Analysis of the purposes, principles, and processes of small group communication. Particular emphasis upon the organization of and participation in problem-solving discussion. Ms. Weathers

130. **Cultural Factors in Interpersonal Communication.** Prerequisite: course 100 or consent of instructor. Study of cultural factors as they affect the quality and processes of interpersonal communication: exercises in the participation, analysis, and criticism of inter-ethnic and interracial communications in the small-group configuration. Ms. Weathers

140. **Theory of Persuasive Communication.** Prerequisite: course 100 or consent of instructor. The dynamics of communication designed to influence human conduct; analysis of the structure of persuasive discourse; integration of theoretical material drawn from relevant disciplines of the humanities and social sciences. Mr. Rosenthal

142. **Rhetorical Theory.** Prerequisite: course 100 or consent of instructor. Survey of the major classical and neoclassical treatises on rhetoric. Analysis of the theories of Plato, Aristotle, Cicero, Quintilian, St. Augustine, Blair, Whately, Campbell, and other leading works in the theory of rhetoric. The Staff

147. **Mass Communication and Social Systems.** Prerequisite: course 100 or consent of instructor. Comparative analysis of major theories about relationships between mass media and social systems from the interpersonal to the international level; emphasis on empirical research. The Staff

150. **Analysis of Communication Content.** Prerequisite: course 100 or consent of instructor. Study of methodologies for the qualitative and quantitative analysis of the content of communications. Ms. French

152. **Analysis of Communication Effects.** Prerequisite: course 100 or consent of instructor. Survey of experimental and field research on the effects of communications. Study of source, message, and environmental factors affecting audience response.

160. **Political Communication.** Prerequisites: courses 100 and 101 or consent of instructor. Study of the nature and function of communication in the political sphere; analysis of contemporary and historical communications within established political institutions; state papers; deliberative discourses; electoral campaigns. The Staff

165. **Agitational Communication.** Prerequisites: courses 100 and 101 or consent of instructor. Theory of agitation: agitation as a force for change in existing institutions and policies in a democratic society. Intensive study of selected agitational movements and the technique and content of their communications. The Staff

170. **Legal Communication.** Prerequisites: courses 100 and 101 or consent of instructor. Study of the trial and appellate processes as systems of communication. Analysis of the elements of the judicial process as they affect the quality of communication content. Study of the rules of evidence, jury behavior, and the structure of legal discourse. Mr. Rosenthal

175. **Criticism and the Public Arts.** Prerequisite: course 100 or consent of instructor. An introduction to methods and problems of criticism in the public arts. Several types of critical methods will be studied: formalistic, analogue, pragmatic, and aesthetic criticism. Topics include the definition of art and criticism, the aesthetic media, genre and resources of film, television, theatre and public discourse, the varieties of critical method, the problems of critical judgment.

The Staff

179. **Undergraduate Honors Program.** Prerequisites: senior standing; grade-point average of 3.5 in Communication Studies major and 3.3 overall. Variable topic course involving specialized study of selected aspects of the field of human communication. Enrollment is limited.

The Staff

199. **Special Studies for Honors Candidates.** (1 to 2 courses). Prerequisites: senior standing and consent of instructor. A course of independent study for senior undergraduates who desire an intensive or specialized investigation of selected research topics. To be arranged with the member of the faculty who will direct the study.

The Staff

**Comparative Literature**

**Literature (Interdepartmental)**

(Program Office: 334D Royce Hall)

The Comparative Literature Program does not offer an undergraduate degree. For detailed information on graduate degrees offered by this program, please refer to the UCLA Graduate Catalog.
Cybernetics
(Interdepartmental)

Majors in Cybernetics

The major provides an introduction to quantitative foundations of information processing, communication, control and system analysis, accompanied by complementary studies of models and phenomena arising in the life sciences, health sciences, bioengineering, etc. The major is appropriate preparation for employment or for graduate or professional studies emphasizing interdisciplinary activity. Technical courses for the major are offered in the School of Engineering and Applied Science, and accompanying course work is taken in biology, psychology, linguistics, mathematics, the School of Medicine and related disciplines. Options may be arranged within the major to feature: (1) cybernetics and biology, emphasizing physiology, cell biology and the nervous system; (2) cybernetics and premedical studies; (3) cybernetics and psychology, emphasizing physiological psychology, perception and learning; (4) mathematical system analysis; (5) cybernetics and linguistics; (6) computing aspects of cybernetics and bioengineering.

Preparation for the Major

Biology 5, Chemistry 11A, Engineering 10C or 10F, Mathematics 31A, 31B, 32A-32B, 33A, 33B, Physics 8A or 6A, 8C or 6B; two courses selected from Biology 6, 7, 8 and Chemistry 11B, 11C, 21, 23, 25 and two laboratories selected from Biology 6L, 8L, Chemistry 11BL, 11CL; two additional courses selected from these biology and chemistry series or from Computer Science 20, 30, Physics 6C, 8B, 8D, 8E, Psychology 10, 41. The major advisor will recommend selections appropriate to the various options. In general, Cybernetics majors are encouraged to complete as much as possible of the lower division biology, chemistry and physics series at some time during their four-year program.

The Major

Fourteen courses as follows: two courses in group (a) below; five courses from not more than two of the groups (a), (b), (c), (d); three courses in group (e); three courses from groups (e) and (f); one course selected from any of the groups (a) through (g).

The groups are: (a) upper division courses in biology, microbiology, organic chemistry and biochemistry (chemistry courses numbered 133 through 157) and physiological psychology (Psychology 115 through 118E); (b) Linguistics 100, 103, 104, 120A, 120B, 125, 145, 164, 165A, 165B; (c) Psychology 110 through 112E, 120 through 124, 150, 151; (d) courses in mathematics numbered 110 and above; (e) courses in system science numbered Engineering 120 through 129; (f) upper division courses in computer science, electrical sciences and engineering (Engineering 100, 100B, 100L and 110 through 119), biocybernetics (Engineering M196B); (g) other upper division courses for which the student is eligible in chemistry, physics, engineering, biological chemistry, biomathematics, physiology, public health.

Minimum Standards

Each course taken in preparation for the major and in the major itself must be completed with a letter grade of "C-" or higher. Furthermore, each student in the major must maintain an average of 2.5 or better in upper division courses in the major and in the lower division mathematics courses of the preparation for the major.

For further information, contact Professor Jack W. Carlyle, 3532 Boelter Hall (825-8807, 825-1322).

Dance

(Department Office: 205 Women's Gym)

Pia Gilbert, Professor of Dance.
Carol Scottorn, M.A., Professor of Dance (Chairwoman of the Department).
Allegre Snyder, M.A., Professor of Dance.
Emma Lewis Thomas, Ph.D., Professor of Dance.
Alma M. Hawkins, Ed.D., Emeritus Professor of Dance.
Elsie Dunin, M.A., Associate Professor of Dance.
Marion Scott, Associate Professor of Dance.
Doris Siegel, Associate Professor of Dance.
EIrma Alperson, Ph.D., Associate Professor of Dance.
Judith Susilo, M.A., Assistant Professor of Dance and Ethnic Arts.

Charles Berliner, M.F.A., Lecturer in Dance.
Gloria Bowen, Lecturer in Dance.
Chris Burnside, M.A., Lecturer in Dance.
Gary Callicott, Ph.D., Lecturer in Dance.
Toby Hankin, Lecturer in Dance.
Kathe Howard, M.A., Lecturer in Dance.
Margaret Owen Marshall, Lecturer in Dance.
Barbara Mattingly, Lecturer in Dance.
Emilio Pulido-Huizar, B.A.C., Lecturer in Dance.
Mia Slavenska, Lecturer in Dance.
Suenobu Togi, Lecturer in Dance.
Martin Tracy, M.A., Lecturer in Dance.
Medha von Essen, M.S., Lecturer in Dance.
Melinda Williams, M.A., Lecturer in Dance.

The Dance major offered in the College of Fine Arts leads to the Bachelor of Arts degree. For requirements, see the "College of Fine Arts." Students who wish to confer with the department counselor regarding program planning and major requirements should see Wendy Urfrig, 205 Women's Gym (825-3951).

Preparation for the Major


The Major

A total of 14 courses including Dance 111A-111B, 150A-150B-150C, 151A, 151B, 152A, 152B, 153A-153B-153C, 154, 158A-158B; two...
courses (8 units) chosen from upper division dance electives.

Admission to the Major
Readiness for admission to the upper division major is determined by a screening and evaluation conducted during Spring Quarter of the sophomore year.

All entering transfer students are auditioned for placement in technique and choreography classes.

Lower Division Courses
10A-10B-10C. Fundamentals of Creative Dance (1/2 course each). Prerequisite: for non-Dance majors. Courses must be taken in sequence. Basic modern dance skills with emphasis on body awareness, alignment, movement range, rhythm coordination and the exploration of the concepts of space, time, and energy in dance improvisation and composition. Ms. Williams

11A-11B-11C. Creative Dance (1/2 course each). Prerequisite: course 10C or consent of instructor. For non-Dance majors. Continuation of modern dance skills with increased emphasis on principles of structure and form in dance composition. Ms. Williams

30AF-30AW-30AS. Fundamentals of Ballet (1/2 course per year). Prerequisite: major in Dance or consent of instructor. This course is offered on an In Progress basis, which requires students to complete the full three quarter sequence, at the end of which a grade is given for all quarters of work. Students are admitted in the Fall Quarter only. Study of ballet technique and principles including dance terminology. Ms. Bowen

30BF-30BW-30BS. Fundamentals of Ballet (1/2 course per year). Prerequisite: open major in Dance or consent of instructor. This course is offered on an In Progress basis. Students are admitted in the Fall Quarter only. Complete the full three quarter sequence, at the end of which a grade is given for all quarters of work. Study of ballet techniques and principles including dance terminology. Students are admitted in the Fall Quarter only. Ms. Bowen

35. Music Analysis for Dance (1/2 course). Study of the elements of music, music structures, and their relationship to dance, with emphasis on rhythm analysis, dance accompaniment and teacher-accompanist roles. Mr. Gilbert

36A-36B-36C. Fundamentals of Creative Dance (1/2 course each). Open only to Dance majors. Study of dance through varied experience emphasizing the increasing ability to develop a skilled body-instrument, to respond to movement creatively and to understand structure and form in beginning dance composition. Principles and elements of dance and their relationship to other art forms. Ms. Williams

37A-37B-37C. Creative Dance (1/2 course each). Prerequisite: course 36C. A continuing study of dance emphasis on movement principles and choreography. Ms. Copperman

38A-38B. Dance Notation (1/2 course each). Study of labanotation with experience in recording and interpreting dance scores with emphasis on notation skills. Mr. Tracy

46A-46B. Fundamentals of Movement (1/2 course each). Prerequisite: consent of instructor. Study of the fundamentals of movement with emphasis on experiencing body awareness, exploring movement potential, and structuring of dance forms. Consideration of cultural influences on expressive forms. Ms. Susilo

50. Introduction to Dance (1/2 course). An introduction to the many and varied theoretical aspects of dance. Ms. Synder

52. Introduction to Dance Theatre (1/2 course). Prerequisite: course 36A or consent of instructor. Study of the interaction of the aesthetic components of dance theater. Mrs. Siege

70. Introduction to Performance in Ethnic Dance (1/2 course). Study of basic movement in ethnic dance forms. Mrs. Dunin

71A-71Q. Performance Courses in Ethnic Dance (1/2 course each). May not be repeated for credit. (A) Dance of Bali; (B) Dance of Africa; (E) Dance of India; (F) Dance of Israel; (G) Dance of Japan; (H) Dance of Java; (J) Dance of Mexico; (M) Dance of Spain; (P) Dance of Yugoslavia; (Q) Dance of Korea. The Staff

Upper Division Courses
111A-111B. Analysis of Human Movement. Prerequisite: course 111A must be completed before enrollment in 111B. A study of the biological and physical principles of movement and the effects of movement upon the structure and function of the human body. Mr. Tracy

111C. Analysis of Human Movement. Prerequisites: courses 111A and 111B. In-depth study of selected topics introduced in 111A and 111B. Mr. Tracy

112A-112F. Intermediate Modern Dance Technique (1/2 course each). Prerequisite: course 153C or consent of instructor. Advanced technique in contemporary dance with emphasis on performing skills. The Staff

116. Improvisation in Dance (1/2 course). Prerequisite: major in Dance or consent of instructor. Practical study of the art of improvisation with emphasis on centering, spontaneity, and the generation of new movement materials and forms as soloist and within the group. Ms. Daily

127. Foundation of Dance Education. Prerequisite: major in Dance or consent of instructor. Analysis and application of principles of movement and choreography in the teaching of modern dance in junior colleges and higher education. Ms. Williams

128. Dance as Culture in Education. Prerequisite: course 70A or consent of instructor. Analysis of theoretical and practical aspects of ethnic dance forms with special reference to teaching in higher education. Mrs. Dunin

131A-131B-131C. Intermediate Ballet (1/2 course each). Prerequisite: course 30B or consent of instructor. Open only to Dance majors. Courses must be taken in sequence. Study of developed techniques and principles of classical ballet including phrasing, combinations, and repertory works. Ms. Slavenska

132A-132F. Advanced Ballet (1/2 course each). Prerequisite: course 131C. Advanced technique in classical ballet with emphasis on performing skills. Ms. Slavenska

140A-140B-140C. Dance Cultures of the World. A survey of dance in selected cultures, the role of dance in society; consideration of style, rhythmic structure, historical background and related folklore. Lectures illustrated with demonstrations, film, slides and recordings. (A) Africa (folk and tribal traditions); (B) Asia (art, tribal and folk traditions); (C) North American Indians (tribal and folk traditions). Mrs. Snyder (F,Sp), Ms. Susilo (W)

141A-141B. Dance Forms. Prerequisites: courses 46A-46B or consent of instructor. A study that considers the physical environmental and cultural influences upon ritual and social dance forms while preparing students for basic observational and recording techniques. Includes the learning and application of beginning skills in Labanotation. Not open to students who have had credit for former courses 47A-47B-47C.

142. Dance in the Balkans. Prerequisite: course 71P. An introduction to the dance of the Balkans, factors influencing its development and social functions, consideration of relationship of dance to other art forms. Mrs. Dunin

143. Dance in India. Prerequisite: course 71E. An introduction to the dance of India, factors influencing its development and social functions, consideration of relationship of dance to other art forms. Ms. Susilo

144. Dance in Indonesia. Prerequisite: course 71A or 71H. An introduction to the dance of Indonesia, factors influencing its development and social functions, consideration of relationship of dance to other art forms. Ms. von Essen

151A. History of Dance in Western Culture, Origins to 1800. Lecture, four hours. Trends in the evolution of dance as an art form in historical context, with particular emphasis on the development of style in any given period. The shift from European court entertainment to American theatrical presentation is studied chronologically from the early 1600’s on. Mrs. Thomas

152A. Lighting Design for Dance Theater (1/2 course). Prerequisite: course 36C or consent of instructor. Study of aesthetics, principles and technical elements of lighting design. Mrs. Siegel

152B. Costume and Scenic Design Concepts for Dance Theatre (1/2 course). Lecture, two hours; laboratory, two hours. Prerequisite: course 37C or consent of instructor. General study of costume history, selected historical styles and introductory survey of costuming as a conceptual basis for visual awareness in theatrical dance design. Designer-choreographer relationships are explored. Mr. Berliner

152C. Advanced Studies in Dance Theater Lighting (1/2 course). Lecture, four hours; laboratory, four or more hours. Prerequisite: course 152A or consent of instructor. Analysis of diverse dance theater lighting problems at an advanced level and individual development of creative solutions. Mrs. Siegel


155. Form and Structure in Choreography. Prerequisite: major or consent of instructor. A study of the craft of choreography as taught by selected artists including Louis Horst, Doris Humphrey and Helen Tamiris. Attention will be given to their concepts of form and structure as well as philosophical bases on which these approaches were formed. Ms. Scott
158A-158B. Philosophical Bases and Trends in Dance (1½ courses). Prerequisite: course 158A must be completed before enrollment in 158B. Critical analysis of dance as one creative experience and the role of professional and educational dance in our society. Study of selected approaches to current development in dance. Mrs. Gilbert

159. Advanced Dance Notation. Prerequisites: courses 38A-38B. Intermediate and advanced Labanotation. Reconstruction and score preparation in ballet, modern, and ethnic dance. Mr. Tracy

160. Creative Dance for Children. Prerequisite: major in Dance or consent of instructor. Approaches to teaching dance as an expressive medium for children with emphasis on concepts and principles. (Weekly lab with children.) Ms. Williams

165A-165F. Movement Dynamics and Personality Growth (½ course each). (Formerly numbered 165A-165B-165C.) Prerequisite: course 150C or consent of instructor. This two-year sequential course focuses on group processes and dynamics, both at the nonverbal (movement) and verbal modes of experience. The course works toward achieving a significant level of psychological insight by the student, to assist in functioning professionally as an effective dance/movement therapist. Mrs. Lovell

171A-171P. Performance Courses in Ethnic Dance (½ course each). Each course may be repeated with consent of instructor, for a maximum of four units. Prerequisite: corresponding course in 71A-71P series (i.e., 71A is prerequisite to 171A, 71B is prerequisite to 171B, etc.). (A) Dance of Bali; (B) Dance of Ghana; (C) Dance of India; (D) Dance of Israel; (E) Dance of Japan; (F) Dance of Java; (G) Dance of Mexico; (H) Dance of Scotland; (I) Dance of Spain; (J) Dance of Yugoslavia. The Staff

190A-190B-190C. Advanced Dance Performance (½ course each). Prerequisite: consent of instructor. The study of performance of major choreography. Mrs. Scottorn, Ms. Scott

191. Repertory Dance Tour (½ to 1 course). Prerequisite: major in Dance or consent of instructor. Creation and performance of dance concerts in the community with special emphasis on the problems of the touring dance company with a variable repertoire. Mrs. Scottorn

197A-197B. Proseminar: Dance Perspectives (½ course each). Prerequisite: upper division standing or consent of instructor. Consideration of the aesthetic evolving from the work of the great artists of our time. The Staff

199. Special Studies in Dance (½, 1 or 2 courses). Prerequisites: senior standing and consent of instructor. The Staff

Graduate Courses

For complete descriptions of graduate-level courses offered by this department, please consult the UCLA Graduate Catalog.

Related Courses in Other Departments


To earn the Certificate in Diversified Liberal Arts, the student must complete all the requirements for the bachelor's degree in the College of Letters and Science. In addition, the student must complete required and elective courses in four areas: (1) English, (2) mathematics and the physical or life sciences, (3) social sciences, (4) humanities, fine arts and foreign language.

Requirements for one of the areas will normally be satisfied by the student's major; in addition, the student must complete seven courses (28 units) in each of two other areas and eight courses (32 units) in the fourth area. The student decides in which area to complete the eighth course. A grade of "C" or better must be earned in all courses specifically required for the program (i.e., English 120A, Mathematics 38A-38B, 104, History 7A, 7B, 151A or 151B). A "C-" or a Pass grade is not acceptable in these courses. A minimum "C" (2.0) grade point average is required in each of the four areas. "D" grades are not acceptable in the program. In addition to those courses listed above, courses in preparation for or on the student's major and in satisfaction of the humanities breadth requirements may not be taken P/NP.

Courses in divisions outside the major, which are required as preparation for or as part of the major, may be applied toward the area course requirements. However, no course may be applied in more than one area. Students will be expected to satisfy breadth requirements of the College of Letters and Science, but courses used to satisfy the breadth requirements may be applied on the Diversified Liberal Arts Program. Students must petition for admission to the program and are advised to see a counselor in the College of Letters and Science. The Dean of the College will certify completion of the program.

Area 1. English

Composition and Grammar (Required): Two courses: English 120A plus one course in satisfaction of the humanities breadth requirement. If the student wishes to complete the Area 1 requirements with additional composition and grammar, the courses must be chosen from the following: English 130, Linguistics 1, 2, 100.

Literature (Required): One course from English 10A, 10B, 10C, 112, 113, Humanities 1A, 1B and all upper division courses in English literature for which the student has the prerequisites. The student may complete more than one course from this list to satisfy the Area 1 course requirement.

Speech (Required): One course from Communication Studies 10, 100, Speech 1, 2, 107, 109. The student may complete more than one course from this list to fulfill the Area 1 course requirement.

Dentistry

(Oral Biology)

(Program Office: 63-050 Center for Health Sciences)

The Program in Dentistry (Oral Biology) does not offer an undergraduate degree. For detailed information on graduate degrees offered by this program, please refer to the UCLA Graduate Catalog.

Diversified Liberal Arts

(Interdepartmental)

(Program Office: 1312 Murphy Hall)

Certificate Program in Diversified Liberal Arts

In order to earn a credential to teach in California elementary schools, a student must complete the Teacher Credential Program in the Graduate School of Education and either earn a satisfactory score on the Common Section of the National Teachers Examination or complete the Diversified Liberal Arts Program (DLAP) in the College of Letters and Science.

Dentistry

(Oral Biology)

(Program Office: 63-050 Center for Health Sciences)

The Program in Dentistry (Oral Biology) does not offer an undergraduate degree. For detailed information on graduate degrees offered by this program, please refer to the UCLA Graduate Catalog.

Diversified Liberal Arts

(Interdepartmental)

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Certificate Program in Diversified Liberal Arts

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Related Courses in Other Departments

Area 2. Mathematics and the Physical or Life Sciences

Mathematics (Required): Mathematics 38A-38B and 104. Substitutions of other courses in mathematics may be made with the written approval of the Department of Mathematics and the Dean of the College of Letters and Science.

Physical or Life Sciences (Required): A minimum of 12 units in physical sciences and/or life sciences, apart from mathematics. To fulfill the Area 2 requirement, the student may elect courses that satisfy the physical sciences or life sciences breadth requirements.

Area 3. Social Sciences

History (Required): One course from History 7A, 7B, 151A, 151B. Other courses that the student may elect to fulfill the total area course requirement are those listed as fulfilling the social science breadth requirements.

Area 4. Humanities, Fine Arts and Foreign Language

Although there are no specific course requirements, courses used in this area must be selected from those courses listed as fulfilling the humanities breadth requirements and, in addition, any courses in foreign language and Dance 10A, 10B, 10C; Music 1, 113A, 113B; Theater Arts 118A, 118B, 119.

Students who plan to pursue the Diversified Liberal Arts Program should begin to take courses in their freshman year that will fulfill these requirements. Transfer students may elect courses that satisfy the physical sciences or social science breadth requirements.

Undergraduate Study

The programs described below are designed to provide the student majoring in Earth and Space Sciences with broad training in curricula leading to the Bachelor of Science degree in Geology or Geophysics. Students intending eventually to work toward a doctorate may want to attain reading proficiency in one or more appropriate foreign languages, required by many graduate schools.

Students majoring in the department should confer with the appropriate Undergraduate Counselor or before the beginning of each quarter. Sample undergraduate programs for the majors in Geology and in Geophysics are available in the advising office.

Bachelor of Science in Geology

Geology Specialty

Preparation for the Major: Earth and Space Sciences 1, 2, 51A, 51B, 51C; Biology 2; Chemistry 11A, 11B, 11BL, 11C, 11CL; Mathematics 31A, 31B, 32A; Physics 8A, 8B and 8C or 6B.


Engineering Geology Specialty

Preparation for the Major: Earth and Space Sciences 1, 51A, 51B, 51C; Biology 2; Chemistry 11A, 11B, 11BL, 11C, 11CL; Mathematics 31A, 31B, 32A, 33A; Physics 8A, 8B, 8C.

The Major: Earth and Space Sciences 103 or 141, 111A, 111B, 111C or 169, 112, 121A-121B, M136A, M139; Engineering 108, 184A, 184B, 185A, 185B; one course from Earth and Space Sciences 103, 137, 141, 150, Geography M102, Engineering 184D.

Paleobiology Specialty

Preparation for the Major: Earth and Space Sciences 1, 2, 51A, 51B, 51C; Biology 5, 6, 6L; Chemistry 11A, 11B, 11BL, 11C, 11CL, 21, 23; Mathematics 31A, 31B, 32A or 3A, 3B, 32A.


Geochemistry Specialty

Preparation for the Major: Earth and Space Sciences 1, 51A, 51B, 51C; Biology 2; Chemistry 11A, 11B, 11BL, 11C, 11CL, 21; Mathematics 31A, 31B, 32A, 33A (Mathematics 32B, 33B recommended); Physics 8A, 8B, 8C (Physics 8D recommended).

The Major: Earth and Space Sciences 111A, 111B, 111C or 169, M130, M131; Chemistry 110A, 110B, 113A, 114 (or Chemistry 23 and 25 or 184 or Earth and Space Sciences 132); three courses from Earth and Space Sciences 103, 112, 119, 121A-121B, 128A, 128B; Chemistry 23; two earth and space sciences or chemistry courses on approval of the advisor.
Nonrenewable Natural Resources Specialty

Preparation for the Major: Earth and Space Sciences 1, 2, 51A, 51B, 51C; Biology 2; Chemistry 11A, 11B, 11BL, 11C, 11CL; Mathematics 31A, 31B, 32A; Physics 8A, 8B and 8C or 6B.


Bachelor of Science in Geophysics

Applied Geophysics Specialty


Geophysics and Space Physics Specialty

Preparation for the Major: Earth and Space Sciences 1, 9; Chemistry 11A, 11B, 11BL, 11C, 11CL; Mathematics 31A, 31B, 32A-32B, 33A, 33B; Physics 8A, 8B, 8C, 8D.

The Major: Earth and Space Sciences 122, M149, M154; Physics 105A, 105B, 110A, 110B, 112A; Physics 131A or Mathematics 145A; three courses from Earth and Space Sciences 101, 119, M131, M136A, M136B, 150, 205, 233, Atmospheric Sciences 153, one of Mathematics 140A, 140B or 140C; three science electives on approval of the advisor.

Students planning to do graduate work in specialized careers in earth science should aim to take, when possible, appropriate courses in departments outside the major in addition to those already specified. Suggested graduate programs for various fields of emphasis are available in the Student Affairs Office, 3683 Geology, and will provide guidelines in choosing upper division courses.

Qualified undergraduate students may, upon consent of their advisors and the instructor, take Earth and Space Sciences graduate courses numbered from 200 to 250.

Honors in Geology or Geophysics

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 member of the faculty. Requirements for admission to candidacy are the same as those required for admission to the Honors Program 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 upon graduation to those students who have a cumulative GPA of 3.4, who have completed at least 20 graded courses at the University of California, and who have completed a minimum of two quarters (8 units) of course 199H leading to the preparation of a satisfactory honors thesis. Students demonstrating exceptional ability will be awarded Highest Honors.

Lower Division Courses

1. Fundamentals of Earth Science. Elements of earth science; study of earth materials; the nature and interpretation of geologic evidence; study of geologic processes; historical aspects of geology. The Staff (F, W, Sp)

2. Earth History. Prerequisite: course 1. Methods of historical science; consideration of special problems relating to the physical and biological evolution of the earth from earliest time to the present. Mr. Nelson (W)

3. Evolution: Solar System, Earth, Life. A nonmathematical course for the general University student. The origins and evolution of the solar system, emphasizing the planets Mercury, Venus, Earth, and Mars. Internal evolution of the earth and its geologic consequences (including oceans and atmosphere). Evolution of life; its interaction with the terrestrial environment. Mr. DeNiro, Mr. Ernst, Mr. Kaula (F)

4. Geologic Evolution of the Earth. Prerequisite: course 1 or consent of instructor. An enquiry into the structural geology of the earth. Mr. Watson (W)

5. Earth Science and Society: Geological Eco- logical Interactions. Geologic aspects of major environmental problems with emphasis on lithosphere-biosphere interactions. Problems of exploration and exploitation of fossil fuel resources. Comparison of society-produced materials and natural cycles. Mr. Reed (Sp)

6. Earthquakes. The causes and effects of earthquakes, with special emphasis on the problems of living with earthquakes in Southern California. Topics include the relationship between earthquakes and local and regional geology, types of earthquakes, past and future earthquakes in California. Earthquake engineering, disaster preparedness, and prospects for predicting or controlling earthquakes. Mr. Bird (W)


10. Geology of California. Prerequisite: course 1. General survey of major geologic features and geologic history of California; its relationship to large scale crustal motions of western North America and the eastern Pacific. Emphasis on geophysical and geological problems. Problems discussed include geophysical studies of geologic hazards such as earthquakes, landslides; aspects of urban geology. Mr. Nelson (Sp)

15. Introduction to Oceanography. Not open for credit to students who have taken Biology 25. Processes responsible for the chemical composition of the ocean, and the circulation patterns. Chemistry, spreading and morphology of the ocean floor. Biological productivity, marine ecology, and minerals forming in the ocean. Mr. DeNiro, Mr. Kaplan (F)

20. Natural History of Southern California. Identification, distribution, diversity of plants, animals, and communities; environmental factors influencing distribu- tion in algae to desert desert life zones. Identification, interpretation, and physical history of rocks, landforms, and structural geologic features within the physiographic regions of Southern California. Emphasis is on field based learning related to integrated aspects of natural history. Mr. Hall (Sp)

51A. Mineralogy-Petrology. Prerequisite: course 1 or consent of instructor; Chemistry 11C, 11CL recommended. Mineralogic crystal chemistry; relation of physical properties to structure. Structural classification and petrogenesis of the main rock-forming minerals. Laboratory study of crystallography and identification of minerals in igneous, sedimentary and metamorphic rocks. Mr. Dollase (F)

51B. Mineralogy-Petrology. Prerequisite: course 51A and an introductory course in high school or college physics or consent of instructor. Principles of optical crystallography. Utilization of optical properties to identify non-opaque minerals in immersion media. Mr. Dollase (W)

51C. Mineralogy-Petrology. Prerequisite: course 51B. Composition, occurrence, and origin of igneous, sedimentary, and metamorphic rocks; megascopic and microscopic study of rocks. Mr. Watson (Sp)

Upper Division Courses

**100.** Principles of Earth Science. Designed for nonmajors. Fundamentals of physical geology and earth history; major problems of geology, such as continental drift and development of large scale features of the earth; physical and biological evolution. Not open to students who have taken Earth and Space Sciences 1.

Mr. Oertel (W)

101. Introduction to Geophysics and Space Physics. Prerequisites: Physics 8A, 8B, 8C, Mathematics 31A, 31B, 32A. A survey of geophysics, the physics of the planets, their atmospheres, and the interplanetary medium, with emphasis on topics of current research interest. The course is designed primarily for students majoring in a physical science or mathematics. Mr. Coleman (F)

103. Intermediate Petrology. Prerequisite: course 51C. Microscopic and megascopic study of selected suites of igneous, sedimentary, and metamorphic rocks; their composition, occurrence, and origin. Mr. Carlisle (W)

Mr. Watson (W)

**105.** Earth Science and Society: Nonrenewable Resources and Geological Hazards. Prerequisite: course 1 or consent of instructor. An inquiry into the alternatives, opportunities and constraints imposed upon the society by mankind by geologic processes and by the characteristics of earth materials. Topics include the nature of non-petroleum mineral resources, mineral and environmental deplo- tions and conservation, the recognition of geological hazards and possible responses. Open to nonmajors. Mr. Carlisle

**108A.** Geothermics. Prerequisite: Mathematics 33A or consent of instructor. Basic concepts of heat transfer applied to the solutions of geological and geophysical problems. Problems discussed include continental heat flow, Cooling of oceanic lithosphere. Solidification of magmas. Thermal and subsidence history of sedimentary basins. Frictional heating on fault zones. Mantle geotherms. Temperature in descending slabs. Thermal convection in geothermal regions. Mr. Schubert

**108B.** Geomechanics. Prerequisite: Mathematics 33A or consent of instructor. Basic concepts of solid and fluid mechanics applied to the solutions of geological and geophysical problems. Problems discussed include stress and strain due to erosion and sediment deposition. Support of loads (volcanoes, seamounts, etc.) by tectonic plates. Plate bending at oceanic trenches. Viscous flow in the asthenosphere. Glacial rebound of a viscous mantle. Flow of ground water in aquifers. Flow of magma through channels. Thermal convection. Flow in porous media. Diapirism. Mr. Schubert
11A. Elements of Field Geology. Prerequisite: course 1 or consent of instructor; majors must have completed course 51C or be enrolled concurrently in courses 51A and 51B. Course 112 normally is taken concurrently. Techniques of geologic mapping; preparation of geologic reports; methods of mapping faults and folds, sedimentary, igneous, and metamorphic terrains, and Quaternary deposits; introduction to field methods in engineering and environmental geology; geologic mapping, petroleum geology, and mining geology and mineral exploration; interpretation of geologic maps; field exercises in pace-and-compass topographic and geologic mapping.

Mr. Bird (F)

11B. Stratigraphic and Field Geology. Prerequisite: course 111A or consent of instructor. Principles of stratigraphy; geologic mapping of a selected area; preparation of a geologic report.

Mr. DePaolo, Mr. Hall (W)

11C. Field Geology. Prerequisite: course 111B or consent of instructor. Interpretation of geologic maps and aerial photographs; plane-table mapping; geologic mapping of a selected area; preparation of a geologic report.

Mr. Boettcher, Mr. Christie (Sp)

111AG - 111BG - 111CG. Field Geology (½ to 1 course each). Prerequisite: graduate standing or consent of instructor. The evolution and distribution of fossils; the geologic report. Mr. Boettcher, Mr. Christie (Sp)

111A - 111B - 111C. Geologic report. The Staff (Sum)

112. Structural Geology. Prerequisite: course 111A normally is taken concurrently or consent of instructor. Planar and linear structures at different scales in sedimentary, metamorphic, and igneous rocks. Faults and folds, their description, classification, and dynamic analysis. Deformation, strength, fracture, and rheological properties of rocks. Mr. Christie (F)

*M114. Intermediate Structural Geology. Prerequisite: course 112 or consent of instructor. Large scale tectonics. The major structural features of the continental and oceanic crust of the earth; their geometry, geologic and geophysical characteristics and theories as to their mode of origin. Orogenesis, continental drift, sea-floor spreading and plate tectonics. Methods of structural analysis and interpretation of geologic structures.

Mr. Oertel

115. Principles of Paleontology. Principles governing the evolution and distribution of fossils; the geologic history of plants, invertebrates and vertebrates.

Mrs. Loeblich (M)

117. Vertebrate Paleontology. (Same as Biology M117.) Prerequisite: Biology 110. Recommended: a course in general geology. Limited enrollment. The fossil record of the evolution of the vertebrates, with emphasis on the morphology of primitive forms in the fish to mammals.

Mr. Vaughn (Sp)

*M118. Paleobotany. (Same as Biology M118.) Prerequisite: one course in biological science or consent of instructor. Recommended: course 2 or equivalent. Survey of morphology, paleobiology, and evolution of vascular and nonvascular plants during geologic time with particular emphasis on major evolutionary events.

Mr. Schopf (Sp)

119. Continental Drift and Sea Floor Spreading. Prerequisite: senior standing in earth and space sciences, physics or mathematics. Evidence for continental drift and sea floor spreading from age-dating of marine sediments and continents and from seismic, magnetic and heat-flow data. Description of sea floor topography and sediments. Processes at mid-ocean rises and edges of plates. Description of events on the continental margins. Biological and biostatigraphic implications. Field work at option of instructor.

Mr. Christie (Sp)

120A. Rubey Colloquium: Major Advances in Earth Science. Prerequisite: upper division standing. Lectures on major advances in earth science. Series of lectures to be offered by distinguished authorities (including regular faculty). Supervision of continuity and assessment of student performance by a faculty member. Series of lectures or short courses to cover topics such as continental drift or plate tectonics, non-renewable resources, natural hazards, geophysics, geochemistry (i.e., aspects of physical or chemical geology). Students should consult the department prior to enrolling in order to ascertain course content. Content or subjects will vary from year to year.

120B. Rubey Colloquium: Major Advances in Earth Science. Prerequisite: upper division standing. Lectures on major advances in earth science. Series of lectures to be offered by distinguished authorities (including regular faculty). Supervision of continuity and assessment of student performance by a faculty member. Series of lectures or short courses to cover topics such as major events in the evolution of life, paleocologic interpretation, paleobiologic aspects of continental drift, origin of life, etc. (i.e., aspects of biogeology). Students should consult the department prior to enrolling in order to ascertain course content. Content or subjects may vary from laboratory work and may be required of students enrolled in a course in Earth Science 199 (Special Studies in Earth and Space Sciences, ½ course).

121A - 121B. Advanced Field Geology (1½ courses each). Prerequisites: courses 111A, 111B, 111C or 112 or consent of instructor. Problems in field geology: preparation of geologic maps and cross-sections; preparation of written geologic reports in the field and a final written summary geologic report of selected areas.

The Staff (Sum)

*122. Physics of the Earth. Prerequisites: Physics 8A, 8B, 8C, Mathematics 31A, 31B, 32A or consent of instructor. Application of physics to the structure and evolution of the solid earth. Seismology, convection and flow, gravitational, magnetic and rock magnetism, and the relation of these topics to plate tectonics and other problems of current geophysical interest.

Mr. Anderson

128A. Mineral Deposits. Prerequisite: course 51C. Origin and occurrence of important mineral deposits, with emphasis on chalcophile elements and sulfide ores. (Alternates yearly with course 128B.)

Mr. Carlisle (Sp)

*M128B. Mineral Deposits. Prerequisite: course 51C. Origin and occurrence of important mineral deposits with emphasis on siderophile and lithophile elements and their minerals. (Alternates yearly with course 128A.)

Mr. Carlisle

*129. Coal (½ course). Prerequisites: courses 51C, 111B or consent of instructor. Coal resources and reserves of the major coal-bearing stages. Geological methods of estimating coal resources, and cost of extraction. Theories of coal formation. New geophysical techniques for estimating reserves. Boiling of coal to produce syngas, an alternative source of transportation energy from the coal deposits to urban centers of usage.

Mr. Anderson

M130. Isotope Geochronology. (Same as Geophysics and Planetary Physics M130.) Prerequisites: junior or senior standing in physical science and consent of instructor. Theoretical aspects of geochronology, particularly Carbon-14 dating. Application of radiocarbon and radiotopic (238U/238Pu) methods to applications in various fields, including paleoclimate, paleoecology, paleoceanography, and geology of ancient sediments. (Alternates yearly with course 131J.)

Mr. Kaplan (F)

*M131. Geochemistry. (Same as Geophysics and Planetary Physics M131.) Prerequisite: senior standing in chemistry, physics or earth and space sciences. Origin and abundance of the elements and their isotopes; distribution and chemistry of the elements in the earth, oceans, and atmosphere; chemistry of the earth’s interior, phases transformation at high pressure and temperature. (Alternates yearly with course 130J.)

Mr. DePaolo

132. Principles of Biogeochemistry. Prerequisite: Chemistry 21. Organic substances as evidence for origin and biochemical evolution of life; origin and development of petroleum; comparative properties of recent and ancient sediments, and application of modern methods to modern and ancient sediments. Mr. DeNiro (W)

133. Regional Geology. Prerequisites: courses 111A, 111B, 111C or 111D or consent of instructor. Application of geologic, stratigraphic, paleontologic, and biologic, and climatic principles to a specific province or provinces. Emphasis on tectonic evolution of selected regions.

Mr. Ernst (Sp)

M136A. Geophysical Exploration. (Same as Geophysics and Planetary Physics M136A.) Prerequisites: Physics 6A, 6B, 6C or 8A, 8B, 8C, Mathematics 31A, 31B, 32A or consent of instructor. Mathematics 32B and 33A recommended. Principles and techniques of gravimetric, seismic, magnetic and other geophysical methods of exploration for ores, petroleum, and other economic minerals.

Mr. Davis (F)

M136B. Geophysical Exploration. (Same as Geophysics and Planetary Physics M136B.) Prerequisites: Physics 6A, 6B, 6C or 8A, 8B, 8C, Mathematics 31A, 31B, 32A or consent of instructor. Principles and techniques for exploration for mineral deposits using natural and artificial electric and magnetic fields, and induced, natural, and gravity waves. Mr. McPherron (W)

137. Petroleum Geology. Prerequisites: courses 111A, 111B, 111C or 111D or consent of instructor. Geology applied to exploration for and production of natural gas and petroleum, and other economic minerals. (Same as Earth and Space Sciences 199 (Special Studies in Earth and Space Sciences, ½ course).

The Staff (Sp)

138. Mining and Exploration Geology. Prerequisite: course 51C. Geologic principles applied to the exploration for and recovery of mineral deposits and the application of geophysical techniques at operating mines; mine economics; exploration geology and mineral resource economics.

Mr. Watson (F)

M139. Engineering and Environmental Geology. (Same as Architecture and Urban Planning M139.) Prerequisite: course 1 or 100; 111A recommended. Principles and practice of soil mechanics and foundation engineering in light of geologic conditions, recognition, prediction and control of subsidence, landslides, and other geologic aspects of urban planning and subsurface disposal of liquids and solid wastes.

Mr. Merfield (F)

140. Nonrenewable Resource Extraction. Prerequisite: course 128A or 128B or 138 or consent of instructor. Exploration and recovery of nonpetroleum and mineral resources; associated geological and economic considerations for the resource analyst and geologist.

Mr. Carlisle (Sp)

141. Sedimentology. Prerequisite: course 111B taken concurrently or consent of instructor. Characteristics of sediment particles, dynamics of sedimentary processes and process-significance of sedimentary features. Interpretation of depositional environments. Mr. Reed (W)

144. Marine Geology. Prerequisite: senior standing. Recent marine sedimentology, and geochemistry; oceanography morphology, structure and geologic history of the ocean basins.

Mr. Kaplan (Sp)


Mr. Yanai (F)

150. Remote Sensing for Earth Sciences. Prerequisite: open to upper division and graduate students. Remote sensing related to the development of natural resources. Characteristics of the electromagnetic spectrum and review of remote sensing devices. Applications of remote sensing to natural resource inventory, soil survey, urban studies, vegetation classification; emphasis on geologic interpretation of imagery.

Mr. Sabin (W)
M154. Solar Terrestrial Physics. (Same as Atmospheric Sciences M154.) Prerequisite or concurrent: Physics 110B. Particle and electromagnetic emissions from the sun under quiet and under disturbed conditions. The solar wind. The magnetospheres and the ionospheres of the earth and other planets. Geophysical exploration including planning, data collection, and other geophysical methods to geologic and other geophysical phenomena. Aurora and aurorae. Mr. Thorne (F)

169. Field Geophysics. Prerequisite: Geophysics and Planetary Physics/Earth and Space Physics M136A. Application of seismic, gravimetric, magnetic, and other geophysical methods to geologic and engineering problems. Practical aspects of geophysical exploration including planning, data collection, data reduction, and interpretation. Field work on unsolved problems. Mr. McPherron (Sp)

190. Earth and Space Sciences Colloquium (½ course). Current topics of research in the Department of Earth and Space Sciences. To be given on a Passed/Not Passed basis. May be repeated more than once for credit. Mr. Rosenfield (W)

195G. Field Geology for Graduate Students (½ course). Field mapping; preparation of a geologic report. Graded PO/NP. Mr. Hall (F)

199. Special Studies in Earth and Space Sciences (1 to 2 courses). Students may be allowed to take course more than once for credit. The Staff

199H. Honors Research in Earth and Space Sciences. Prerequisites: senior standing and permission of the Departmental Honors Committee. Individual research designed to broaden and deepen the student's knowledge of some phase of earth and space sciences. The Staff

Graduate Courses

For complete descriptions of graduate-level courses offered by this department, please consult the UCLA Graduate Catalog.

East Asian Studies

(Interdepartmental)

(Program Office: 9381 Bunche Hall)

Major in East Asian Studies

This major is designed to serve students who wish to study and/or reside in the Chinese- and Japanese-speaking areas of East Asia and the Asian American communities. It also prepares students for graduate study in one of the social science disciplines which customarily explore those areas.

Preparation for the Major

History 9B-9C; Oriental Languages 1A-1B-1C or 9A-9B-9C or a parallel Cantonese sequence; Oriental Languages 11A-11B-11C or 19A-19B-19C. Students planning to pursue classical Chinese in the major will need Oriental Languages 13A-13B-13C in addition to the above courses.

The Major

This consists of three parts:

(1) Four courses selected from the following:


(2) Five courses selected from the following:

Any courses in the social sciences listed above under item 1 not being used to satisfy that requirement; any upper division courses in the Department of Oriental Languages not being used to satisfy other parts of the major requirements; any new upper division courses relevant to East Asian or Asian American studies (including no more than three CED courses) which may be approved by the Executive Committee of the College on the recommendation of the Advisory Committee; Art 114B, 114C, 115B, 115C; Dance 140B, 145; Music 140B, 141, 145, 146A, 146B, 146C, 147A, 147B*

(3) The prescribed courses in one of the following areas (courses offered to satisfy this requirement will not also satisfy other parts of the major requirements): (a) language: Oriental Languages 121A-121B and two other upper division courses in Chinese or Oriental Languages 119A-119B and two other upper division courses in Japanese; (b) archaeology: any four of the following: Oriental Languages 170A, 170B, Anthropology 112*, 115*, 115R*; (c) geography: Geography 132 or 133, 186 and two additional upper division geography courses; (d) history: four upper division or graduate courses in East Asian or Southeast Asian history (History 182A, 182B, 182C, 183, 184, 187A, 187B, 187C, 190A, 190B, 197 when in the East Asian field or 214); (e) political science: Political Science 115* and three courses selected from the following: Political Science 135, 136, 159, 160, 161, 197 when in the East Asian field; (f) sociology: Sociology 124* and three courses selected from the following: Sociology 113*, 126*, 134*, 151*, 154.

For further information, contact Professor David M. Farquhar, 9381 Bunche Hall (825-3078).

*Courses so marked have prerequisites which are not included among the courses mentioned here.

Economics

(Department Office: 2263 Bunche Hall)

Armen A. Alchian, Ph.D., Professor of Economics.
William R. Allen, Ph.D., Professor of Economics.
Robert W. Clower, D.Litt. (OXON.), Professor of Economics.
Michael R. Darby, Ph.D., Professor of Economics.
Harold Demsetz, Ph.D., Professor of Economics.
George W. Hilton, Ph.D., Professor of Economics.
Werner Z. Hirsch, Ph.D., Professor of Economics.
Jack Hirshleifer, Ph.D., Professor of Economics.
Michael D. Intriligator, Ph.D., Professor of Economics.
Benjamin Klein, Ph.D., Professor of Economics.
Edward E. Learner, Ph.D., Professor of Economics.
Axel Leijonhufvud, Ph.D., Professor of Economics.
John J. McCall, Ph.D., Professor of Economics.
John G. Riley, Ph.D., Professor of Economics.
Harold M. Somers, Ph.D., LL.B., Professor of Economics.
Thomas Sowell, Ph.D., Professor of Economics.
Earl A. Thompson, Ph.D., Professor of Economics.
Finis R. Welch, Ph.D., Professor of Economics.
John F. Barron, Ph.D., Emeritus Professor of Economics.
Paul A. Dodd, Ph.D., LL.D., Emeritus Professor of Economics.
Earl J. Miller, Ph.D., LL.D., Emeritus Professor of Economics.
Dudley F. Pegrum, Ph.D., Emeritus Professor of Economics.
Bryan C. Ellickson, Ph.D., Associate Professor of Economics.
Cotton M. Lindsay, Ph.D., Associate Professor of Economics.
George G.S. Murphy, Ph.D., Associate Professor of Economics.
Joseph M. Ostroy, Ph.D., Associate Professor of Economics.
Robert F. Cotterman, Ph.D., Assistant Professor of Economics.
Daniel Friedman, Ph.D., Assistant Professor of Economics.
Steven Wildman, Ph.D., Assistant Professor of Economics.
Benjamin Yu, Ph.D., Assistant Professor of Economics.
Kenneth Sokoloff, Acting Assistant Professor of Economics.

Objective of the Major in Economics

The undergraduate program in economics is designed for students who wish to gain a thorough understanding of economic analysis. Emphasis is on economic principles applied to the resolution of interpersonal conflicts of interest and the coordination of 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 their primary focus in their undergraduate education.

The undergraduate major in Economics provides analytical training in reference to socioeconomic phenomena and develops the capacity for general problem solving, independent thought and research. Moreover, the major provides an excellent theoretical background for those pursuing graduate education in law, management, public administration, journalism, social welfare, architecture and urban planning and education, as well as economics.

Pre-Economics Major

While students are completing the lower division preparation courses for economics, they should be classified as Pre-Economics majors. When students have completed the preparation courses for the major, they must petition to enter the major at the Economics Undergraduate Advisor's Office.
Undergraduate Advising
There is an undergraduate advising office located in 2253 Bunche Hall. The advisor is available for consultation on matters relating to curriculum and major requirements, course evaluations, special programs and career planning.

Major in Economics/System Science
The major is described later in this section of the catalog.

Lower Division Courses
1. Principles of Economics. Lecture, three hours; discussion, one hour. Not open to students with credit for Economics 100. An introduction to the principles of economic analysis, economic institutions, and issues of economic policy. Emphasis on allocation of resources and distribution of income through the price system.

2. Principles of Economics. Lecture, three hours; discussion, one hour. Not open to students with credit for Economics 100. An introduction to the principles of economic analysis, economic institutions, and issues of economic policy. Emphasis on aggregate economics, including national income, monetary and fiscal policy, and international trade.

3. Lower Division Research Seminar in Micro Economics. Prerequisite: course 1. Class enrollment limited to ten freshmen or sophomore students. Seminar in which students do an intensive research project under guidance of regular faculty. The major topic in consultation with instructor; subjects limited to materials covered in Economics 1. Student writes paper and presents to seminar.

4. Lower Division Research Seminar in Macro Economics. Prerequisite: course 2. Class enrollment limited to ten freshmen or sophomore students. Seminar in which students do an intensive research project under guidance of regular faculty. Student selects major topic in consultation with instructor; subjects limited to material covered in Economics 2. Student writes paper and presents to seminar.

5. Evolution of Economic Institutions in America. Not open to students with credit for course 183. The historical development of the present American economic system and its performance over time, especially as revealed by the quantitative data of modern research.

6. Introduction to Statistical Methods. (Formerly numbered 140.) Not open to students with credit for Mathematics 50A-50B, 150A-150B-150C, 152A-152B or Management 115. Elements of statistical analysis. Presentation and interpretation of data; descriptive statistics; theory of probability and basic sampling distributions; statistical inference, including principles of estimation and tests of hypotheses; introduction to regression and correlation.

*Upper Division Courses
Courses 1 and 2 or 100 are prerequisite to all upper division courses in economics.

100. Economic Principles and Problems. Not open to students with credit for course 1 or 2. Under special circumstances an Economics major in upper division standing may be permitted to substitute course 100 for 1 and 2 by petition. A one-quarter course presenting the principles of economics with applications to current economic problems.

101A. Micro Economic Theory. Prerequisite: course 101A. Theory of factor pricing and income distribution; general equilibrium; implications of the pricing process for the optimum allocation of resources; interest and capital.

102. Macro Economic Theory. Prerequisites: two courses in calculus or consent of instructor. Theory of income, employment, and the price level. Analysis of secular growth and business fluctuations; introduction to monetary and fiscal policy.

103. Upper Division Research Seminar: Applications of Economic Theory. Prerequisites: courses 101A, 101B, 102, consent of instructor. A limited enrollment seminar in which the student writes a research paper on a topic chosen in consultation with instructor.

106. Economic History of American Ethnic Groups. Prerequisite: course 101A. A critical analysis of variables affecting the income, occupations, and general economic progress of American ethnic groups. Such ethnic characteristics as demographic profile, regional distribution, skill level, and time of arrival will be considered, together with such societal characteristics as discrimination and public policy.


110. Economic Problems of Underdeveloped Countries. Prerequisite: upper division courses in development economics. Economic structure of low income countries and primary causes for their limited economic growth. Economic goals and policy alternatives open to their leaders. Possible roles of developed countries. Selected case studies.

111. Theories of Economic Growth and Development. Growth models, theory of production under constraints, relative factor prices and their impact on choice of technology, investment criteria, role of the market, economic planning in less developed areas.

112. Policies for Economic Development. Prerequisite: course 111 or 102. Suggested strategies for economic development: inflation, balanced growth, import substitution, export promotion, especially as revealed by the quantitative data of modern research.

120. Introduction to Urban and Regional Economics. Prerequisite: course 101A or consent of instructor. Economic analysis applied to significant current regional and urban problems and policy.

121. Urban Economic Analysis. Prerequisites: courses 120, 101A, 101B or consent of instructor. Demand and supply of urban public services; transportation and location decisions and urban human resources analysis.


131. Nonproprietary Organization. Prerequisites: courses 101A, 101B, completion of math requirement for the major. Use of economic techniques to study behavior of nonprofit organizations such as churches, foundations, government, cooperatives, unions, nonprofit firms, etc. Attention paid to behavior within these organizations as well as aggregates characterizing actions of the organization itself. Models of political behavior, and effect of decision rules and agenda on political outcomes studied.
132. Financing Social Security and Transfer Expenditures, in the context of the economic behavior of the household and the performance of the economy, topics such as income, poverty, taxes, and the effectiveness of the alternative to such programs as OASDI, unemployment insurance, public assistance and others. The Staff

133. State and Local Finance. Prerequisite: course 101A. The study of state and local governments; the revenues, expenditures, and indebtedness of these governments. Analysis of state and local tax systems. Mr. Hirsch

M135. Economic Models of the Political Process. (Same as Political Science M103.) Prerequisites: Economics 101A, a basic course in political science and junior/senior status. This seminar is jointly offered by the Economics and Political Science Departments, and permission of instructor is required. The course examines conceptions and applications of two different processes of political interaction, the cooperative (as in public choice) and the conflictual (as in warfare) making use of economic models of choice and equilibrium.

141. Principles of Statistical Decision. Prerequisite: course 40 or equivalent. Errors of the first and second kind; economic loss functions; prior probabilities and Bayes' Theorem. Analysis of classical and Bayesian approaches. Application to inventory and production problems. The value of information, and implications for sampling design. Mr. Ellickson, Mr. Hirthshaler, Mr. McCall

144. Introduction to Mathematical Methods in Economics. (Formerly numbered 145.) Prerequisites: courses 101 A, 101 B, or consent of instructor. An introduction to the use of calculus in economic analysis. Topics covered include partial differentiation, optimization, integration and differential and difference equations, with applications to the theory of the household and the firm, capital theory and economic dynamics.

Mr. Ellickson, Mr. Instrigator, Mr. Riley

145. Topics in Mathematical Economics. Prerequisite: course 144 (formerly numbered 145). Detailed course description should be obtained from instructor. Possible topics include: theory of economic growth; competitive equilibrium analysis; examination of market failure and the role for market intervention.

146. Linear Models in Economics. Prerequisite: a course in calculus. An introduction to matrices and matrix algebra, with applications to economics, specifically input-output, Markov chains and linear models of econometrics.

Mr. Ellickson, Mr. Instrigator, Mr. Riley

147. Introduction to Econometrics. Prerequisites: two courses in calculus and one course in statistics. An introduction to and survey of econometrics, including model specification; data collection; estimation and hypothesis testing; the use of econometric models for structural analysis, forecasting, and policy evaluation. An integral part of the course is an original econometric study. Mr. Ellickson, Mr. Instrigator

150. Wage Theory. Prerequisites: courses 101A, 101B or consent of instructor. The supply and demand for labor. Analysis of government, union and other constraints on the competitive system of wage determination. Wage level and structure. Wages and human capital theory. Mr. Cotterman, Mr. Sowell

151. Labor, Wages and Income. Prerequisite: course 150 or consent of instructor. Selected topics in labor theory; income distribution; business cycles and unemployment; investments in human capital and life cycles; migration; human fertility; marriage and divorce. Mr. Cotterman, Mr. Sowell

152. Economics of Trade Unions. Prerequisite: course 150 or consent of instructor. Economic analysis of strikes, boycotts, lockouts, rights to work, seniority, work rules, pensions, fringe benefits. The evolution of trade unions and the legislative framework within which they operate are also considered. Mr. Hilton

160. Money and Banking. Principles of money and banking in the United States; legal and institutional framework; money supply process; instruments, effects, and practical implications of policy. Mr. Darby, Mr. Friedman, Mr. Wildman

161. Monetary Theory. Prerequisite: course 160. The nature of money and monetary exchange: level and term structure of interest rates; level and growth rate of money; transmission of monetary shocks; theory and practice of monetary policy. Mr. Darby, Mr. Clower

170. Industrial Organization: Structure and Control. Prerequisite: course 101A. Economic and institutional foundations of public regulation of industry; the measurement and control of competition, monopoly and collusion; economic examination of antitrust; determinants of market structure; empirical evidence of structure and performance of industries. Mr. Demsetz, Mr. Klein

171. Industrial Organization: Theory and Tactics. Prerequisite: course 101A. Study of pricing and output decisions of firms under conditions of less than perfect competition or monopoly; theories of oligopoly and monopolistic competition; information costs and advertising; examination of pricing practices such as price discrimination, tie-in selling, predatory pricing and resale price maintenance. Mr. Demsetz, Mr. Klein

172. Economic Analysis of Laws and Legal Institutions. Prerequisite: course 101A. Application of economic theory to legal rule formulation: study of the economic nature and consequences of alternative legal arrangements with special reference to property rights. Application of economic theory to analysis of effects of laws relative to property, contracts, torts, crimes, taxation and constitutional issues. Analysis of the legal process. Mr. Demsetz, Mr. Hirsch

180. Comparative Economic Systems. Prerequisite: course 101A. An analysis of capitalist and planned economies as exemplified by the United States, Soviet Union, Great Britain, etc. Alternative systems are compared with respect to the economic goals, theories of economic organization, institutions, and developmental processes. Problems of economic planning are emphasized. Mr. Murphy


182. Economic Problems of the U.S.S.R. An introduction to the organization and policies of the economy of the U.S.S.R. Mr. Murphy

183. Development of Economic Institutions in the United States. Not open to students with credit for courses 191 or 192. A study of the changing economic conditions in the U.S. from colonial times to the early 20th century and the effects of these changes on American society. Mr. Sokoloff

190. International Economics. Not open to students with credit for courses 191 or 192. A general introduction to international economics, based upon an examination of the theory of trade and the means and significance of balance of payments adjustments, with analysis of major issues of international commercial and monetary policy confronting national and international agencies. Mr. Allen, Mr. Learner

191. International Trade Theory. Prerequisite: course 101B. Not open to students with credit for course 190. The theory of international trade: the bases, direction, terms, volume, and gains of trade. The effects of tariffs, quantitative restrictions, and international integration. The effects of free and restricted trade on economic welfare and political stability. Mr. Learner

192. International Finance. Prerequisite: course 102. Not open to students with credit for course 190. Emphasis on the interpretation of the balance of payments and the adjustment to national and international equilibrium, through changes in price levels, exchange rates, and national income. Other topics include: making international payments, determination of exchange rates under various monetary standards, capital movements, exchange controls, and international monetary organization. Mr. Allen

198. Special Studies in Economics (% to 1 course). Prerequisites: senior standing and consent of instructor. A student may count this course only once in satisfying his major in Economics; he may take it a second time to meet University graduation requirements.

Graduate Courses

For complete descriptions of graduate-level courses offered by this department, please consult the UCLA Graduate Catalog.

Economics/System Science

(Interdepartmental)

(Program Office: 4532 Boelter Hall)

Major in Economics/System Science

This major is an alternative to the regular departmental major in Economics and combines work in the Department of System Science (School of Engineering and Applied Science) with preparation in economic theory and in those aspects of mathematics and statistics that are necessary for the study of quantitative aspects of economics and systems theory. The major is appropriate for students who plan graduate study with emphasis on such areas as economic theory, mathematical economics, econometrics, feedback and control systems, optimization, computing techniques, and the modeling and analysis of various socio-economic systems.

Preparation for the Major

Economics 1 and 2; Engineering 10C or 10S; Mathematics 31A, 31B, 32A-32B, 33A, 33B.

The Major

Fourteen upper division courses are required consisting of: six courses in economics selected from those numbered Economics 101 and above; six courses in system science selected...
from the series numbered Engineering 120 through 129; two courses in mathematics selected from those numbered Mathematics 110 and above.

Selections must include the following: Economics 101A, 101B and 102; one of Economics 144, 145, 146, 147; Engineering 120A or Mathematics 150A or 152A; Engineering 120B or M120C or Mathematics 150B or M151 or 152B.

Recommended system science selections include Engineering 129A and 129L in the optimization area and Engineering 121A, 122A and 128A in the area of dynamic systems analysis.

For purposes of the College breadth requirements, this major is considered to be in the division of physical sciences. Economics/System Science majors may not offer courses in economics as breadth courses in the social sciences.

Minimum Standards

Each course taken in the major and in preparation for the major must be completed with a letter grade of "C-" or better, and in these courses a grade-point average of at least 2.5 is required.

For further information, contact Professor Stephen Jacobsen, 4532 Boelter Hall (825-2327) or Professor Michael Intriligator, 2263 Bunche Hall (825-4144).

Education

(Office of the Dean: 244 Moore Hall)

The Graduate School of Education does not offer an undergraduate degree. The following upper division courses are offered with enrollment restrictions as indicated:

Upper Division Courses

100A. Cultural Foundations of Education (1/2 course). Prerequisite: consent of instructor. Analysis of significant problems and issues in contemporary American education using historical, philosophical, sociological and organizational perspectives. Examines the politics of schooling, the organizational structure of school systems, and philosophical concepts of the aims and functions of schooling and education.

100B. Cross-Cultural Foundations of Education (1/2 course). Prerequisite: consent of instructor. Analysis of significant problems and issues in the history, culture and current affairs of particular ethnic minority groups in the United States. Patterns of intergroup and school-community relations, and methods for teaching minority students. Includes field experiences.


M108. Sociology of Education. (Same as Sociology M143.) Studies of social processes and interaction patterns in educational organizations, the relationships of such organizations to aspects of society, social class and power, social relations within the school, formal and informal groups, school culture, roles of teachers, students and administrators.

112. Psychological Foundations of Education. Prerequisite: consent of instructor. Analysis of learning processes in school situations. Examines processes of human motivation, the affective, cognitive, social and personal development of children and adolescents, the evaluation of learning, individual differences, and the implications of relevant theory and research for instructional practices.

113. Instructional Psychology. Major psychological approaches to teaching. Processes of learning and motivation in the instructional setting. The psychology of teaching methods. Issues in the design and evaluation of instruction.

The Staff

125A. The Education of Exceptional Individuals. Prerequisite: Psychology 10 or equivalent. An introduction to the field of special education with emphasis on the psychology of individual differences and the learning characteristics of exceptional individuals and application of research and theory to special education problems.

125B. Principles for Teaching Exceptional Individuals. Prerequisite: consent of instructor. Examines approaches for teaching exceptional individuals in special and regular education programs. Principles and assumptions underlying alternative approaches. Emphasis on individualizing curriculum and classroom management. Observation in schools.

147. Social Science Methods and the Law. Prerequisite: upper division undergraduate, two years of college-level mathematics or consent of instructor. A quantitative orientation for understanding and critically analyzing the emerging impact of social science methods and the law. Fundamental skills in statistical and economic analysis of data will be provided along with illustrations of their use in landmark legal cases.

M148. Women in Higher Education. (Same as Women's Studies M148.) Prerequisite: upper division standing. The course examines the education and career development of women in higher education. Specifically, it focuses on undergraduate and graduate women; women faculty and administrators; curricula, programs and counseling services designed to enhance women's educational and career development, affirmative action and other recent legislation.

180. Social Psychology of Higher Education. An overview of significant studies in the Social Psychology of Higher Education. Focusing on institutional characteristics and students' interpersonal and intrapersonal processes, special emphasis is upon identifying and explaining the effects of the college experience upon student development and achievement.

199. Special Studies (1/2 to 2 courses). Prerequisites: senior standing and consent of instructor. Independent study of individual problems. The Staff

Graduate Courses

For complete descriptions of graduate-level courses offered by this School, please refer to the UCLA Graduate Catalog.

Engineering and Applied Science

(Office of the Dean: 7400 Boelter Hall)

Russell F. O'Neill, Ph.D., Dean.
Russell A. Westmann, Ph.D., Associate Dean.
Alfred C. Ingersoll, Ph.D., Associate Dean.
Alan J. Ardelt, Ph.D., Assistant Dean.
Richard Stern, Ph.D., Assistant Dean.
Alan N. Wilson, Jr., Ph.D., Assistant Dean.

CHEMICAL, NUCLEAR AND THERMAL ENGINEERING

(Department Office: 5531 Boelter Hall)

Douglas N. Bennion, Ph.D., Professor of Engineering and Applied Science.
Harry Buehler, M.S., Professor of Engineering and Applied Science.
Ivan Catton, Ph.D., Professor of Engineering and Applied Science.
Robert W. Conn, Ph.D., Professor of Engineering and Applied Science.
Donald K. Edwards, Ph.D., Professor of Engineering and Applied Science.
Traugott H.K. Frederking, Ph.D., Professor of Engineering and Applied Science.
William E. Kastenberg, Ph.D., Professor of Engineering and Applied Science.
Eldon L. Knuth, Ph.D., Professor of Engineering and Applied Science.
Russell F. O'Neill, Ph.D., Professor of Engineering and Applied Science.

CHEMICAL, NUCLEAR AND THERMAL ENGINEERING

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Traugott H.K. Frederking, Ph.D., Professor of Engineering and Applied Science.
William E. Kastenberg, Ph.D., Professor of Engineering and Applied Science.
Eldon L. Knuth, Ph.D., Professor of Engineering and Applied Science.
Joseph W. McClutchan, M.S., Professor of Engineering and Applied Science.

Anthony F. Mills, Ph.D., Professor of Engineering and Applied Science.
Ken Nobe, Ph.D., Professor of Engineering and Applied Science (Chairman of the Department).
David Oishi, Ph.D., Professor of Engineering and Applied Science.
Richard L. Perrine, Ph.D., Professor of Engineering and Applied Science.
Lawrence B. Robinson, Ph.D., Professor of Engineering and Applied Science.

William D. Van Vorst, Ph.D., Professor of Engineering and Applied Science.
Ahmed R. Wazzan, Ph.D., Professor of Engineering and Applied Science.

F. Eugene Yates, M.D., Professor of Medicine and Engineering and Applied Science.
George E. Apostolakis, Ph.D., Associate Professor of Engineering and Applied Science.

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**ELECTRICAL SCIENCES AND ENGINEERING**

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F. W. Schott, Ph.D., Professor of Engineering and Applied Science.
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Norman C. Dalkey, Ph.D., Adjunct Professor of Engineering and Applied Science.
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Melvin W. Lifson, Ph.D., Visiting Lecturer in Engineering and Applied Science.
Kenneth R. Pfeiffer, Ph.D., Visiting Lecturer in Engineering and Applied Science.
Robert V. Philips, B.S., Adjunct Professor of Engineering and Applied Science.
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**ENGINEERING SYSTEMS**

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Morris Asimow, Ph.D., Emeritus Professor of Engineering and Applied Science.
Ralph M. Barnes, Ph.D., Emeritus Professor of Engineering and Applied Science.
Ronald T. Burchell, Ph.D., Emeritus Professor of Engineering and Applied Science in Production Management.
Bonham Campbell, E.E., Emeritus Professor of Engineering and Applied Science.
Edward P. Coleman, Ph.D., Emeritus Professor of Engineering and Applied Science.
J. Morley English, Ph.D., Emeritus Professor of Engineering and Applied Science.
Warren A. Hall, Ph.D., Emeritus Professor of Engineering and Applied Science.
W. Julian King, M.E., Emeritus Professor of Engineering and Applied Science.
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**COMPUTER SCIENCE**

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Richard R. Gold, Ph.D., Adjunct Professor of Engineering and Applied Science.

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Harold T. Yura, Ph.D., Adjunct Professor of Engineering and Applied Science.

Moche Ziv, Ph.D., Adjunct Associate Professor of Engineering and Applied Science.

Kung Yao, Ph.D., Professor of Engineering and Applied Science.

Richard E. Mortensen, Ph.D., Associate Professor of Engineering and Applied Science.

Izhak Rubin, Ph.D., Associate Professor of Engineering and Applied Science.

Eduardo J. Subelman, Ph.D., Assistant Professor of Engineering and Applied Science.

Devan S. Ward, Ph.D., Assistant Professor of Anesthesiology and Engineering and Applied Science.

George J. Ruzicka, Ph.D., Adjunct Associate Professor of Engineering and Applied Science.

UNDERGRADUATE REQUIRED COURSES

LOWER DIVISION: 10

UPPER DIVISION: The student is to select 8 core courses (32 units) from the 5 subject areas as listed below. The minimum and maximum number of units allowed in each of the 5 subject areas is also given.

SUBJECT AREAS (5); COURSES (12)

(1) COMPUTER PROCESSES

COURSE: M124A

UNITS: 4-8

(2) ELECTRICAL SCIENCES

COURSES: 100, 100B

UNITS: 4-8

(3) MECHANICS

COURSES: 102, 103, 108

UNITS: 8-12

(4) SYSTEMS

COURSES: 106B, 121C, 127B

UNITS: 4-8

(5) THERMAL AND MATERIALS SCIENCES

COURSES: 141, 105A, 105D

UNITS: 8-12

*Not open for credit to students who have taken Engineering 107B.

Students following pre-1976-77 catalogs are referred to the respective catalogs for further information.

SCHOOL COURSES


*Open only to Engineering Executive Program students.

DEPARTMENTAL COURSE OFFERINGS

CHEMICAL, NUCLEAR AND THERMAL ENGINEERING COURSES

**Engineering**

**Lower Division Courses**

5. **Computer Literacy and Appreciation.** An introduction to computers and computing for nonscience majors. The course covers computer technology and how machines process information. Students will write simple programs, learn algorithmic thinking and gain insight into the power and limitations of computer systems.

10C. **Introduction to Computing.** (Formerly numbered 10.) Recommended for Math/Computer Science majors (emphasis on numerical problems). Open to graduate students on S/U grade basis only. Not open to students who have completed Engineering 10 30S. Introduction to Programming for Life and Social Sciences. (Formerly numbered 10.) Recommended for all majors except Math/Computer Science and Engineering (emphasis on nonnumerical problems). Open to graduate students on S/U grade basis only. Not open to students who have completed Engineering 10, 10C or 10S. Description and use of FORTRAN programming language. Selected topics in numerical analysis. Organization and characteristics of digital computers. Machine language. Programming and running of several numerical and nonnumerical problems.

10D. **Introduction to Programming/FORTTRAN.** (Formerly numbered 10.) Recommended for Chemical, Nuclear and Thermal Engineering Department and Mechanics and Structures Department majors (emphasis on numerical problems). Open to graduate students on S/U grade basis only. Not open to students who have completed Engineering 10, 10C or 10S. Description and use of FORTRAN programming language. Selected topics in numerical analysis and data processing. Programming and running of several numeric and nonnumeric problems.

Mr. Levine (F,Sp)

11. **Patterns of Problem Solving.** An introduction to patterns of reasoning in the process of problem solution and decision making. Exposure to concepts, theories and techniques in the analysis and synthesis of total systems in our complex technological civilization.

Mr. Rubinstein (Sp)

12. **Applied Patterns of Problem Solving.**Prerequisite: course 11. An application of the tools and methods discussed in Engineering 11 to three specific problems of a social and technical nature.

Mr. Rubinstein (Sp)

14. **Science of Engineering Materials.** Prerequisites: Chemistry 11A, 11B, 11BL, Physics 8A, 8B (8C may be taken concurrently). (Not open for credit to students who have taken Engineering 140B.) General introduction to different types of materials used in engineering designs: metals, ceramics, plastics and composites, relationship between structure (crystal and molecular) and properties. Properties of analogical materials. Illustration of their fundamental differences, and their applications in engineering.

Mr. Ono (F,Sp)

15. **Introduction to Manufacturing Engineering.** Manufacturing processes, materials and design in manufacturing: productivity, competitive aspects of manufacturing, manufacturing planning, production scheduling, flexible manufacturing systems, economic and social aspects of manufacturing.

Mr. Shabak (F)

**Upper Division Courses**

100. **Electrical and Electronic Circuits.** Lecture, four hours; recitation, one hour. Prerequisites: Mathematics 31A, 31B, 32A, 33A, 33B, Physics 8C. Electrical quantities, circuit principles, signal waveforms, A.C. circuits, semiconductor devices, small signal amplifiers, electrical and electronic instruments.

Mr. Luhmann (F,Sp)

100B. **Engineering Electromagnetics.** Lecture, four hours; recitation, one hour. Prerequisites: Physics 8C, Mathematics 32A-32B or 33A, 33B. Electromagnetic field concepts; Maxwell's Equations; static and quasistatic fields, field energy, energy flow and the Poynting vector; electromechanical interactions; waves in unbounded media and on two-wire transmission lines; reflection and refraction: lossy media; skin effect; analogs to electromagnetic fields.

Mr. Alexopoulos (F)

100L. **Circuit Analysis Laboratory (1/2 course).** Prerequisites: Physics 8C, Engineering 100 which should be taken concurrently. Experiments with circuits containing linear and nonlinear devices; transient and steady state behavior of circuits.

Mr. Luhmann (F,Sp)

102. **Mechanics of Particles and Rigid Bodies.** Lecture, three hours; recitation, two hours. Prerequisites: Mathematics 33A, Physics 8A. Newtonian mechanics (statics and dynamics) of particles and rigid bodies. Fundamental concepts of mechanics. Statics, kinematics, and kinetics of particles and rigid bodies. Impulse-momentum and work-energy relationships. Applications.

Mr. Gibson (F)

103. **Elementary Fluid Mechanics.** Lecture, three hours; recitation, two hours. Prerequisites: Mathematics 32B, 33A, Physics 8B. An introductory course dealing with the application of the principles of mechanics to the flow of compressible and incompressible fluids.

Mr. Kelly (F,Sp)

104. **Introduction to Experimental Techniques (1/2 course).** Principles of simple machining operations, engineering drawing practices, soldering and welding techniques, vacuum systems, glassblowing, American standard sizes and color-codes, effective presentation of results. One lecture-demonstration per week. May be taken before junior year. To be graded on Pass-Fail basis. Mr. Villard (F,Sp)

104C–104D. **Undergraduate Research Laboratory.** Laboratory, eight hours. Prerequisite: senior standing. Two quarter comprehensive projects in experimental engineering—research or design— involving laboratory work. Students may submit projects of their own choosing. May serve as basis for graduate research. Will satisfy engineering laboratory requirement. Qualified non-engineering students are encouraged to enroll.

Mr. Campfield, Mr. Shabaik, Mr. Stern (F,Sp)
105A. Introduction to Engineering Thermodynamics. Lecture, four hours; recitation, one hour. Prerequisites: Physics 8B, Mathematics 32B. Phenomenological thermodynamics. Concepts of equilibrium, entropy and irreversible processes. First law and concept of energy; second law and concept of entropy. Equations of state and thermodynamic properties. Engineering applications of these principles in the analysis and design of thermal systems.

Mr. Nobe, Mr. Robinson (F,W,Sp)

105D. Transport Phenomena. Lecture, four hours; recitation, one hour. Prerequisites: Physics 8B, Mathematics 32B, 33A. Transport phenomena; heat conduction, mass species diffusion, convective heat and mass transfer, and radiation. Engineering applications in thermal and environmental control.

Mr. Edwards, Mr. Mills (F,W,Sp)

164A. Principles of Engineering Economy. Prerequisite: upper division standing. Economic analysis of engineering projects: value systems; economic decisions on capital investment and choice of engineering alternatives; new projects, replacement and abandonment policies; risky decisions including make/buy policies and research investment; corporate financial practices and accounting.

Mr. Lyman (F,W,Sp)


Mr. Nottage, Mr. O'Brien (W)

166C. Experimental Design Laboratory. Laboratory, eight hours. Prerequisite: course 106B or equivalent. Course 106B. Creative experimental projects for student designs in any engineering domain where individual students have preparation and interest, exemplifying the professional method. Predicted idealized performance is compared with experimentally achieved realities. 

Student prize competition entries are encouraged.

Mr. Nottage, Mr. O'Brien (W)

1650. Engineering Systems Design Laboratory. Recitation, one hour; laboratory, eight hours. Prerequisite: course 106C; course 104 recommended. Advanced senior standing required. Similar to 106C and normally a continuation thereof. Design projects generally emphasizing productivity, energy, environmental, and process cost-benefit studies.

M101A. Principles of Biotechnology. [Same as Psychology M153.] Prerequisite: third quarter sophomore or higher standing. The principles of biological science are developed in an engineering context. An emphasis upon engineering concerns, biological, and sociological factors affect the integration of man into environmental, informational and managerial systems by engineering means.

Mr. Lyman (F,W)

108. Introduction to Mechanics of Defective Solids. Lecture, three hours; recitation, two hours. Prerequisite: Mathematics 33A (may be taken concurrently); Engineering 102 recommended. Review of equilibrium principles. Concepts of stress and strain. Material constitutive relations (elastic, plastic, viscoelastic). Hysteresis in deformable bodies. Structural applications to trusses, beams, shafts, columns and pressure vessels.

Mr. Nelson (F,W,Sp)

108. The Engineer and Society. Prerequisite: senior standing. Survey of oral and written reports related to creative engineering, its sociological and ecological impacts, present, future, and past relationships. Maximum student participation in topical selection and class structuring. Creativity and original thinking is emphasized.

Mr. Ingersoll (F,W,Sp)


Mr. Wilson (F,W,Sp)


Mr. Orchard (F,W,Sp)

110C. Passive Network Synthesis. Prerequisite: course 110B or equivalent. Properties of positive real functions and tests for positive realness. Synthesis of one and two-port RLC and two-element kind networks.

Mr. Ternes (F,Sp)

111A. Electric Power Systems. Prerequisite: course 100. Overall electric power system requirements; typical systems; one-line diagrams. Per-unit quantities: characteristics of machines, transformers, over-head lines and cables; steady-state analysis of systems. Power limits and stability, fault calculations; relay systems and fault coordination.

Mr. Schott (W)

111B. Electromechanical Energy Conversion. Prerequisite: course 100. Energy conversion and power flow in electromechanical interactions; electromechanics of actuators and rotating a.c. synchronous and induction machines and d.c. machines. Linear machines.

Mr. Schott (F)

113A. Introduction to Lasers and Quantum Electronics. Prerequisite: course 106B or equivalent or consent of instructor. Properties of lasers and other quantum electronic devices. Interferometers, crystal optics, gain and saturation phenomena, and gas discharges.

Mr. Casperson, Mr. Stafsudd (F)

113B. Laser Laboratory (½ course). Recitation, one hour; laboratory, three hours. Prerequisite: course 100B or equivalent or consent of instructor. Properties of lasers including saturation, mode-locking and relaxation effects, and laser applications including optics, modulation, communication, holography, interferometry and nonlinear effects.

Mr. Casperson, Mr. Stafsudd (F)

115A. Fundamentals of Solid State I. Prerequisite: junior standing in engineering; course 190A or equivalent recommended. Introductory atomic concepts, quantum mechanical principles, energy level in complex atoms, quantum statistics, crystal structure, energy levels in solids, band theory.

Mr. Viewananth (F,Sp)

115B. Fundamentals of Solid State II. Prerequisite: course 115A. A discussion of the solid state properties, lattice vibrations, thermal properties, dielectric, magnetic, and superconducting properties.

Mr. Stafsudd (W)

115C. Semiconductor Physical Electronics. Prerequisite: course 115B. Band structure of semiconductors, homogeneous semiconductors, excess carriers in semiconductors, semiconductor surfaces, optical and thermal properties, application to design of devices.

Mr. F.G. Allen, Mr. Pan (Sp)

115D. The Principles of Design of Semiconductor Devices. Prerequisite: senior standing in engineering. Semiconductor technology, Schottky barrier, p-n junction, MOS capacitance, transistor fundamentals, drift transistor, high frequency properties, field effect transistors, integrated electronics, applications and design of devices.

Mr. F.G. Allen, Mr. K.L. Wang (F,W)

115E. Solid State Electronics Laboratory (½ course). Prerequisite: course 115C. Experimental measurement of electronic, magnetic, thermal and optical properties of p- and n-type semiconductors as used in the design of devices.

Mr. F.G. Allen (W)

115F. Semiconductor Devices Laboratory (½ course). Prerequisite: course 115D. Design, fabrication, characterization, performance of p-n, and other semiconductor devices. In particular the student will perform various processing tasks such as wafer preparation, oxidation, impurity diffusion, metallization, sintering and photolithography.

Mr. F.G. Allen, Mr. K.L. Wang (F,W)


Mr. Nottage, Mr. O'Brien (F,W,Sp)


Mr. Willis (F,W,Sp)

116C. Pulse and Digital Methods. Prerequisites: courses 115A, 116B. Analysis and design of switching-mode electronic circuits and systems including pulse generation, logic operations, timing and frequency counting.

Mr. K. Martin (W)

116D. Communication Circuits. Prerequisites: courses 116B, 121C. Signals and spectra. Signal distortion in transmission filters, transmission bandwidth requirements. Random signals and noise, linear modulation, single-channel operation, communication circuits and characteristics. 

Mr. Willis (F,W,Sp)


Mr. Nottage (F,Sp)

116L. Electronics I Laboratory (½ course). Prerequisite: course 100L; course 116A recommended. Experimental determination of device characteristics, resistive diode circuits, single-stage amplifiers, compound stages, multistage stages, efficiency of feedback on single-stage amplifiers.

Mr. K. Martin (F,Sp)

116M. Electronics II Laboratory (½ course). Prerequisite: course 116L; course 116B recommended. Experimental and computer studies of multistage, wideband, tuned and power amplifier, and multiloop feedback amplifiers. Introduction to Thick Film Hybrid Techniques. Construction of amplifier using hybrid thick film techniques.

Mr. Willis (F,W,Sp)

116N. Pulse and Digital Methods Laboratory (½ course). Prerequisite: course 116M; course 116C to be taken concurrently. Experimental and computer studies of diode and transistor switching and timing circuits. Linear and nonlinear wave shaping techniques. Waveform generation.

Mr. K. Martin (Sp)

117A. Electromagnetic Waves I. Prerequisite: course 116A. Radiation from finite antennas, guided waves in enclosed waveguide and on surfaces; Smith Chart; excitation of guided waves; phase and group velocity; cavity resonators; concept of Q; perturbation theory; waves in complex media (ferrites, crystals, semiconductors, plasmas).

Mr. Schott (F,Sp)


Mr. Elliott (W)

117D. Electromagnetic Waves IV. Prerequisite: course 117A. Special relativity; relativistic kinematics; field transformations; particle trajectories in electromagnetic fields; radiation from accelerated charges; waves in active media, microwave sources.

Mr. C.W. Mis (F,Sp)


Mr. Alexopoulos (Sp)
117L. Electromagnetics Laboratory (½ course). Prerequisite: course 117A; course 117B may be taken concurrently. Experimental investigation of microwave devices, circuits, and antennas. Design of waveguide strip line transmission systems; detectors and power measuring devices; cavity resonator studies; antenna impedance and radiation characteristics. Mr. Elliott (W).


118B. Plasma Physics. (Same as Physics M122.) Prerequisite: course 100B or Physics 110A. Senior-level introductory course to physics of plasmas and ionized gases and fundamentals of controlled fusion. Particle motion in magnetic fields; fluid behavior, plasma waves; resistivity and transport; equilibrium and stability; kinetic effects.Illustrative laboratory experiments will be discussed. Mr. Chen, Mr. Luhmann (F,Sp).

120A. Probability. Prerequisites: Mathematics 32B, 33B. An introduction to the theory and application of probability, including random variables and vectors, distributions and densities, characteristic functions, limit theorems, preliminary concepts of stochastic processes. Mr. Mortensen, Mr. Omura, Mr. Subelman (F, W).

120B. Stochastic Processes. Prerequisite: course 120A or comparable background in probability (e.g., Mathematics 150A-150B); course 121C or equivalent recommended (may be taken concurrently). An introduction to the theory and application of stochastic models, emphasizing stationary processes and filtering. Random signals and noise, correlation, linear systems; mean-square correlation, the orthogonality principle, Weiner and Kalman filters. Mr. Miller, Mr. Mortensen, Mr. Yao (Sp).

120C. Stochastic Processes. (Formerly numbered M120C.) Prerequisites: course 120A or Mathematics 150A-150B or 152A and consent of instructor. An introduction to the theory and application of stochastic models, emphasizing Markov chains and pure jump processes; illustrations from queueing systems, point processes, birth and death processes, renewal theory: Poisson processes, Brownian motion.

Mr. Balakrishnan, Mr. Miller, Mr. Rubin (F).

121A. Elements of System Analysis. Prerequisites: Mathematics 33A, 33B (or former courses 31C, 32C). Not open for credit to those who have completed Engineering 121C. Intended for students whose graduate majors are not in engineering. Basic concepts of systems, dynamics, input-output behavior, analysis of signals; illustrations drawn from such fields as control and communication, economics and management sciences, life sciences, computer sciences. Mr. Aoki, Mr. Carlyle (C).

121C. Systems and Signals. Lecture, three hours; recitation, two hours. Prerequisites: Mathematics 32A-32B, 33A-33B (or former courses 31C, 31C, 32C, 32C), Physics 8A, 8B, 8C. Recommended: Engineering 100 or 102 or Physics 8D. Introductory course with illustrations from physical and life sciences. Input-output descriptions of systems, linearity; impulse and frequency responses, Fourier methods; transforms, analysis of signals. Introduction to digital filtering and Fast Fourier Transform. Computational aspects of system modelling and identification. Mr. Levan, Mr. Jacobsen, Mr. Yao (W).

122A. Principles of Feedback Control. Prerequisite: course 121C or consent of instructor. Classical methods of analysis and design of feedback control systems, as applied to problems selected from engineering, biologic and related areas. Mr. Jacobsen, Mr. Wang, Mr. Yao (W).

124A. Applied Numerical Computing. (Formerly numbered 124A.) (Same as Computer Science M124A.) Prerequisites: Engineering 10C, Mathematics 33A, 33B or equivalents. An introduction to scientific computing and an application-oriented survey of computing techniques for several important classes of problems, including matrix computations, root-finding, optimization, difference and integral approximation. Student computing exercises. Mr. Carlyle, Mr. Karpus (F, W, Sp).

127B. Elements of Probability and Information. Prerequisite: Mathematics 33A or consent of instructor. An introduction to finite systems for coding and transmission of messages as character strings. Basic laws of probability and decision in finite systems. Information sources, entropy, noisy channels, capacity, discussion of the meaning and application of Shannon’s theorems. Mr. Omura (F, Sp).

128A. Linear Systems: The State Space Approach. Prerequisite: course 121C. State-space methods of linear system analysis and design, with application to problems in networks, control, and system modeling. Mr. Jacobsen, Mr. Levan, Mr. Omura (F, W).

128L. System Science Laboratory. Laboratory, eight hours. Prerequisites: Engineering 122A, 120B and consent of instructor. Students will make actual measurements on real hardware in experimental environments of such topics as frequency, and transient response of a mechanical system; design, construction, and test of operational amplifiers, simple analog computers, and demodulators for AM and FM signals. Mr. Subelman, Mr. P.K.C. Wang, Mr. Yao (Sp).

129A. Introduction to Linear and Quadratic Programming. Prerequisites: Mathematics 32A, 33A or consent of instructor. An introduction to the formulation and solution of linear and quadratic programming problems with applications from engineering and economic systems. Linear programming; the simplex algorithm; duality theory. Optimization of quadratic functions subject to linear and quadratic constraints. Mr. Jacobsen, Mr. Miller, Mr. Subelman (W).

130A. Introduction to Statistical Thermodynamics. Prerequisite: course 105A. Calculations of expected values and variances of thermodynamic functions for perfect monatomic gas, Einstein monatomic gas, Boltzmann, and Debye monatomic crystal, photon gas, electron gas in a metal, perfect atomic crystal. Calculations of gross emission rates from thermal sources. The Staff, Chemical, Nuclear Engineering Department (F).

131A. Intermediate Heat Transfer. Prerequisite: course 105D or 105D or Mathematics 117X. Students will be introduced to the principles of heat transfer and engineering applications. Topics include one and two group diffusion, finite system for coding and translation, ordinary differential equations, interpolation and other energy uses. Consideration of thermo-dynamic, economic and environmental constraints. Mr. Calton (Sp).

131B. Theory of Reactor Core Physics. Prerequisite: course 131A. Introduction to slowing down, thermalization, multigroup theory, heterogeneous effects, reactor kinetics, and perturbation theory. Mr. Apostolakis (W).

131BL. Nuclear Analysis Laboratory (1 course). Laboratory, four hours. Prerequisite: course 135A should be taken concurrently. A laboratory course in nuclear engineering comprised of various experiments and related fields. The experiments will consist of measuring and calculating reactor core physics parameters, and pertinent heat transfer/flow fluid parameters. Mr. Calton (F).

135A. Nuclear Reactor Theory I. Prerequisite: course 131A. Introduction to slowing down, thermalization, multigroup theory, heterogeneous effects, reactor kinetics, and perturbation theory. Mr. Okrent (F).

135B. Nuclear Reactor Theory II. Prerequisite: course 135A. Introduction to slowing down, thermalization, multigroup theory, heterogeneous effects, reactor kinetics, and perturbation theory. Mr. Apostolakis (W).

135B. Nuclear Analysis Laboratory (1 course). Laboratory, four hours. Prerequisite: course 131A should be taken concurrently. A laboratory course in nuclear engineering comprised of various experiments and related fields. The experiments will consist of measuring and calculating reactor core physics parameters, and pertinent heat transfer/flow fluid parameters. Mr. Calton (F).

135C. Nuclear Reactor Design I. (Formerly numbered 135D.) (Not the same as Engineering 135C prior to Spring Quarter 1980.) Prerequisites: courses 135A, 135B. Reactor physics, engineering, fuel element design for nuclear reactor cores, criticality, reactivity considerations, and effects; power distributions; differences among various power reactor systems. Introduction to the use of physics design computer code. Mr. Okrent (Sp).

135E. Neutron Activation Analysis Laboratory. Prerequisites: upper division standing in engineering. Chemistry 111A, 11B, Mathematics 31A, 31B, Physics 6A, 6B, 8A. Application of neutron activation as a tool for research in the physical sciences. Emphasis will be on the neutron reactor as a neutron source. Topics include nuclear chemistry, radiation detectors and analyzers with computer handling of the spectral data. Mr. Cattan (Sp).

136. Experimental Reactor Operations, Control and Safety (½ course). Laboratory, four hours. Prerequisite: course 135A. Operation of the UCLA R-1 Argonaut reactor, measurements of various core parameters and control system responses and evaluation of various safety systems and reactor operation. Experiments not included in Engineering 135A, 135B, 135C will be conducted. Mr. Cattan (Sp).

Mr. Apostolakis (F)

138B. Nuclear Reactor Thermal Hydraulic Design. (Formerly numbered 138E.) Prerequisites: courses 105A, 105D, 131A (135A recommended). Thermohydraulic design of various nuclear power reactor concepts; power generation and heat removal; power cycle, thermal and hydraulic component design; overall plant design; steady state and transient nuclear system operation.

Mr. Chir (W)


137. Introduction to Chemical Engineering. Prerequisite: Mathematics 33A, Engineering 105A (may be taken concurrently). For analysis and design of industrial chemical processes. Material and energy balances.

The Chemical Engineering Staff (F,Sp)

137A. Chemical Engineering Thermodynamics. Prerequisite: course 137. Thermodynamic properties of pure substances, thermodynamic solutions. Phase equilibrium. Chemical reaction kinetics.

The Chemical Engineering Staff (F,W)

137B. Chemical Engineering Diffusional Processes. (Formerly numbered 137F.) (Not the same as Engineering 113 prior to Fall Quarter 1981.) Prerequisites: courses 105D, 137, 137A. Brownian motion, fluxes according to irreversible thermodynamics; one-dimensional theory: membrane transport, facilitated transport; convective diffusion, concentration boundary layers, turbulent diffusion. The fundamentals will be illustrated by applications to separation processes, gas cleaning and blood oxygenation.

The Chemical Engineering Staff (Sp)

137C. Chemical Engineering Separation Operations. (Formerly numbered 137B.) (Not the same as Engineering 137C prior to Fall Quarter 1981.) Prerequisites: courses 105D, 137, 137A. Application of the principles of heat, mass and momentum transport to the design and operation of separation processes such as distillation, gas absorption, filtration and reverse osmosis.

The Chemical Engineering Staff (F,W)

137D. Chemical Engineering Kinetics. (Formerly numbered 137D.) (Not the same as Engineering 137D prior to Winter Quarter 1982.) Prerequisites: courses 105D, 137, 137A, 137B. Fundamentals of chemical kinetics and catalysis. Introduction to the analysis and design of homogeneous and heterogeneous chemical reactors.

The Chemical Engineering Staff (W)

137E. Chemical Engineering Design. (Formerly numbered 137D.) (Not the same as Engineering 137E prior to Spring Quarter 1982.) Prerequisites: courses 137C, 137D. Integration of chemical engineering fundamentals such as chemical reactor design and separation operations and simple economic principles for the purpose of designing complete chemical processes.

The Chemical Engineering Staff (Sp)

138A. Introduction to Cryogenics and Low Temperature Processing. Prerequisite: course 105A. liquefaction of gases, cooling to cryotemperatures. LNG processes, liquid hydrogen, and liquid He cryogenic systems for superfluids and applied superconductivity.

Mr. F. Rederking (W)

138B. Chemical Engineering Polymer Processes. Prerequisites: course 103, Chemistry 21 or senior standing in engineering or physical science. Formulation of polymers, criteria for selecting a reaction scheme, polymerization techniques. Polymer characterization. Mechanical properties. Rheology of macromolecules, modeling and experimental methods to characterize non-Newtonian fluids. Polymer process engineering.

The Chemical Engineering Staff

139A. Introductory Chemical, Nuclear, and Thermal Engineering Laboratory. (Not the same as Engineering 139A prior to Winter Quarter 1977.) Laboratory, eight hours. Prerequisites: courses 103A, 105A, 105D. Basic introductory laboratory experiments illustrating the experimental techniques for the study of liquid and gas phase processes. Experiments include examples from thermodynamics, chemical engineering, heat and mass transfer, nuclear engineering, and environmental problems.

The Staff, Chemical, Nuclear and Thermal Engineering Department (F,W)

139AC. Introductory Chemical, Nuclear and Thermal Engineering Laboratory. Laboratory, eight hours. Prerequisites: courses 103, 105A, 105D, 137, 137A or consent of instructor. Basic introductory laboratory experiments illustrating the experimental techniques for the study of liquid and gas phase processes. Experiments include examples from thermodynamics, chemical engineering, heat and mass transfer, nuclear engineering and environmental problems. For students in the Chemical Engineering Program.

The Chemical Engineering Staff

139B. Chemical and Thermal Engineering Laboratory. (Formerly numbered 139A.) (Not open to students who have taken Engineering 139A prior to Winter Quarter 1977.) Laboratory, eight hours. Prerequisites: courses 105D, 137A or consent of instructor. Basic laboratory practice for the study of energy transformation and rate processes. Selected experiments include examples from thermodynamics, heat and mass transfer, chemical and electrochemical processes, cryogenics, chemical kinetics, molecular dynamics, saline water conversion and environmental problems.

The Staff, Chemical, Nuclear and Thermal Engineering Department (Sp)

139BC. Chemical and Thermal Engineering Laboratory. Laboratory, eight hours. Prerequisites: courses 137B, 137C (may be taken concurrently), 139A or consent of instructor. Basic laboratory practice for the study of energy transformation and rate processes. Selected experiments include examples from thermodynamics, heat and mass transfer, chemical and electrochemical processes, cryogenics, chemical kinetics, molecular dynamics, saline water conversion and environmental problems. For students in the Chemical Engineering Program.

The Chemical Engineering Staff


140E. Materials Selection and Engineering Design. Prerequisite: course 14 or consent of instructor. Explicit guidance among the myriad materials available for design in engineering. Properties and applications of steels, nonferrous alloys, polymeric, ceramic, composite materials and composites, coatings. Materials selection, treatment and serviceability emphasized as part of successful design. Design projects.

Mr. Yue (W)

140X. Experimental Methods of Materials Research (1/4 to 1 course). Laboratory, two to eight hours; recitation, one to four hours. Prerequisites: course 14 or equivalent and consent of instructor. Variable topics intended for students wishing to learn individual experimental techniques for materials processing, and characterization of materials. Students will operate various modern instruments, including electron microscopes, X-ray diffraction apparatus, mechanical testing machines and high temperature furnaces.

Mr. Ono (F,Sp)

141. Phase Relations in Solids. Prerequisites: courses 14, 105A. Summary of thermodynamic laws, equilibrium criteria, solution thermodynamics, mass action law, binary and ternary phase diagrams, glass transition.

Mr. Knapp (Sp)

142A. Diffusion and Diffusion-Controlled Reactions. (Formerly numbered 142J.) Prerequisite: course 141. Diffusion in metals and ionic solids, nucleation and growth theory; precipitation from solid solution, eutectoid decomposition, design of heat treatment processes of alloys, design of intermediate phases, gas-solid reactions, design of oxidation-resistant alloys, recrystallization and grain growth.

Mr. Douglass (F)

143A. Mechanical Behavior of Materials. Prerequisites: courses 14, 108 or equivalent. 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.

Mr. Ono, Mr. Shabaka (W)

143L. Mechanical Testing Laboratory (1/4 course). Prerequisites: courses 14, 108, 131A or 139A. Basic mechanical testing. Basic testing equipment. Basic strength testing theory. Analysis of data. Comparison of results with theory.

Mr. Shabaka (W)

144A. Polymer Science. (Formerly numbered 149A.) Prerequisite: course 14. Introduction to polymers, polymerization mechanisms, molecular weight and distribution, chemical structure and bonding, structure crystallinity, and morphology and their effects on physical properties. Glassy polymers, cross-linked polymers, elastomers, adhesives. Fibers and polymer technology, polymer processing technology, plasticization.

Mr. Mackenzie (W)

144L. Design of Specific Polymeric Systems (1/4 course). (Formerly numbered 149L.) Prerequisite: course 14A or consent of instructor. Control of blend properties, effects of physical properties, and applications to specific polymeric systems. Polymerization mechanisms, molecular weight and distribution, chemical structure and bonding, structure crystallinity, and morphology and their effects on physical properties. Glassy polymers, cross-linked polymers, elastomers, adhesives. Fibers and polymer technology, polymer processing technology, plasticization.

Mr. Mackenzie (W)

145A. Introduction to Materials Characterization. Prerequisite: course 140C or equivalent. Modern methods of materials characterization: X-ray diffraction and spectroscopy; principles of metallography; scanning and transmission electron microscopy; analysis and evaluation of engineering materials.

Mr. Wagner (F,Sp)

145L. Materials Characterization Laboratory (1/4 course). Prerequisite: course 145A. Modern laboratory techniques for the microstructural characterization of materials; X-ray powder method; X-ray spectrosCopy (wavelength and energy dispersive) for chemical analysis; optical and electron microscopy, quantitative metallography, surface topography.

Mr. Arredl, Mr. Wagner (Sp)
146A. Introduction to Ceramics and Glasses. Prerequisite: course 14 or equivalent. An 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.

Mr. Mackenzie (W)

146B. Processing of Ceramics and Glasses. Prerequisite: course 146A or equivalent. A study of the processes used in fabrication of ceramics and glasses, relationship to structure and properties. Processing operations including materials preparation, forming, sintering and melting. Design of processing to achieve desired characteristics of structure, properties and cost.

Mr. Knapp (Sp)

148L. Laboratory in Ceramics (% course). Laboratory, four hours. Prerequisite: course 146A or equivalent; concurrently or subsequently. Examination of properties through control process for engineering applications. Quantitative characterization and selection of raw materials. Slip casting and extrusion of clay bodies. Sintering of powders. Glass melting and fabrication. Determination of chemical and physical properties.

Mr. Knapp (Sp)

147A. Introduction to Metallurgy. Prerequisite: course 14. Introduction to metallic alloys used in engineering. Phases, phases diagrams, solidification processes and cast and wrought alloys, design of metallic alloys for specific applications.

Mr. Bunshah, Mr. Wagner (F)

147B. Metal Fabrication Processes. Prerequisite: course 14. Theoretical basis for cold forming and hot forming processes; rolling, extrusion and forging. Conventional metal removal. Solidification processes and casting. Powder metallurgy. Mr. Shabaik (Sp)

147E. Introduction to Metallography. Prerequisite: course 141 or equivalent. Metallographic examinations carried out in vacuum including metallography, purification, heat treatment, degassing of liquid metals, joining. Properties and applications of these materials.

Mr. Charwat (Sp)

147L. Metal Fabrication Processes Laboratory (% course). Prerequisite: course 147B. Experimental investigation and analysis of metal forming processes (forging, extrusion, drawing and rolling). Force measurement and energy calculations in metal cutting. Experimental investigation of hot and isotropic pressing of powder.

Mr. Shabaik (Sp)

149C. Properties of Art Ceramic Materials. (Formerly numbered 148C.) Lecture, three hours; laboratory, three hours; laboratory, four hours. Prerequisite: consent of instructor. A technical introduction to the origins and evolution of ceramic materials and their functions in bodies and glazes. Design of glazes and methods of expressing composition. Laboratory projects will be included (not intended for Engineering majors).

Mr. Knapp (F)

148E. Ceramic Materials in History and Archaelogy. (Formerly numbered 148E.) Lecture, two hours; laboratory, four hours. Prerequisite: consent of instructor. A technical introduction to the origins and evolution of ceramic materials and their functions in bodies and glazes. Design of glazes and methods of expressing composition. Laboratory exercises are aimed at the development of skills necessary for analytical studies (for students in the humanities and sciences).

Mr. Knapp (W)

150A. Applied Fluid Mechanics I. Prerequisite: course 103A or consent of instructor. The course will provide students with a working knowledge of incompressible fluid mechanics. Equations of motion will be derived and applied to a variety of engineering fields. These will include flow over bodies, flow through pipes, open channel flow, ocean waves, and porous media.

Mr. Kelly (F, W)

150B. Applied Fluid Mechanics II. Prerequisite: course 103A or equivalent or consent of instructor. Gas dynamics: isentropic flow in nozzles, normal and oblique shocks. Prandlt-Meyer expansion fan, effects of friction and heat transfer in channel flows, thin airfoils in supersonic flow. Viscous flow; exact solutions of Navier-Stokes equations. Boundary layer theory, instability, turbulence, separation.

Mr. Charwat (Sp)

151. Performance of Vehicles. Prerequisites: courses 103A, 105A. Preliminary design analysis of thermal and mechanical energy conversion systems used in automobiles, trains, aircraft, rocket-powered vehicles, ground effect machines, ships and sailboats; performance parameters will include speed, range, payload, efficiency, dynamics and stability, noise, and air or water pollution. Unsteady effects: transients, resonances. Fluid energy sources: winds, waves, tides, rivers. Design of turbines, pumps and fans. Activators and fluidic logic elements.

Mr. Charwat (Sp)

153A. Engineering Acoustics. Prerequisite: upper division standing in engineering or consent of instructor. Fundamental course in acoustics. Includes the ear and hearing; basic acoustical instrumentation; propagation of sound; sources of sound; architectural reverberation; selected subjects.

Mr. Stern (F)

153B. Acoustics Laboratory. Laboratory, eight hours. Prerequisite: course 153A (may be taken concurrently) or consent of instructor. Experimental studies in the field of acoustics, including audiology, noise and noise control, acoustical filters, impedance measurements, transducer characteristics and interferometry. Use of computer to facilitate experimental data.

Mr. Stern (W, odd years)

153C. Noise and Noise Control Design. Prerequisite: course 153A or consent of instructor. Practical concepts in design, construction, measurement and analysis of noise suppression techniques. Includes noise equipment, transducers, environmental factors in sound propagation, enclosures, properties of materials, sound interaction in structures, mufflers, isolators, damping of panels, ducts, aerodynamic noise, noise criteria and standards.

Mr. Stern (W, even years)

154A. Aerodynamic Design. (Formerly numbered 150C.) Prerequisites: courses 103A, 150A. This course presents the classical ideas of aircraft aerodynamics. Lift, drag, thrust, and power are discussed, then aircraft performance and stability. The quarter assignment is the preliminary design of an aircraft satisfying specifications set by the instructor.

Mr. Friedmann (W)


Mr. Friedmann (Sp)

155. Intermediate Dynamics. Prerequisite: course 102 or equivalent. Not open for full credit to students having taken 102B. The axioms of Newtonian mechanics, generalized coordinates, Lagrange's equations, variational principles, central force motion; kinematics and dynamics of a rigid body, Euler's equations, motion of rotating bodies, coordinate motion, normal coordinates, orthogonal rotations, the vibrating string.

Mr. Forster (Sp)


Mr. Lin (Sp)


Mr. Chawat (F, W, Sp)

157A. Fluid Mechanics Laboratory. Laboratory, eight hours. Prerequisites: courses 103A, 157. Course provides an introduction to the application of principles of fluid mechanics involving a variety of systems, including: flow in pipes, condensers, nuclear reactors, reactors, incompressible fluids, boundary layer theory, stability, turbulence, separation. Application of principles of fluid mechanics involving a wide range of physical systems, including simplified models of mechanical and electromagnetic devices, space and ground transportation vehicles, and biomedical systems. Mathematical modeling and computer simulation are emphasized.

Mr. Dubowsky (F, W, even years)


Mr. Westman (F, W)


Mr. Roberts (Sp)

161A. Introduction to Astronautics. Prerequisite: course 102. The space-environment of earth, near-earth and inter-planetary travel. Study of the two-body orbital transfer and rendezvous, elementary perturbation theory, influence of the earth's oblateness.

Mr. Forster

162A. Introduction to Mechanism and Mechanical Systems. (Formerly numbered 178A.) Prerequisite: course 102. The analysis and synthesis of mechanisms and mechanical systems are studied including both kinematics and dynamics aspects. Mechanisms from a wide range of applications including automatic machinery, transportation systems and computer peripheral equipment are introduced.

Mr. Dubowsky (F)

162B. Fundamentals of Mechanical System Design. (Formerly numbered 178B.) Lecture, three hours; laboratory, four hours. Prerequisite: course 162A. Course provides a background in experimental techniques of modern design and development of mechanical systems. Application and analysis of basic components and sub-systems such as gears, bearings, hydraulic and pneumatic sub-systems. The dynamics of high-speed machines. Students will create a design of their choice.

Mr. Dubowsky (W)

162C. Electromechanical Systems Laboratory. Lecture, one hour; laboratory, five hours. Prerequisite: course 162A or equivalent. An introductory course for students interested in research, design or development of complex mechanical and electromechanical systems. Student, with consent of instructor, will design a system or part of system and develop and build instrument. Behavior of this system is studied in detail.

Mr. R.R. Allen (Sp)

163. Dynamics and Control of Physical Systems. Prerequisites: courses 171A and either 155 or 169A (concurrent enrollment is satisfactory). Application of the principles of dynamics and control theory to a wide range of physical systems, including simplified models of mechanical and electromagnetic devices, space and ground transportation vehicles, and biomedical systems. Mathematical modeling and computer simulation are emphasized.

Mr. Dubowsky (W, even years)
164. Engineering System Dynamics. Prerequisites: courses 171A, 169A (either of which may be taken concurrently). Computer models of dynamic systems with interacting mechanical, electrical, hydraulic, and thermodynamic elements; component models; subsystem interactions; system equations in state-variable form; computer simulation. Rigid and flexible body dynamics; transducers; control systems, including feedback control. Mr. S. Selna (W, odd years)

165A. Elementary Structural Analysis. Prerequisite: course 108. Equilibrium of structures; deformation analysis; discussion of structures based on the method of sections. Plane trusses and frames, statics and dynamics. Mr. R.R. Allen (W, odd years)

165B. Intermediate Structural Analysis. Prerequisite: course 165A. Classical force, displacement methods of structural analysis; three moment equation, slope deflection equations, moment distribution; virtual work, minimum potential, complementary potential theorems; Castigliano's theorems, generalized loadings; matrix manipulation, inversion; solution of the linear algebraic equations, eigenvalue problems; structural applications; matrix displacement method for beams, trusses, frames, direct assembly of system stiffness; matrix force method for planar frames. Mr. Dong (F, Sp)

165L. Computer Analysis of Structures. (Formerly numbered 165N.) Prerequisite: course 165A. Development of algorithms and FORTRAN coding for matrix manipulation, inversion; solution of the linear algebraic equations, eigenvalue problems; structural applications; matrix displacement method for beams, trusses, frames, direct assembly of system stiffness; matrix force method for planar frames.

166. Elementary Structural Mechanics. Prerequisite: course 108. Analysis of stress, strain; phenomena and mechanical behavior, fatigue, cumulative damage; bending, extension of beams, unsymmetrical sections, stiffened shell structures; torsion. Mr. Schmit (W, Sp)

171A. Introduction to Feedback and Control Systems: Dynamic Systems Control I. Lecture, three hours; recitation, one hour. Prerequisite: consent of instructor. Introduction to feedback principles, control systems and stability. Unified introduction to continuous and discrete-time (digital or sampled-data) systems. Control synthesis and implementation. Mr. Rea (F)

171A. Introduction to Feedback and Control Systems: Dynamic Systems Control II. Prerequisite: either course 171A or 222A. Emphasis on state-space models of continuous and discrete-time dynamical systems. Linear algebra of systems; vector spaces; geometric concepts; transformations and matrices; canonical forms. Stability, state controllability, and observability. State representation of nonlinear systems; linearization. Emphasis on modeling concepts, applications, and computer-aided problem solving. Mr. DiStefano (F)

173. Engineering Project Management. Emphasizes techniques for design. Mr. Nottage (W)

174A. Introduction to Elements of Decision Making. Prerequisite: course 175 or equivalent mathematics courses. Elements of decision making and the decision process. Decision and utility theory. Formulation of utility functions and subjective probabilities. Application of utility functions and subjective probabilities to economic decisions. Mr. Rubinstein (F)

175A. Design of Reinforced Concrete Structures. Lecture, three hours; recitation, three hours. Prerequisite: course 165A. Design of reinforced concrete buildings. Reinforced concrete elements, columns, and slabs. Working stress and ultimate strength methods. Mr. Rea (F)

175B. Design of Reinforced Concrete Structures. Lecture, three hours; recitation, three hours. Prerequisite: course 165A. Design of reinforced concrete buildings. Reinforced concrete elements, columns, and slabs. Working stress and ultimate strength methods. Mr. Rea (F)

176. Design of Prestressed Concrete Structures. Prerequisite: course 165A. Prestressing and post-tensioning techniques. Properties of concrete and prestressing steels. Loss of prestress. Analysis of sections for flexural stresses and ultimate strength. Design of beams by allowable stress and strength methods. Load balancing design; continuous beams and slabs. Mr. Selna (Sp)

177. Reinforced Concrete Structural Laboratory. Laboratory, eight hours. Prerequisites: course 167B and consent of instructor. Experimental verification of strength design methods used for reinforced concrete elements. Full or near full scale slab, beam, column, and joint specimens tested to failure. Mr. Selna (Sp)

169A. Introduction to Mechanical Vibrations. Prerequisites: courses 102, 108; recommended but not required: course 121C. Fundamentals of vibration theory and applications. Free, forced and transient vibration of one and two degrees of freedom systems, including damping and nonlinear behavior. Normal modes, coupled and normal coordinates. Elements of vibration and wave propagation in continuous systems. Mr. Duke (W)


178. Soil Mechanics. Prerequisite: course 164 or consent of instructor. Soil as a foundation for structures and as a material of construction. Soil formation, classification, physical and mechanical properties, bearing capacity, earth pressures, consolidation and shear strength. Mr. Lade (F)

180B. Machine and Systems Biotechnology. Prerequisite: course 107A or consent of instructor. Quantitative and qualitative methods for assessing man as a component in engineering design applications. Limiting conditions of hygiene, safety, and comfort; computer capabilities applied to display-control design, decision-making problems, and task definition; problems of man-machine interactions in large-scale systems. Mr. Lyman (W)

181A. Air Pollution Control. Prerequisite: senior standing or consent of instructor. Quantitative consideration of the air resource and its management. Air quality measurements and standards. Systems for pollution control. Environmental aspects of air pollution problems. Data analyses and interpretations. Lectures, occasional laboratory and field trips. Mr. Perine

194A. Engineering Hydrology. Prerequisite: senior standing or consent of instructor; elementary probability concepts, applications, and computer-aided problem solving. Introduction to system analysis applied to Water Resources Engineering. Mr. Dracup, Mr. W.G. Yeh (F, Sp)

194B. Introduction to Water Resources Engineering. Prerequisite: course 103A or consent of instructor. Principles of hydraulics, the flow of water in open channels and pressure conduits, reservoirs and dams. Basic principles of drainage, hydroelectric power, introduction to system analysis applied to Water Resources Engineering. Mr. Dracup, Mr. W.G. Yeh (F, Sp)

194D. Water Quality Control Systems. Prerequisite: upper division standing in engineering or consent of instructor. Water as a resource; the quality, chemical, and biological bases of pollution and treatment. Potability and chemical aspects of quality control and reclamation; analytical, economic, and performance aspects of process design for prevention and treatment. Field trips. Mr. Stenstrom (F)

194E. Water Quality Control Laboratory. Laboratory, eight hours. Prerequisites: course 184D (may be taken concurrently), Chemistry 11 A, 11 B. Basic laboratory techniques and principles of computer-aided problem solving and analysis of waters and wastewaters. Selected experiments include measurement of biochemical oxygen demand, suspended solids, dissolved oxygen hardness, and other parameters used in water quality control. Mr. Phillips (W)

195A. Principles of Soil Mechanics. Prerequisite: course 108; Earth and Space Sciences 1 recommended. Soil as a foundation for structures and as a material of construction. Soil formation, classification,physical and mechanical properties, bearing capacity, earth pressures, consolidation and shear strength. Mr. Lade (F)

195B. Soil Mechanics—Laboratory Practices (1/2 course). Laboratory, four hours. Prerequisite: course 184B. Laboratory experiments to be performed by the students to get basic data required for assigned design problems. Soil classification, Atterbur method, permeability, compaction, shear strength and specific gravity determination. Mr. Duke (W)

196A. Elements of Construction. Lecture, two hours; special projects, field trips, four hours. Prerequisite: senior standing in engineering. Anatomy of the industry, bidding and purchasing strategies, contracts, construction, and environmental aspects of project design and construction, planning and scheduling, equipment and materials, construction methods, field engineering techniques, observation and engineering analysis of current construction projects in the valley. Mr. Duke

191A. Laplace Transforms and Applied Complex Variables. Prerequisites: courses 100, 102. Introduction to the Laplace Transformation: application to electrical and mechanical problems, convolution-type integral equations, difference equations and boundary value problems in partial differential equations. Complex variable theory, contour integrals, residues; application to transform inversion and partial differential equations. Mr. Forster (W, Sp)
192A. Mathematics of Engineering. Prerequisites: Mathematics 33A, 33B. Application of mathematical methods to problems of interest in engineering. The main topics covered include linear and nonlinear differential equations. Fourier series, transforms, and non-linear effects are also discussed as related to the solutions of differential equations.

Mr. Kelly, Mr. Liu, Mr. Pomraning (F,W,Sp)

192B. Mathematics of Engineering. Prerequisite: course 192A or equivalent. Applications of mathematical methods to engineering problems are considered. Eigenvalue problems for continuous systems and the most typical functions are studied.

Mr. Kelly, Mr. Liu, Mr. Pomraning (F,W,Sp)

192C. Mathematics of Engineering. Prerequisite: course 192A or equivalent. Application of mathematics to engineering problems. A survey of the classical partial differential equations, wave, heat, and potential theories. The formulation of the problems and analytical and numerical methods are studied.

Mr. Kelly, Mr. Liu, Mr. Pomraning (Sp)

193A. Engineering Probabilistics and Stochastics. Prerequisite: junior standing in engineering. Descriptions and representations of solid objects; absolute and conditional probability; discrete and continuous random variables; probability distribution, increment, and density functions; Chebyshev's inequality, moment generating functions; law of large numbers, central limit theorems; discrete and continuous stochastic processes.

Mr. Apostolakis, Mr. Meecham, Mr. Peari (F,Sp)


Mr. DeCosta, Mr. Peari (F,Sp)

194A. Fundamentals of Computer-Aided Design and Manufacturing. Lecture, four hours. Prerequisites: one-quarter standing in mechanical or electrical engineering; course 194B must be taken concurrently. Basic course in computer-aided and manufacturing area. Covers foundations of computerized drafting, including primitives, operators, and major functions. Discusses descriptions of instruction sets and memory management. AC, DC and digital circuit design.

Mr. Bussell, Mr. Ercegovac (F,Sp)

194B. Computer-Aided Design Laboratory (½ course). Lecture, four hours. Prerequisites: junior standing in engineering or mathematics; course 194A must be taken concurrently. Students will be taught how to utilize an on-line computer-aided system, to draw and to design various parts and systems.

Mr. Melkanoff (F)


Mr. Muth, Mr. Ternes (Sp)


Mr. Muth, Mr. Young (F)

196B. Modeling and Simulation of Biological Systems. (Same as Medicine M196B.) Prerequisite: calculus. Introduction to classical and modern systems and modeling and simulation methods for studying biological systems. Includes multicompartamental modeling, multiplex differential equation models, and simulation laboratory. Applications to molecular, cell biology, and medicine. Life science and medical students are encouraged to enroll.

Mr. Campfield, Mr. DiStefano (F,Sp)

199B-199G. Special Studies (½ to 2 courses). Prerequisites: senior standing and consent of instructor. Individual investigation of a selected topic, to be arranged with a faculty member. Enrollment requirements, if any, are available in department offices. Occasional field trips may be arranged. May be repeated for bachelor's degree credit.

199B. Electrical Sciences and Engineering Department. The Staff (F,Sp)

199C. Chemical, Nuclear and Thermal Engineering Department. The Staff (F,Sp)

199D. Engineering Systems Department. The Staff (F,Sp)

199E. Materials Department. The Staff (F,Sp)

199F. Mechanics and Structures Department. The Staff (F,Sp)

199G. System Science Department. The Staff (F,Sp)

Computer Science

Lower Division Courses

20. Programming and Problem Solving. (Formerly numbered Engineering 20.) Prerequisite: Engineering 1OC; this course is to be taken concurrently. Open to graduate students on S/U grade basis only. Solution of numerical and nonnumerical problems of intermediate complexity, using assembly languages and several programming languages. Students will analyze, program, and run hundreds of problems. Emphasis is placed on individual ability to carry out assignments under minimum supervision.

Mr. Uzgalis (F,Sp)

30. Introduction to Computer Operating Systems. (Formerly numbered Engineering 30.) Prerequisite: Computer Science 20; open to graduate students on S/U grade basis only. Introductory course on functions and use of modern computer systems. Overview of batch and time-sharing systems. Functional description of assemblers, compilers, linkage editors, loaders. Job control language, overlays, file structures, buffering, protection. Assignments will include problems on the computer.

Mr. Friedman, Mr. McNamee, Mr. Muntz (F,Sp)

99. Individual Programming Projects (½ to 1 course). Prerequisite: Engineering 10C or consent of instructor. Course intended for students wishing to learn individually new programming languages and students wishing to make up deficiencies so as to bring them to the level of Computer Science 20. Students will design, check-out and run programs in various programming languages.

Mr. Melkanoff (W,Sp)

Upper Division Courses


Mr. Gerta, Mr. Muntz (F,Sp)

120. Computer System Modeling Fundamentals. Prerequisite: upper division standing. Basic tools for performance analysis and design of distributed computer systems including: probability; transforms; Markov chains; queueing theory; counting; graphs; network flows; computational graph models. Examples will be drawn from the computer systems field.

Mr. Kleinrock (F,Sp)

M124A. Applied Numerical Computing. (Formerly numbered Engineering 124A.) (Same as Engineering M124A.) Prerequisites: Engineering 10C, Mathematics 33A, 33B or equivalents. An introduction to scientific computing and computer-aided and application-oriented survey of computer methods for solving important practical problems. Some mathematical prerequisites will be assumed. Students must have good working knowledge of FORTRAN, ALGOL 60, COBOL, PL/1, and ALGOL 68. Additional topics as instructor sees fit.

Mr. Berry, Mr. Cardenas, Mr. Uzgalis (F,Sp)


Mr. Gerla, Mr. Karplus (W,Sp)

141. Basic Methods of Data Organization. (Formerly numbered Engineering 123A.) Prerequisite: Computer Science 20. The main objective is to study, compare and evaluate programming languages, in particular, commercially available languages: FORTRAN, ALGOL 60, COBOL, PL/1, and ALGOL 68. Additional topics as instructor sees fit.

Mr. Gerla, Mr. Klinger (F,Sp)

151A. Computer System Architecture I: Introduction. (Formerly Engineering 125A.) Lecture, four hours; recitation, two hours. Prerequisites: college-level physics (electricity and magnetism), Engineering 10C; Computer Science 152A to be taken concurrently. Study of computer architecture. Description of machine organization and operation. Information: its representation and manipulation. Combinatorial logic design with ICs and MSI devices. Sequential circuits, storage elements and MSI packages. Arithmetic and the arithmetic-logic unit.

Mr. Azizivani, Mr. Bussell, Mr. Erocevic (F,Sp)

151B. Computer System Architecture II: Intermediate. (Formerly numbered Engineering 125B.) Lecture, four hours; recitation, two hours. Prerequisites: Computer Science 151A; Computer Science 152B to be taken concurrently. Study of computer architecture. Description of machine organization and operation. Information: its representation and manipulation. Combinatorial logic design with ICS and MSI devices. Sequential circuits, storage elements and MSI packages. Arithmetic and the arithmetic-logic unit.

Mr. Aziz, Mr. Bussell, Mr. Erocevic (W,Sp)

152A. Introductory Digital Circuits Laboratory (½ course). (Formerly numbered Engineering 125A.) Prerequisite: Engineering 1OC. This course is to be taken concurrently with Computer Science 151A. Familiarization with design and interconnection of logic circuits and networks through implementation and debugging procedures, including experience with printed circuit design.

Mr. Bussell, Mr. Erocevic (W,Sp)

152B. Digital Systems Laboratory (½ course). (Formerly numbered Engineering 125B.) Prerequisite: Computer Science 151B. This course is to be taken concurrently with Computer Science 151A. Familiarization with design and interconnection of logic circuits and networks through implementation and debugging procedures, including experience with printed circuit design.

Mr. Bussell, Mr. Rennels (F,Sp)

Mr. Bussell, Mr. Rennels (W,Sp)
English

(Department Office: 2225 Rolfe Hall)

Michael J.B. Allen, Ph.D., Professor of English.
Calvin Bernard Bedient, Ph.D., Professor of English.
Daniel G. Calder, Ph.D., Professor of English.
Richard Keith Crose, Ph.D., Professor of English.
Vinton A. Dearing, Ph.D., Professor of English.
Robert William Dry, Ph.D., Professor of English.
Patterson W. Ford, Ph.D., Professor of English and Celt.
Robert A. Georges, Ph.D., Professor of English.
Gerald Jay Goldberg, Ph.D., Professor of English.
George Robert Guffey, Ph.D., Professor of English (Vice-Chairman of the Department).
Charles Bennett Guillans, Ph.D., Professor of English.
Henry Ansar Kelly, Ph.D., Professor of English and Medieval Renaissance Studies.
Jascha Kessler, Ph.D., Professor of English.
Robert Martin Kinsman, Ph.D., Professor of English.
Murray Krieger, Ph.D., University of Pennsylvania.
Richard Allan Lanham, Ph.D., Professor of English.
Richard D. Lehan, Ph.D., Professor of English.
Blake Reynolds Nevius, Ph.D., Professor of English.
Maximilian Erwin Novak, D.Phil., Professor of English.
Joseph N. Riddle, Ph.D., Professor of English.
Florence Ridley, Ph.D., Professor of English.
Alan Henry Roper, Ph.D., Professor of English.
George S. Rousseau, Ph.D., Professor of English and Eighteenth-Century Studies.
William David Schaefer, Ph.D., Professor of English.
Paul Roland Selin, Ph.D., Professor of English.
Paul Douglas Sheets, Ph.D., Professor of English (Chairman of the Department).
Georg Bernhard Tennyson, Ph.D., Professor of English.
Peter Larsen Thorslev, Jr., Ph.D., Professor of English.
Alexander Welsh, Ph.D., Professor of English.
D.K. Wilgis, Ph.D., Professor of English and Anglo-American Folksong.
Ruth B. Yeazell, Ph.D., Professor of English.
Robert Martin Adams, Ph.D., Emeritus Professor of English.
Robert Paul Balk, Ph.D., Emeritus Professor of English.
Charles V. Hartung, Ph.D., Emeritus Professor of English.
Leonard Howard, Ph.D., L.H.D., Emeritus Professor of English.
Claude Jones, Ph.D., Emeritus Professor of English.
Paul Alfred Jorgensen, Ph.D., Emeritus Professor of English.
Alfred Edwin Longueil, Ph.D., Emeritus Professor of English.
Adal Blanche Nisbet, Ph.D., Emeritus Professor of English.
Franklin Prescott Rolfe, Ph.D., Emeritus Professor of English.
Walter Eldon Anderson, Ph.D., Associate Professor of English.
Charles Linwood Batten, Jr., Ph.D., Associate Professor of English.
Charles Ashton Berst, Jr., Ph.D., Associate Professor of English.
A. R. Carnwath, Ph.D., Associate Professor of English.
Frederick Lorrain Burwick, Ph.D., Associate Professor of English.
Edward Ignatius Condon, Ph.D., Associate Professor of English and Medieval Studies.
Ronald E. Freeman, Ph.D., Associate Professor of English.
Christopher Wald Grose, Ph.D., Associate Professor of English.
James Edward Goodwin, Ph.D., Associate Professor of English.
Albert David Hutter, Ph.D., Associate Professor of English.
Gordon L. Kipling, Ph.D., Associate Professor of English.
Jack Kolb, Ph.D., Associate Professor of English (Vice-Chairman of the Department).
Kenneth Robert Lincoln, Ph.D., Associate Professor of English.
Robert Maniquis, Ph.D., Associate Professor of English.
Raymond Arthur Paredes, Ph.D., Associate Professor of English.
Karen Elizabeth Rowe, Ph.D., Associate Professor of English.
Thomas Richard Wortham, Ph.D., Associate Professor of English.
Stephen Irwin Yenser, Ph.D., Associate Professor of English.
Ruth E. Armentrout, Ph.D., Assistant Professor of English.
Susan Brienda, Ph.D., Assistant Professor of English.
Romey T. Keys, Ph.D., Assistant Professor of English.
Joseph F. Nagy, Ph.D., Assistant Professor of English.
Barbara Lee Packer, Ph.D., Assistant Professor of English.
Jonathan Post, Ph.D., Assistant Professor of English.
Jeffrey Rubin-Dorsky, Ph.D., Assistant Professor of English.
Donald L. Weber, Ph.D., Assistant Professor of English.
Richard Yarborough, Ph.D., Assistant Professor of English.

Admission to Courses in English

Students must have completed the Subject A requirement before taking any courses in English (other than English A or English 1). Reference to Subject A as a prerequisite in the following pages alludes to the Subject A requirement. For regulations concerning Subject A, see index.

Preparation for the Major

Requirements: English 3, 4, 10A, 10B, 10C taken in the stated sequence (each course is a prerequisite for the next course). Completion of English 3 or 4 normally satisfies the College of Letters and Science "D" requirement in English composition. Completion of English 3 and 4 satisfies the College of Fine Arts English composition requirement (see the sections on "College of Letters and Science" and "College of Fine Arts" for details).

Extra-Departmental Requirement in Foreign Literature or Foreign Language: All English majors must have completed either (1) the fifth course or its equivalent in any one foreign language or (2) any combination of five courses in foreign language and foreign literature, including Foreign Literature in Translation courses (see "Courses" section of this catalog). These courses may be taken P/NP. High school foreign language courses count toward option 1, but not option 2.

Graduate Courses

For complete descriptions of graduate-level courses offered by this School, please consult the UCLA Graduate Catalog.
The Major

Requirements: English 141A or 141B (Chaucer); 142A and 142B (Shakespeare), 143 (Milton); at least one "Specialized Study" course from the 180 series and a minimum of seven additional upper division English courses. At least five of the seven courses must be chosen from the series numbered 150-190. At least one of the seven courses must be in literature before 1800 (the 150 series).

All majors are encouraged to choose additional electives from courses numbered 140 through 190. English 140 (Literary Criticism) is especially recommended for students intending graduate work in literature.

Special Programs

The department offers special programs in American Studies and General Literature, for both of which the regular "Preparation for the Major" sequence as well as the departmental foreign language requirement apply. Because of the specialized nature of these programs, students planning to do graduate work in English should consult with the departmental advisor before selecting either of these.

American Studies: This program consists of nine upper division courses in English and six related upper division courses taken in other departments. The nine English courses must include 109 (Interdisciplinary Approaches to Literature); two courses chosen from 142A and 142B (Shakespeare) and 143 (Milton); three courses chosen from 170, 171, 172, 173, 174 (the historical sequence in American literature); 175 (Perspectives in the Study of American Culture); and one course pertaining to American Studies chosen from the 180 series (Specialized Studies) or the 190 offerings (Literature and Society), taken preferably in the senior year. Of the six upper division courses in other departments, four must be in a selected discipline (history, political science, art, etc.). One of these four courses must deal with the methodology of the discipline, while the other three must explicitly treat American culture. With history as the secondary discipline, for example, students could select from such courses as History 100 (History and Historians)—which would fulfill the methodology requirement—History 15B-15C (African-American History), History 150A-150B (Intellectual History of the United States), History 150C (History of Religion in the United States), History 154C-154D (History of American Architecture and Urban Planning) and History 160 (The Immigrant in America). These courses must be chosen in consultation with the English departmental advisor. A complete listing of acceptable courses in the various secondary disciplines may be obtained from the Department of English (2225 Rolfe Hall).

General Literature: This program consists of nine upper division courses in English or American literature and six upper division courses in foreign literatures (at least one of which must be taught in the original language, not a study of works in translation). The nine English courses must include 142A and 142B (Shakespeare); 141A, 141B (Chaucer) or 143 (Milton); at least one course from the 150 series; and three electives chosen from courses numbered 140 through 190 (students intending graduate work in literature are especially encouraged to take English 140). A listing of acceptable courses arranged into possible emphases under this program may be obtained from the Department of English (2225 Rolfe Hall).

Creative Writing Major

Students in this major must satisfy all requirements listed under "Preparation for the Major" including the foreign language requirement. This major consists of 142A and 142B (Shakespeare) and a minimum of ten additional upper division English courses; three creative writing courses from the 133-135 series, taken in a single genre (poetry, short story or drama); three literature courses paralleling the creative writing specialization (the following pairings are recommended: 100A and 101B with 133; 100C and 101C with 134; 100B and 101D with 135); and four electives chosen from courses 140 through 190. Students will be admitted to this program only upon recommendation of their instructor after completing 133A, 134A or 135A. Students planning on choosing this major are encouraged to take English 20; for further details see the Department of English (2225 Rolfe Hall).

Major for Foreign Students

The department offers a special major in English open optionally to bona fide foreign students whose first language is other than English. Students in this major must satisfy all requirements listed under "Preparation for the Major"; they may fulfill the departmental foreign language requirement with their own native language. The following 12 courses are required for the major itself; English 103J, 106J, 109J; two courses in the 100 series; 122; 142A, 142B; and four additional courses from those numbered 140-199. Students who complete this major and wish to pursue graduate study should consult with the departmental advisor about programs of study and requirements for admission.

Teaching Credential Candidates

Teaching of English: Students wishing to obtain a teaching credential should declare their intention at the beginning of their junior year and seek the advice of the departmental advisor in planning a coherent program. The department requires either 120A, 120B or 120C and 130 as part of, or in addition to, the major. Candidates must also complete English 300 before they can be certified to begin student teaching. Candidates are encouraged to choose additional courses in language and in children's literature, literature for adolescents, American literature and literature for minorities as some of their electives. Note: students who enter the Graduate School of Education seeking a credential to teach English must, before beginning their required practice teaching assignment, be certified by the Department of English as prepared to teach this subject; the department will not certify any student who has not completed 130, 300 and either 120A, 120B or 120C. For additional information on courses leading to the teaching credential, consult the Graduate School of Education (201 Moore Hall) and the Department of English (2225 Rolfe Hall).

The Honors Course in English

Majors with a 3.25 overall grade-point average and a 3.5 grade-point average in English courses are encouraged to enter the Honors Program in English. Application should be made during the second quarter of the junior year. In addition to maintaining the above grade-point averages, students who expect to graduate with departmental honors are required to take two courses in the 180 series and one Special Study tutorial (English 199H).

Lower Division Courses

A. Basic Review of English Usage (No credit). Prerequisite: unsatisfactory performance on the Subject A Placement Test. English A displaces 4 units on the student’s Study List but yields no credit toward a degree. Enrollment in English A is offered only on a P/NP basis and is required of students with low scores on the Subject A Placement Test. Instruction in standard English usage, including practice in sentence and paragraph construction, diction, punctuation, and spelling. Workshop exercises in writing and revision. Completion of this course or demonstration of minimum competence in composition on the Subject A Placement Test is a prerequisite for English 1.

1. Fundamentals of Exposition (1/2 course). Prerequisite: English A or qualifying score on Subject A Placement Test. English A displaces 4 units on the student’s Study List but yields no credit toward a degree. A course designed to develop the proficiency in expository writing required for successful University work. Lectures, readings, class discussions, and assignments in writing and revision. Completion of the course with a grade of "C" or better meets the Subject A requirement. P/NP only.

3. English Composition, Rhetoric and Language. (Formerly numbered 1A-1B.) Prerequisite: satisfaction of Subject A requirement by examination or by completion of English 1 with a grade of "C" or better. Principles and methods of exposition and argumentation, with readings and analysis of passages of prose. Topics vary: special interest sections are set aside in the class schedule for social science, life science, fine arts students, creative writers, Shakespearians, students in literature or on rhetoric and stylistics. Minimum of six 3-5 page papers.

4. Critical Reading and Writing. (Formerly numbered 2.) Prerequisite: satisfaction of Subject A requirement and English 3 (or its equivalent; see departmental advisor for details). An introduction to literary analysis, with close reading and carefully written exposition of selections from one or more of the principal modes of literature: poetry, prose fiction, and drama. Minimum of six 3-5 page papers.

10A. English Literature to 1500. Prerequisites: satisfaction of Subject A requirement, English 3, 4, A study of selected works of the period, beginning with selections from Old English poetry and including writings by Chaucer,抖Tennyson, Shakespeare, Donne, and Milton. Minimum of three 3-5 page papers or equivalent.
108. English Literature, 1600-1832. Prerequisites: satisfaction of Subject A requirement, English 3, 4, 10A. A study of selected works of the period, including writings by Dryden, Pope, Swift, Wordsworth, and Keats. Minimum of three 3-5 page papers or equivalent.

10C. English Literature, 1832 to the Present. Prerequisites: satisfaction of Subject A requirement, English 3, 4, 10A, 10B. A study of selected works of the 19th period, including writings by Tennyson, Arnold, Browning, Yeats, Joyce, and Eliot. Minimum of three 3-5 page papers or equivalent.

20. Introduction to Creative Writing. Prerequisites: satisfaction of Subject A requirement, English 3 (or its equivalent); and submission of samples of creative or expository writing to a screening committee (hence departmental consent). A course designed to introduce the fundamentals of creative writing. Each class will focus either on poetry, fiction, or drama, depending upon the writing interests of the given quarter. Readings from assigned texts and weekly writing assignments will be required.

75. Major British Authors before 1800. Prerequisite: satisfaction of Subject A requirement. Not open for credit to English majors or students who have taken 10A or 10B. A study of selected masterpieces of English literature before 1800, including the works of such writers as Chaucer, Shakespeare, Donne, Milton, Swift, Pope, Johnson, and Fielding.

76. Major British Authors, 1800 to the Present. Prerequisite: satisfaction of Subject A requirement. Not open for credit to English majors or students who have taken 10B or 10C. A study of selected masterpieces of English literature to the present, including the works of such writers as Wordsworth, Coleridge, Keats, Tennyson, Dickens, Browning, Yeats, Joyce, and Eliot.

Mr. Berst, Mr. Hutter, Mr. Kolb

80. Major American Authors. Prerequisite: satisfaction of Subject A requirement. Not open for credit to English majors or students who have taken any courses in the 170 series. An introduction to the chief American men of letters, with emphasis upon the poetry, nonfictional prose, and short fiction of such writers as Poe, Emerson, Whitman, Twain, Frost, and Hemingway.

Mr. Wortham

85. The American Novel. Prerequisite: satisfaction of Subject A requirement. Not open for credit to English majors or students who have taken any courses in the 174 series. An introduction to the chief American novelists, with emphasis upon the cultural backgrounds, and distinctive uses of language. Mr. Paredes, Mr. Rubin-Dorsky

90. Shakespeare. Prerequisite: satisfaction of Subject A requirement. Not open for credit to English majors or students who have taken 142A or 142B. A survey of Shakespeare's plays, including comedies, tragedies, and history plays, selected to represent Shakespeare's breadth, artistic progress, and total dramatic achievement. Mr. Guffey, Mr. Rodes, Ms. Rowe

Upper Division Courses

Requirements: See "Admission to Courses in English" for prerequisites for courses 100-123. In addition, English 3 and 4 are prerequisites for courses 130-135; consent of instructor following submission of samples of creative work is required for enrollment in courses 133-135. English 3, 4, 10A, 10B, 10C, taken in the stated sequence, are prerequisites for courses 140-190.

100A. Introduction to Poetry. Prerequisite: satisfaction of Subject A requirement. A study of critical issues (metrics, diction, figurative, language symbolisms). Not open for credit to English majors or students who have taken 10A or 10B. A study of selected masterpieces of English literature before 1800, including the works of such writers as Chaucer, Shakespeare, Donne, Milton, Swift, Pope, Johnson, and Fielding.

Mr. Rousseau

100B. Introduction to Drama. Prerequisite: satisfaction of Subject A requirement. Examination of representative plays: readings may range from Greek to modern drama. Emphasis on critical approaches to the dramatic text; study of issues such as plot, construction, characterization, special uses of language in drama, methods of evaluation.

100C. Introduction to Fiction. Prerequisite: satisfaction of Subject A requirement. An introduction to the short story, its development and its analysis of short and long narratives, and of critical issues as plot, characterization, setting, narrative voice, realistic and nonrealistic forms.

Mr. Anderson, Mr. Keys

100D. Introduction to Special Topics and Genres. Prerequisite: satisfaction of Subject A requirement. A study of a particular topic, genre, or sub-genre in literature, such as satire, biography, parody, or a specialized classification of literature. May be repeated for credit.

Mr. Berst, Mr. Hutter, Mr. Kolb

101A. Recent British Literature. Prerequisite: satisfaction of Subject A requirement. Recent trends and developments in English fiction and poetry since World War II.

Mr. Gullans

101B. Recent American Poetry. Prerequisite: satisfaction of Subject A requirement. Recent trends and developments in American poetry since World War II.

Mr. Gullans

101C. Recent American Fiction. Prerequisite: satisfaction of Subject A requirement. Recent trends and developments in American fiction since World War II.

Mr. Goldberg, Mr. Worthy

101D. Recent British and American Drama. Prerequisite: satisfaction of Subject A requirement. Recent trends and developments in British and American drama since World War II.

Mr. Berst, Mr. Goodwin

102. The Short Story in England and America. Prerequisite: satisfaction of Subject A requirement. A historical survey of the short story as a genre from the nineteenth century to the present.

Mr. Anderson

103. Jewish American Fiction. Prerequisite: satisfaction of Subject A requirement. A study of the fiction of Jewish writers in America such as Bellow, Malamud, and Roth, focusing on the encounter of Jewish culture with American society.

Mr. Cushman

104. Afro-American Literature. Prerequisite: satisfaction of Subject A requirement. An introductory survey of the Afro-American literary tradition from the 19th century to the present. Readings include novels, essays, and short stories, selected to represent African American literature as it developed within its own cultural context and in response to American society. Mr. Yarborough

105. The Chicano Experience in Literature. Prerequisite: satisfaction of Subject A requirement. A study of the literature of English by and about Chicanos. The course surveys the development of the Chicano experience in American literature generally and focuses on the development of Chicano literature itself, its cultural backgrounds, and distinctive uses of language.

Mr. Paredes

106. Native American Literary Studies. Prerequisite: satisfaction of Subject A requirement. The study of Native American oral cultures through translated documents (song-poems, life-stories, myths, tales, dream visions, speeches) and the images and stories made about Native Americans (poetry, fiction, history, anthropology, sociology).

Mr. Lincoln

107. Women in Literature. (Same as Women's Studies M107.) Prerequisite: satisfaction of Subject A requirement. A survey of literary works by and about women, the course examines the delineation of women in English and American literature, studies in historical and contemporary themes, and the evolution of female role in society through the study of literature.

Ms. Rowe, Ms. Yeazell


Mr. Dearing

108C. The English Bible as Literature: Special Topics. Prerequisite: satisfaction of Subject A requirement. A study of the English Bible, with attention to particular literary themes, motifs, and genres; the course may also attempt to trace the influence of the Bible upon discrete periods or individual authors in English literature. May be repeated for credit.

Mr. Berst, Mr. Hutter, Mr. Kolb

109. Interdisciplinary Approaches to Literature. Prerequisite: satisfaction of Subject A requirement. The specialized study of the work of a single poet, dramatist, prose writer, or novelist. May be repeated for credit.

Mr. Keys

110. Studies in Individual Authors. Prerequisite: satisfaction of Subject A requirement. The specialized study of the work of a single poet, dramatist, prose writer, or novelist. May be repeated for credit.

Mr. Condren

111A. The Literature of Myth and Oral Tradition. (Same as Folklore M111.) Prerequisite: satisfaction of Subject A requirement. A study of myth, dramatic origins, oral epic, folk tale, and ballad, emphasizing Indo-European and Semitic examples.

Mr. Nagy

111B. Anglo-American Folk Song. (Same as Folklore M106.) Prerequisites: satisfaction of Subject A requirement. A study of the historical, cultural backgrounds, and distinctive uses of language of Anglo-American balladry and folk song, with attention to historical development, ethnic and social background, and political and social history.

Mr. Nagy

111C. British Folklore and Mythology. (Same as Folklore M121.) Prerequisites: satisfaction of Subject A requirement, junior standing. A study of the folkloric and mythological traditions of the British peoples, with attention to their history, function, and regional differences.

Mr. Georges, Mr. Nagy

111D. Celtic Mythology. (Same as Folklore M122.) Prerequisite: Folklore 101 or permission of instructor. A survey of the early materials, chiefly literary, for the study of the mythic traditions of the Celtic peoples, ranging from ancient Gaul to medieval Ireland and Wales.

Mr. Ford

111E. Survey of Medieval Celtic Literature. (Same as Folklore M112.) Prerequisite: satisfaction of Subject A requirement. A general course dealing with Celtic literature from the earliest times to the fourteenth century. No knowledge of Irish or Welsh is required.

Mr. Ford

111F. Celtic Folklore. (Same as Folklore M127.) Prerequisite: Folklore 101 or permission of instructor. A study of the oral traditions of modern Ireland, Scotland, and other Celtic countries, with attention to the techniques of folkloristic research.

Mr. Nagy

112. Children's Literature. Prerequisite: satisfaction of Subject A requirement. A study of the historical backgrounds and development of types of children's literature, folklore and oral tradition, levels of interest, and the techniques of folklore research.

Mr. Cushman
This course will analyze and evaluate the literature particularly suggested for this age group, and study the schools. It will also review mature books that are possible for students to read. A survey of contemporary literature from England, France, and America will be included. The course will also discuss the role of the English teacher in promoting reading and the development of critical thinking skills in students.

113. Literature for Adolescents and Young Adults. Prerequisite: satisfaction of Subject A requirement. This course will introduce students to the literature of adolescence and young adulthood, focusing on the themes and issues that are important to this age group. The course will also explore the role of literature in shaping the identities of young people.

114. World Literatures in English. Prerequisite: satisfaction of Subject A requirement, consent of instructor. A survey of contemporary literature from English-speaking regions of the world, reviewing the major genres from several countries and making cross-comparisons with the literatures. Generalizations concerning the nature of the English used by such writers will be examined. May be repeated for credit.

115. American Popular Literature. Prerequisite: satisfaction of Subject A requirement, English 10A, 10B, 10C. An introduction to the major literary forms and cultural expressions of the United States, with an emphasis on the roles of literature in shaping American identities and values.

116. Science Fiction. Prerequisite: satisfaction of Subject A requirement. A study of science fiction and science speculative literature. Mr. Guffey

117. Detective Fiction. Prerequisite: satisfaction of Subject A requirement. A study of British and American detective fiction and the literature of detection. Mr. Hutter

118. Film and Literature. Prerequisite: satisfaction of Subject A requirement. A study of the interdisciplinary relationships between film and literature, including theme and structure, and focusing on cinematic adaptations of literary works. Mr. Goodwin

120A. Language Study for Teachers: Elementary School. Prerequisite: satisfaction of Subject A requirement. A survey of topics in English linguistics of 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 the teaching of reading, writing, spelling, and literature. Ms. Hinton

120B. Language Study for Teachers of English: Secondary and Post-Secondary. Prerequisite: satisfaction of Subject A requirement. A rapid review of English grammar and an introduction to basic concepts in socio-linguistics, dialectology, and stylistics, applied to the analysis of written and spoken samples from students in junior and senior high school and junior college.

120C. Language Study for Teachers of Subjects Other Than English: Secondary and Post-Secon- dary. Prerequisite: satisfaction of Subject A requirement. A course designed to introduce teachers of subjects other than English to basic concepts in language acquisition/dialectology, socio-linguistics, and composition.

121. The History of the English Language. Prerequisite: satisfaction of Subject A requirement. A study directed toward English majors of the major features in the grammatical, lexical, and phonetic condition of the English language from Indo-European up to the present time.

Ms. Armentrout, Mr. Calder, Mr. Condon

122. Introduction to the Structure of Present-Day English. Prerequisite: satisfaction of Subject A requirement. An introduction to the techniques of linguistic description as applied to the pronunciation, grammar, and vocabulary of modern English. Ms. Armentrout

123. Afro-American English. Prerequisites: satisfaction of Subject A requirement, English 120A, 120B, 120C or Linguistics 100; prerequisite: English 122. An in-depth study of Afro-American English and the development of Afro-American speech. The emphasis will be on the analysis of tapes and documents, of the characteristics of urban Afro-American speech and writing.

130. Composition for Teachers. Prerequisites: satisfaction of Subject A requirement, English 3, 4. Preparation for future teachers of English composition in the writing and criticism of the kinds of prose discourse usually taught in primary and secondary schools and in junior college.

131. Exposition. Prerequisites: satisfaction of Subject A requirement, English 3. 4. Further work in expository composition, designed especially to meet the needs of upper division students, including transfer students, who desire training beyond that offered in freshman composition courses. May be taken P/NP by English majors, though English majors who wish to use this course to satisfy departmental prerequisites must take it for a letter grade.

131H. Advanced Exposition. Prerequisites: satisfaction of Subject A requirement, English 3 and consent of instructor, following submission of samples of expository prose. An advanced version of English 131 for students who wish to take more advanced courses in expository skills. Writing assignments will focus upon the expository essays required in upper division literature courses. May be taken P/NP by English majors, though English majors must take the course to satisfy departmental prerequisites.

133A-133B-133C. Creative Writing: Poetry. Prerequisites: satisfaction of Subject A requirement, English 3 and consent of instructor, following submission of samples of poetry. An introductory course designed to meet the needs of non-major students interested in the study of the craft and technique of poetry. Poetry writing assignments will be evaluated on the basis of technical skill and literary merit.

134A-134B-134C. Creative Writing: Short Story. Prerequisites: satisfaction of Subject A requirement, English 3, 4, and consent of instructor, following submission of samples of short stories. This course is designed to introduce students to the craft of short story writing. It will focus on the development of narrative technique, character development, and thematic exploration.

135A-135B-135C. Creative Writing: Drama. Prerequisites: satisfaction of Subject A requirement, English 3, 4, and consent of instructor, following submission of samples of writing. An exploration of the capacity of each student to write for the theater. Class discussion of student writing, individual conferences, and reading of literature will be central to the course.

136A-136B-136C. Practical Writing and Editing. Prerequisites: satisfaction of Subject A requirement, English 3, 4, and consent of instructor, following submission of samples of writing. This course is designed to introduce students to the craft of practical writing and editing, with a focus on the development of writing skills and the ability to critically assess and revise written work.

140. Criticism. Prerequisites: satisfaction of Subject A requirement, English 3, 4, 10A, 10B, 10C. An introduction to the major modes of literary criticism. The course will focus on the development of critical thinking and the ability to analyze and interpret literary texts.

141A. Chaucer: The Canterbury Tales. Prerequisites: satisfaction of Subject A requirement, English 3, 4, 10A, 10B, 10C. A study of the English drama, excluding Shakespeare, from its beginning to the closing of the theaters, with special emphasis on plays of the Elizabethan and Jacobean periods.

Mr. Braunmuller, Mr. Dert

151. Elizabethan Literature. Prerequisites: satisfaction of Subject A requirement, English 3, 4, 10A, 10B, 10C. A study of English literature of the sixteenth century, with special emphasis on the development of pre-Shakespearean drama and the interrelationships of poetry, prose, fiction, and literary theory and criticism during the reign of Elizabeth I.

Mr. Dert, Mr. Kippling

152. The Drama to 1642. Prerequisites: satisfaction of Subject A requirement, English 3, 4, 10A, 10B, 10C. A study of the English drama, excluding Shakespeare, from its beginning to the closing of the theaters, with special emphasis on plays of the Elizabethan and Jacobean periods.

Mr. Braunmuller, Mr. Dert

153. Literature of the Early Seventeenth Century (1600-1660). Prerequisites: satisfaction of Subject A requirement, English 3, 4, 10A, 10B, 10C. A study of early modern English literature and its influence on modern literature.

Mr. Novak, Mr. Roper, Mr. Rousseau

155. Literature of the Later Eighteenth Century (1730-1798). Prerequisites: satisfaction of Subject A requirement, English 3, 4, 10A, 10B, 10C. A study of the major works as literary documents and as products of eighteenth-century thought. The work of Milton is excluded.

Mr. Grose, Mr. Gullans, Mr. Post

156. Literature of the Restoration and Earlier Eighteenth Century (1680-1730). Prerequisites: satisfaction of Subject A requirement, English 3, 4, 10A, 10B, 10C. A study of the major works as literary documents and as products of eighteenth-century thought.

Mr. Novak, Mr. Roper, Mr. Rousseau

158. The Drama, 1682-1842. Prerequisites: satisfaction of Subject A requirement, English 3, 4, 10A, 10B, 10C. A survey of the English drama from the Restoration to the Licensing Act.

Mr. Novak, Mr. Rodes

157. The Novel to 1832. Prerequisites: satisfaction of Subject A requirement, English 3, 4, 10A, 10B, 10C. A study of literature after the Restoration and Restoration to the Licensing Act.

Mr. Novak, Mr. Roper, Mr. Rousseau

160. Earlier Romantic Poetry and Prose. Prerequisites: satisfaction of Subject A requirement, English 3, 4, 10A, 10B, 10C. An intensive study of the major works as literary documents and as products of eighteenth-century thought.

Mr. Lehan, Mr. Rousseau, Ms. Yeazell

161. Earlier Romantic Poetry and Prose. Prerequisites: satisfaction of Subject A requirement, English 3, 4, 10A, 10B, 10C. An intensive study of the poetry and prose of Blake, Wordsworth, and Coleridge, with col- lateral readings from such authors as Godwin, Burke, Paine, Burns, Southey, Lamb, DeQuincey, and Scott.

Mr. Manjuis, Ms. Packer, Mr. Sheats
161. Later Romantic Poetry and Prose. Prerequisites: satisfaction of Subject A requirement, English 3, 4, 10A, 10B, 10C. An intensive study of the poetry and prose of Keats, Shelley, and Byron, with collateral readings from such authors as Hazlitt, Hunt, Landor, Care, Moore, and Peacock.

Mr. Bruck, Mr. Maniquis, Mr. Thorslev

162. Earlier Victorian Poetry and Prose. Prerequisites: satisfaction of Subject A requirement, English 3, 4, 10A, 10B, 10C. A study of the poetry and prose of the Victorian age from the passage of the first Reform Bill through the high Victorian period, including such authors as Tennyson, Browning, Arnold, Carlyle, Mill, and Newman.

Mr. Freeman, Mr. Kolb, Mr. Tennyson

163. Later Victorian Poetry and Prose. Prerequisites: satisfaction of Subject A requirement, English 3, 4, 10A, 10B, 10C. A study of the poetry and prose of the later Victorian age from Pre-Raphaelitism through the Aesthetic and Decadent Movements, along with other intellectual trends, including such authors as Ruskin, Swinburne, Pater, Hopkins, Hardy, Wilde and Yeats.

Mr. Freeman, Mr. Kolb, Mr. Tennyson

164. The Novel, 1832-1900. Prerequisites: satisfaction of Subject A requirement, English 3, 4, 10A, 10B, 10C. A survey of the major English novelists from Dickens through Hardy.

Mr. Anderson, Mr. Keys, Ms. Yeazell

165. Twentieth-Century British Poetry and Prose. Prerequisites: satisfaction of Subject A requirement, English 3, 4, 10A, 10B, 10C. A study of the dominant trends of twentieth-century poetry and prose, with emphasis on experimental work in short fiction, poetry, and the contemporary critical sensibility.

Mr. Bedient, Mr. Cross, Mr. Lincoln

166. The Novel, 1900 to the Present. Prerequisites: satisfaction of Subject A requirement, English 3, 4, 10A, 10B, 10C. A survey of the major English novelists from Conrad to the present.

Mr. Keys, Mr. Lehman, Mr. Lincoln

167. The Drama, 1842 to the Present. Prerequisites: satisfaction of Subject A requirement, English 3, 4, 10A, 10B, 10C (for Theater Arts majors the prerequisite of courses 10A, 10B, 10C is waived). A survey of British and American drama with its principal continental influences.

Mr. Berst, Mr. Braunmuller, Mr. Goodwin

170. American Literature to 1800. Prerequisites: satisfaction of Subject A requirement, English 3, 4, 10A, 10B, 10C. A historical survey of American literature through the Colonial and Early National periods.

Mr. Weber

171. American Literature, 1801-1865. Prerequisites: satisfaction of Subject A requirement, English 3, 4, 10A, 10B, 10C. A historical survey of American literature, including fiction, from the beginning of the nineteenth century to the end of the Civil War.

Ms. Packer, Mr. Rubín-Dorsky, Mr. Wortham

172. American Literature, 1866-1912. Prerequisites: satisfaction of Subject A requirement, English 3, 4, 10A, 10B, 10C. A historical survey of American literature from the end of the Civil War to the founding of Poetry magazine.

Mr. Novius, Mr. Rubín-Dorsky, Mr. Wortham


Mr. Bedient, Mr. Riddell, Mr. Yenser

174. Twentieth-Century American Fiction. Prerequisites: satisfaction of Subject A requirement, English 3, 4, 10A, 10B, 10C. The development of the American novel and short story since 1912, including the works of Hemingway, Fitzgerald, and Faulkner.

Mr. Goodwin, Mr. Paredes, Mr. Yarbrough

175. Perspectives in the Study of American Culture. Prerequisites: satisfaction of Subject A requirement, English 3, 4, 10A, 10B, 10C. An interdisciplinary study of American literature in its relationships to other disciplines, including art, architecture, film, history, music, politics, and various social sciences. It will concentrate upon the application of literary methodology to a historical survey of American culture.

Mr. Goodwin, Mr. Paredes, Mr. Weber

Specialized Studies

These courses (180 through 189) are designed to permit a small number of students (normal limit: 15) to engage in concentrated study in an area in which they have a particular interest, and in which they have taken adequate upper division background courses. Prerequisites: satisfaction of Subject A requirement, English 3, 4, 10A, 10B, 10C. For the period, author, genre, or subject to be studied, see the Schedule of Classes for any given quarter. Enrollment for specialized studies courses is handled through the Department of English (2225 Rolfe Hall) at the time of preregistration in the quarter preceding that in which the course is offered. For further details, see the departmental advisor. Specialized studies courses may be repeated for credit.

180. Specialized Studies in Medieval Literature.

180X. Variable Topics.

181. Specialized Studies in Renaissance Literature.


188. Specialized Studies in Nineteenth-Century American Literature.


190. Literature and Society. Prerequisites: satisfaction of Subject A requirement, English 3, 4, 10A, 10B, 10C. The intensive study of some aspect of the relationship between literature and social, economic or political history. May be repeated for credit.

M197. Contemporary Afro-American Fiction. (Same as Afro-American Studies M197A.) An examination of the dominant stylistic, thematic and ideological trends in Afro-American fiction written in the 60's and 70's. Writers to be covered include Ernest J. Gaines, Ishmael Reed, Nathan Heard, Cecil Brown, James Alan McPherson, Alice Walker, Eulalie Southward, and Toni Morrison. We will locate the works of fiction within the Afro-American fictive tradition and also discuss the critical controversy surrounding contemporary Afro-American literature (focusing upon Addison Gayle's The Black Aesthetic). Finally, we will examine the ways in which these works of fiction reflect important recent developments in Afro-American culture. A familiarity with Afro-American history and literature would be useful in this course, but it is not essential.

199. Special Studies in English (1/2 to 1 course). Prerequisite: consent of instructor. An intensive directed research project. To enroll or obtain information, see departmental advisor.

199H. Honors Tutorial. Prerequisite: consent of instructor. A tutorial course for students enrolled in the Honors Program in English. Each student will be expected to complete a substantial critical or research paper for credit in the course.

Graduate Courses

For complete descriptions of graduate-level courses offered by this department, please consult the UCLA Graduate Catalog.

ENGLISH AS A SECOND LANGUAGE

(Section Office: 3303 Rolfe Hall)

J. Donald Bowen, Ph.D., Professor of English.
Russell Norman Campbell, Ph.D., Professor of English.
John Frederick Powey, Ph.D., Professor of English.
Clifford Holmes Prator, Ph.D., Emeritus Professor of English.
Marianne Cece-Murcia, Ph.D., Associate Professor of English.
Evelyn R. Hatch, Ph.D., Associate Professor of English (Vice-Chairman of the Department).
Earl James Rand, Ph.D., Associate Professor of English.
John H. Schumann, Ph.D., Associate Professor of English.
Roger W. Anderson, Ph.D., Assistant Professor of English.
Frances B. Hinofitos, Ph.D., Assistant Professor of English.

Jose L. Galvan, ABD, Lecturer in English.
S. Robert Greenberg, Ph.D., Visiting Lecturer in English.
Peter Ladefoged, Ph.D., Professor of Phonetics.

Undergraduate Courses

Courses 33A, 33B, 33C, 34, 36, 103J, 106J. 109J are only for students whose first language is other than English. Courses 33A, 33B, 33C are not open to those who have received a satisfactory grade in English 1 at the University of California. Permission to enroll in these three courses is given on the basis of the English as a Second Language Placement Examination (ESLPE) which students whose mother tongue is not English must take instead of the Subject A Placement Test (see Subject A in the index). Depending on the results of this examination, entering students are (1) exempted from any special ESL requirement; (2) required to take course 33C; (3) required to take course 33B followed by course 33C; (4) required to take course 33A followed by courses 33B and 33C; or (5) required to spend a quarter studying elementary English exclusively, followed by courses 33A, 33B, 33C.

Lower Division Courses


The Staff

33B. Intermediate English as a Second Language. Prerequisite: course 33A or proficiency demonstrated by the English as a Second Language Placement Examination. Meets five hours weekly. Emphasizes writing, study skills, reading comprehension and vocabulary development and includes attention to listening and speaking.
opportunities for practice and improvement in writing skills and thus acquaint prospective language teachers with a wide variety of linguistic structures. Mr. Anderson

107K. Reading in the ESL Context. Limited to TESL Certificate or M.A. candidates. Provides opportunities for practice and improvement in reading skills and thus fulfills the composition requirement for the TESL Certificate. Surveys important theoretical and methodological issues related to the teaching of reading/composition to ESL students and examines appropriate classroom materials. Ms. Schumann

109K. Literature in the ESL Context. Limited to TESL Certificate or M.A. candidates. Provides opportunities for practice and improvement in writing skills and thus fulfills the composition requirement for the TESL Certificate. Surveys important theoretical and methodological issues related to the teaching of writing/composition to ESL students and examines appropriate classroom materials. Mr. Povey

111K. Background Language for Teachers of English as a Second Language. Prerequisite: consent of instructor. Fulfills the foreign language requirement for the Certificate in the Teaching of English as a Second Language. Beginning course in a non-Indo-European language taught as a demonstration of recommended pedagogical techniques and designed to acquaint prospective language teachers with a wide variety of linguistic structures. Mr. Anderson

Environmental Science and Engineering (Interdepartmental)

(Interdepartmental)

Program Office: 3677 Geology

Undergraduate Program

Although no undergraduate major is offered encompassing the broad area of environmental science and engineering, studies which readily lead to advanced work or employment in these fields can be arranged along several routes. Students with majors in the natural sciences, ecosystems/geography, public health or engineering, who have environmental or energy problem-solving as a professional goal, may wish to supplement their course preparation in consultation with the faculty of the Environmental Science and Engineering Program. In preparation for graduate study, attention should be given to requirements for the doctoral program in Environmental Science and Engineering.

For detailed information on graduate degrees offered by this program, please refer to the UCLA Graduate Catalog.

Ethnic Arts (Interdepartmental)

(Coordinator’s Office: 205 Women’s Gym)

Committee in Charge: Allegra Fuller Snyder, Dance (Coordinator); Philip Newman, Anthropology; Art: Elsie Dunin, Dance; Carol Scothorn, Dance; Judy Susilo, Dance; D.K. Wilgus, Folktale and Mythology; James Porter, Folklore and Mythology; Abraham Schwadron, Music; William Hutchinson, Music; J.H.K. Nkietia, Music; David Draper, Music; Donald Crabs, Theater Arts; Mel Helsiiten, Theater Arts; Beverly Robinson, Theater Arts.

The major provides a program of interdisciplinary studies designed to facilitate the cultural and cross-cultural investigation of man’s artistic expression. The flexibility of the program allows the student to focus on a particular medium of expressive behavior after having been exposed to general problems and perspectives in the study of art forms of peoples throughout the world.

The major includes: a core of seven courses (28 units) from anthropology, art, dance, folklore and mythology, music and theater arts; a concentration consisting of nine courses (36 units) in one of the disciplines: a senior colloquium; and three upper division elective courses (12 units).

Foreign Language Requirement: At least three quarters (one year) in one foreign language at the college level are required of all students. All courses in foreign language, except foreign literature in English translation, may be applied to this requirement.

Students who plan to take the “concentration” in music are advised to select French, German or Italian.

General College Requirements: The student will satisfy the general College requirements (other than foreign language) of his College (Fine Arts or Letters and Science) regardless of the department in which his concentration is located.

Students who wish to see a counselor regarding program planning and major requirements should see Wendy Ufrig, 205 Women’s Gym (825–3951).

Requirements for the Bachelor of Arts Degree

(1) A core of seven interdepartmental courses: Dance 70, 46A–46B, Folklore 101, Music 5A–5B–5C, Theater Arts 102E, Anthropology 5 and either Art 55 or 56.

(2) A concentration of nine courses in one of the following areas (the student will declare a “concentration” by the beginning of the junior year):

Anthropology: 6, 133F, 135Q, 185 and any five upper division anthropology courses from 101 through 186 and including one area course from 170–179.

Dance: 38B, 141A-141B, 151A, 151B; two courses from 140A, 140B, 140C; one course from 142, 143, 144, 145, 146; three half-courses from 171A-171P (including one course each from western and non-western cultures; please note that 71A-71P are prerequisites for 171A-171P).

Folklore and Mythology: One course from M111, M118, M120; two courses from M106, M123B, 124, M181, M182, M183, Classics 161, 168; six courses from M112, M121, M122, M123A, M125, M126, M127, M128, M129, 130, 131, M149, M150, 190, German 134.

Music: 17A-17B-17C, 26A-26B-26C, 140A-140B-140C (non-sequential).


(3) Ethnic Arts 190A-190B. Senior Colloquium. Prerequisites: restricted to senior standing, Ethnic Arts major. Studies of a comparative and integrative nature in the ethnic arts. Ms. Snyder and Concentration Faculty.

(4) Three elective courses which may be chosen from the list below. Other courses might also be appropriate. In order to meet degree requirements the electives must be related to the major and approved by the concentration advisor. The three courses chosen to meet this requirement must be upper division courses and from three different areas outside the area of concentration.

**Upper Division Electives**

Anthropology 118A, 118B. Museum Studies.
133R. Aesthetic Anthropology.
135Q. The Individual in Culture.
137. Ethnography on Film.
185. History of Social Anthropology.
102. Art of the Ancient Near East.
103A. Greek Art.
103B. Hellenistic Art.
103C. Roman Art.
103D. Etruscan Art.
103E. Late Roman Art.
104A-104B-104C, 104D. Architecture and the Minor Arts of Islam in the Middle Ages.
114A. The Early Art of India.
114B. Chinese Art.
114C. Japanese Art.
114D. The Later Art of India.
115A. Advanced Indian Art.
115B. Advanced Chinese Art.
115C. Advanced Japanese Art.
118A. The Arts of Oceania.
118B. The Arts of Pre-Columbian America.
118C. The Arts of Sub-Saharan Africa.
118D. The Arts of Native North America.
119A. Advanced Studies in African Art: Western Sudan.
119B. Advanced Studies in African Art: Central Africa.
Classics 161. Introduction to Classical Mythology.
168. Introduction to Comparative Mythology.
Dance 111A-111B, 111C. Analysis of Human Movement.
128. Dance as Culture in Education.
140A-140B-140C. Dance Cultures of the World.
141A-141B. Dance Forms.
142. Dance in the Balkans.
143. Dance in India.
144. Dance in Indonesia.
145. Dance in Japan.
146. Dance in Latin America.
151A. History of Dance in Western Culture, Early Baroque to the Present.
158A-158B. Philosophical Bases and Trends in Dance.
159. Advanced Dance Notation.
171A-171P. Performance Courses in Ethnic Dance: A-Bali; B-Ghana; E-India; F-Israel; G-Japan; H-Java; J-Mexico; L-Scotland; M-Spain; P-Yugoslavia (courses 71A-71P are prerequisites for 171A-171P).
English 104. Afro-American Literature.
Folklore and Mythology 106. Anglo-American Song (English M111B).
108. Afro-American Folklore and Culture.
1111. Literature of Myth and Oral Tradition (English M111A).
1112. Survey of Medieval Celtic Literature (English M111E).
118. Folk Art and Technology.
121. British Folklore and Mythology (English M111C).
122. Celtic Mythology (English M111D).
123A. Finnish Folklore and Mythology (Scandinavian Languages M123A).
123B. Finnish Folksong and Ballad (Scandinavian Languages M123B).
124. Finnish Folk Art and Technology.
125. Folklore and Mythology of the Lapps (Scandinavian Languages M125).
126. Baltic and Slavic Folklore and Mythology (Slavic Languages M179).
127. Celtic Folklore (English M111F).
128. Hungarian Folklore and Mythology (Hungarian M135).
129. Folklore and Mythology of the Ugric Peoples (Hungarian M135).
130. North American Indian Folklore and Mythology Studies.
131. Folklore of India.
149. Folk Literature of the Hispanic World (Spanish M149).
150. Russian Folk Literature (Russian M150).
180. Analytical Approaches to Folk Music (Music M180).
181. Folk Music of Central and Western Europe (Music M181).
190. Selected Topics in Folklore and Mythology Studies.
199. Special Studies in Folklore.
German 134. German Folklore.
130. Music of the United States.
131A-131B. Music of Hispanic America.
132A-132B. Development of Jazz.
Folklore and Mythology
(Interdepartmental)

(Program Office of: 1041 Graduate School of Management)
Shirley L. Arora, Ph.D., Professor of Spanish
Margherita A. Cottino-Jones, Ph.D., Professor of Italian.
Patrick F. Ford, Ph.D., Professor of English and Celtic Studies (Director of Center for the Study of Comparative Folklore and Mythology).
Robert A. Georges, Ph.D., Professor of English and Folklore.
Manjula Gimbatas, Ph.D., Professor of European Archaeology.
Melvyn Hestien, Ph.D., Professor of Theater Arts.
Nazar A. Jaraizhohby, Ph.D., Professor of Music.
Vladimir Markov, Ph.D., Professor of Slavic Languages.
Jaan Puhvel, Ph.D., Professor of Classics and Indo-European Studies.
Stanley L. Robe, Ph.D., Professor of Spanish.
Robert Cushman, B.A., Associate Professor of Slavic Languages.
Donald J. Ward, Ph.D., Professor of German and Folklore.
D.K. Wilgus, Ph.D., Professor of English and Anglo-American Folksong (Chairman, Folklore and Mythology Committee).
Johannes Wilbert, Ph.D., Professor of Anthropology.
Wayland D. Hand, Ph.D., Emeritus Professor of German and Folklore.
Charles Speroni, Ph.D., Emeritus Professor of Italian.
Michael Owen Jones, Ph.D., Associate Professor of History and Folklore.
James Porter, M.A., Associate Professor of Music and Folklore.
Edward F. Tuttle, Ph.D., Associate Professor of Italian.
David E. Draper, Ph.D., Assistant Professor of Music.
Joseph Nagy, Assistant Professor of English and Folklore.
A. Jihad Racy, Ph.D., Assistant Professor of Music.
Jacqueline C. Dje Dje, Ph.D., Acting Assistant Professor of Music.

* Manjula Gimbatas, D.B. in charge Associate Professor of Hungarian.
* Beverly J. Robinson, M.A., Lecturer in Theater Arts.

J.H.H. Nketia, B.A., Professor of Music.
Wendell H. Oswald, Ph.D., Professor of Anthropology.
Pier-Maria Pasnetti, Ph.D., Professor of Italian and Comparative Literature.
Douglas Price-Williams, Ph.D., Professor of Anthropology and Psychiatry in Residence.
Florence H. Ridley, Ph.D., Professor of English.
Arnold Rubin, Ph.D., Associate Professor of Art.
Gerard Sabagh, Ph.D., Professor of Sociology.
Allegro Snyder, M.A., Professor of Dance.
Eli Sobel, Ph.D., Professor of German.
Erik Wahlgren, Ph.D., Emeritus Professor of Scandinavian and Germanic Languages.
Dean S. Worth, Ph.D., Professor of Slavic Languages.

Although no undergraduate degree program is offered in folklore and mythology, those majoring in the Ethnic Arts Interdisciplinary Studies program may select folklore and mythology as their area of concentration. A variety of undergraduate courses offered by departments or by faculty participating in the interdepartmental program is also available to all University students. Those with undergraduate preparation in folklore and mythology studies may continue their work on the graduate level. For planning course work, students should consult departmental advisors and the Chairman of the Committee which administers the interdepartmental program.

Lower Division Course

15. Introduction to American Folklore Studies. (Same as English M111A.) Three hours weekly. A historical and analytical approach to the role of folklore in the development of American civilization and of the influence of the American experience in shaping folklore in American society; attention will also be given to representative areas of inquiry and analytical procedures.

Mr. Georges, Mr. Jones, Mr. Wilgus

M106. Anglo-American Folk Song. (Same as English M111B.) Three hours weekly. A study of the traditional genres or forms of Anglo-American folk culture and the theoretical data recorded from various North American Indians. Attention is paid to the material manifestations of folk culture and the theoretical concepts and methodologies utilized in their analysis.

Mr. Georges, Mr. Jones

M111. The Literature of Myth and Oral Tradition. (Same as English M111C.) Prerequisite: consent of instructor. A study of the oral traditions of the Finns. Special attention is paid to the oral epic, beliefs and legends.

Ms. Rank

M122. Celtic Mythology. (Same as English M111D.) Prerequisite: course 101 or permission of instructor. A survey of the early materials, chiefly literary, for the study of the mythic traditions of the Celtic peoples, ranging from ancient Gaul to medieval Ireland and Wales.

Mr. Ford

M123A. Finnish Folklore and Mythology. (Same as Scandinavian Languages M123A.) The methods and results of Finnish folklore studies and the mythic traditions of the Finns. Special attention is paid to the oral epic, beliefs and legends.

Ms. Rank

M123B. Finnish Folksong and Ballad. (Same as Scandinavian Languages M123B.) Course M123A is not prerequisite to M123B. A survey of Finnish balladry and folksong, with attention to historical development, ethnic background, and poetic and musical values.

Ms. Rank

M124. Baltic and Slavic Folklore and Mythology. (Same as Slavic M179.) Three hours weekly. An introduction to the study of folklore and mythology and to those interested in Indo-European mythic antiquities.

Ms. Gimbatas

M127. Celtic Folklore. (Same as English M111F.) Prerequisite: course 101 or permission of instructor. A study of the folkloric traditions of modern Ireland, Scotland, and other Celtic countries, with attention to current trends in folkloristic research.

Mr. Nagy

M128. Hungarian Folklore and Mythology. (Same as Hungarian M135.) A general course for the student interested in folklore and mythology, with emphasis on types of folklore and varieties of folklore research.

Ms. Birnbaum

M129. Folklore and Mythology of the Ugric Peoples. (Same as Hungarian M136.) Survey of the folkloric traditions of the smaller Ugric nationalities (Voguls, Ostyaks, etc.).

Ms. Birnbaum

M130. North American Indian Folklore and Mythology Studies. Prerequisite: course 101 or consent of instructor. An examination of folkloristic and mythological data recorded from various North American Indian peoples within the contexts of the principal ideological frameworks which have been evolved historically for the analysis of such data.

Mr. Georges

M131. Folklore of India. Prerequisite: course 101 or permission of instructor. A survey of the folkloric traditions of India, with special reference to the content and dissemination of oral epics, ballads, legends, and beliefs.

Mr. Jaraizhohby

M140. From Boccaccio to Basile (In English). (Same as Italian M140.) A class meets three hours weekly to study the origin and development of the Italian novella in its themes, in its structure, in its historical context, and in its European ramifications. The course is designed for students in other departments who wish to become acquainted with either the premises or the growth of similar literary genres. It is also intended for students majoring in Folklore and Mythology, who will be given an insight into Italian popular tales when these (as in the case of Boccaccio) are studied as highly sophisticated literary forms, as well as when (as in the case of Basile) they become embedded into the folk tradition of the Western world.

Mrs. Cotton-Jones

M149. Folk Literature of the Hispanic World. (Same as Spanish M149.) A study of the historical and present dissemination of the principal forms of folk literature throughout the Hispanic countries.

Mrs. Arora, Mr. Robe

M150. Russian Folk Literature. (Same as Russian M150.) Three hours weekly. Lectures and readings in Russian.

The Staff
M154A-M154B. The Afro-American Musical Heritage. (Same as Music M154A-M154B.) Four hours weekly. Prerequisite: Music 1 or consent of instructor. M154A is prerequisite to M154B. A study of Afro-American rhythm, dance, music, field hollers, work songs, spirituals, blues, and jazz; the contrast between West African, Afro-American and Afro-Brazilian musical traditions. Ms. Dje Dje M170. Russian Folklore. (Same as Russian M170.) Three hours weekly. A general introduction to Russian folklore including a survey of genres and related folkloric phenomena. Lectures and readings in English. The Staff

M171. Slavic Folklore in North America. (Same as Slavic M171.) Three hours weekly. The nature and specifics of Slavic folklore in North America including a survey of verbal genres and other folkloric phenomena. Lectures and readings in English. The Staff

M178. Southeast European Folklore and Ethnography. (Same as Slavic M178.) Three hours weekly. An exploration of the folklore and ethnography of Southeastern Europe with emphasis on Romania and Yugoslavia. Folklore genres will be examined in the context of traditional social organization and in the context of industrializing communist states. The Staff

M180. Analytical Approaches to Folk Music. (Same as Music M180.) Four hours weekly. Prerequisites: Music 5A-5B-5C or consent of instructor. An intensive study of the methods and techniques necessary to the understanding of Western folk music. Mr. Porter

M181. Folk Music of Central and Western Europe. (Same as Music M181.) Four hours weekly. Prerequisites: Music 5A-5B-5C or 140A or 140B or 140C or consent of instructor. An analysis of the folk musical styles of Europe, excluding the Balkans and Soviet Russia. Particular attention will be paid to the comparative study of European folk music. Mr. Porter

190. Selected Topics in Folklore and Mythology Studies. Prerequisites: course 151 or 101 and consent of instructor. A prosessing focusing upon selected problems, data, or themes in folklore and mythology studies. The Staff

199. Special Studies in Folklore (1/2 to 1 course). Prerequisites: senior standing and consent of instructor. The Staff

Graduate Courses

For complete descriptions of graduate-level courses offered by this program, please consult the UCLA Graduate Catalog.

Related Upper Division Courses in Other Departments


Foreign Literature in Translation

French

(Edward Office: 160 Haines Hall)

Marc Besnson, Ph.D., Professor of French.
Eric Gans, Ph.D., Professor of French.
Hassan el Noti, Docteur ès Lettres, Professor of French.
Francis J. Crowley, Ph.D., Emeritus Professor of French.
Milan S. Da Lu, Ph.D., Emeritus Professor of French.
Oreste F. Pucciani, Ph.D., Emeritus Professor of French.
Stephen D. Werner, Ph.D., Associate Professor of French (Chairman of the Department).
Mary Ann Burke, Ph.D., Assistant Professor of French.
Patrick Coleman, Ph.D., Assistant Professor of French.

Preparation for the Major

Required: French 1, 2, 3, 4, 5, 6 (or 7), 12, 15. Before undertaking upper division work in grammar, composition, advanced phonetics or civilization, the student will be required to take French 1, 2, 3, 4, 5, 6 (or 7) and 15 or their equivalents. Students receiving less than a grade of "B" in French 6 will take French 7 (minimum grade for continuation is "C"). Before undertaking upper division work in literature, the student will, in addition to the above courses, be required to take French 12, "Introduction to the Study of French Literature." The student will normally take French 6 before undertaking French 12 or 15; highly qualified students who have obtained the grade of "A" in French 5 may enroll in French 6 with permission of instructor.

The Major

Four majors are offered by the department:

Plan A: Leads to the Bachelor of Arts in French and subsequently to the Master's Degree. Plan A Required: 15 full courses of upper division work including French 100A, 100B, 100C, 103, 114A-114B-114C; six courses in French literature chosen from the 115-120 offerings**; two elective upper division courses to be chosen upon consultation with the major advisor, either from offerings of the Department of French, from the humanities or social sciences division of the College of Letters and Science or the College of Fine Arts.

Plan B: Emphasis on literature, leading to the Bachelor of Arts in French and subsequently to the Master's Degree. Plan B Required: 15 full courses of upper division work including French 100A, 100B, 100C, 103, 114A-114B-114C; six courses in French literature chosen from the 115-120 offerings**; two elective upper division courses to be chosen upon consultation with the major advisor, either from offerings of the Department of French, from the humanities or social sciences division of the College of Letters and Science or from the College of Fine Arts.

Plan C (French Studies): A core program in French allowing, in addition, for individual selection of relevant courses in related fields in the humanities, the social sciences, linguistics, etc. Required: 15 full courses of upper division work, including French 100A, 100B, 100C, 103, 114A-114B-114C; three courses of French literature chosen from courses 115-120**; five upper division elective courses in the fields relevant to French Studies to be chosen in or out of the Department of French upon consultation with the major advisor. This program does not normally prepare for admission to the master's program in French at UCLA (see Plans A and B).

Plan D (French and Linguistics): In addition to the normal preparation for the major, students are required to complete the sixth quarter of work in one other foreign language or the third quarter in each of two other foreign languages. Required: French 100A, 100B, 100C, 103, 114A-114B-114C; two courses from French 105, 106, 107, 108A; Linguistics 100, 103, 110, 120A, 120B, 164 or 165A or 165B. It is strongly advised that students who intend to pursue advanced degrees begin preparation for the language requirements at the undergraduate level.

Students whose knowledge of French exceeds the preparation usually received in courses preparing for the major and who demonstrate the requisite attainment in French 100A, 100B or 100C will substitute for those courses in grammar and composition an equivalent number of upper division courses in the Department of French upon consultation with the major advisor. All prospective French majors who are native or quasi-native speakers of French must see the major advisor before beginning upper division work in the major.

All major students must complete a minimum of 9 courses of appropriate upper division work in the Department of French.

Course work taken on a Passed/Not Passed basis is not acceptable in any area of the major program.

Students who fail to maintain a "C" average or better in all upper division work undertaken in fulfillment of the French major will, upon approval of the Dean of the College of Letters and Science, be excluded from the major in French.

Students intending to major in French must consult a major advisor before registering for upper division courses in fulfillment of the major.

The Honors Program in French

Majors with a 3.5 grade-point average in the Department of French and a 3.3 overall grade-point average will be eligible to apply for the Honors Program in French. Interested students should contact the professor in charge of French 140A-140B near the end of their junior year and should make application at that time if they wish to enter the program. Applications should include: (1) a letter in French describing the student's field of interest in French literature and culture; (2) the student's final examination in French 100B, 100C, 103 or a final examination or term paper from a literature course. If these materials meet with approval, the student will be called for an interview. Students admitted to the program will enroll in French 140A-140B. French 140A and 140B are seminars taught by a member of the professorial staff. French 140C is to be devoted to the preparation of an individual project, normally related to the topic of 140A or 140B; this work will be undertaken under the guidance of a faculty member (not necessarily the instructor of 140A).

140A-140B-140C. Honors Program in French. Prerequisites: junior or senior standing in French with a 3.5 grade-point average in the major, a 3.3 overall average and consent of the department.

140A. Honors Seminar in French. Seminar on different aspects of a selected literary genre, such as drama, poetry, the novel, etc.

140B. Honors Seminar in French. Seminar on a chosen theme or particular problem of French literature, civilization or ideas.

140C. Individual study on a topic related to that of 140A or 140B leading to an essay to be written under the guidance of a faculty member.

Teaching Credential Requirements

Students desiring a single-subject teaching credential in French must have the approval of the French Department in order to gain admission to student teaching. For the Single-Subject Instruction Credential, this approval is contingent upon a major or the equivalent) in French and the successful completion of French 370 and 495. French 370 and 495 should be taken prior to student teaching. Under exceptional circumstances, the department may allow the student to enroll in these courses concurrently with a student teaching assignment.

Multiple-subject instruction credential candidates who select French in partial fulfillment of the Special Program in Diversified Liberal Arts must complete French 310A and 310B prior to student teaching.

* A course in French history may be substituted for one of these with the permission of the major advisor.
For additional information, consult the Graduate School of Education (201 Moore Hall) and the Department of French (160 Haines Hall).

Lower Division Courses

The ordinary prerequisites for each of the lower division courses are listed under the description of these courses. Students who have had special advantages in preparation may, upon examination or by recommendation of the instructor, be permitted a more advanced program. No credit will be allowed for completing a less advanced course after satisfactory completion of a more advanced course in grammar and/or composition.

1. Elementary French. Sections meet five hours weekly. Not available for academic credit to those students who have completed more than one year of high school French or equivalent. The student will, however, be credited with four units toward the minimum progress requirement.

2. Elementary French. Sections meet five hours weekly. Prerequisite: course 1 or advanced placement standing. Not available for academic credit to those students who have completed two years of high school French or equivalent. The student will, however, be credited with four units toward the minimum progress requirement.

3. Elementary French. Sections meet five hours weekly. Prerequisite: course 2 or two years of high school French or advanced placement standing.

4. Intermediate French. Sections meet five hours weekly. Prerequisite: course 3 or three years of high school French or advanced placement standing.

5. Intermediate French. Sections meet five hours weekly. Prerequisite: course 4 or four years of high school French or advanced placement standing.

6. Intermediate French. Sections meet five hours weekly. Prerequisite: course 5 or advanced placement standing.

7. Advanced French. Sections meet five hours weekly. Prerequisite: course 6 or advanced placement standing.

8. Advanced French. Sections meet three hours weekly. Prerequisite: course 7 with a grade of "A" or "B" or permission of instructor. The Staff. Ms. Hamel-Baccash in charge

9. Introduction to the Reading of French (4 course). Classes will meet three times a week. This course is intended to enable students to acquire basic reading skills in French. Attention will be given at an early stage to the specialized vocabulary of particular scientific and humanistic disciplines. (Should not be taken concurrently with French 1. Credit cannot be received for both courses.)

10. French Conversation (4 course each). Sections meet three hours weekly. Prerequisite: course 3 with a grade of "A" or "B" or permission of instructor. The Staff. Ms. Korol-Ward in charge

11. Advanced Grammar I. Prerequisites: course 6 and (normally) 1 or equivalent. A placement examination will be administered and qualified students will be advanced to French 100B or 100C.

12. Advanced Grammar II. Prerequisite: course 100B or equivalent. A placement examination will be administered and qualified students will be advanced to French 100C or 103.

13. French Linguistics. Classes meet three hours weekly. Prerequisite: course 100C or equivalent. Consent of instructor.

Upper Division Courses

The prerequisites for all upper division courses taken in partial fulfillment of the French major are French 6 with a grade of "B" or better (otherwise French 7 with a grade of "C" or better), 12, 15 or their equivalents. All upper division courses except as otherwise indicated are conducted in French. Credit will ordinarily not be allowed for completing a less advanced course after satisfactory completion of a more advanced course in grammar and/or composition. French 104, 105, 106, 107 and 108A are not sequential and may be taken in any order, provided the prerequisites for each course are fulfilled.

100. French Conversation (4 course each). Sections meet three hours weekly. Prerequisite: course 3 with a grade of "A" or "B" or permission of department. The Staff.

101. Advanced Grammar I. Prerequisites: course 6 and (normally) 1 or equivalent. A placement examination will be administered and qualified students will be advanced to French 100B or 100C.

102. Advanced Grammar II. Prerequisite: course 100B or equivalent. A placement examination will be administered and qualified students will be advanced to French 100C or 103.

103. French Linguistics. Classes meet three hours weekly. Prerequisite: course 100C or equivalent. Consent of instructor.

104. French Conversation (4 course each). Sections meet three hours weekly. Prerequisite: course 3 with a grade of "A" or "B" or permission of instructor. The Staff.

105. Advanced Grammar I. Prerequisites: course 6 and (normally) 1 or equivalent. A placement examination will be administered and qualified students will be advanced to French 100C or 103.

106. Advanced Grammar II. Prerequisite: course 100B or equivalent. A placement examination will be administered and qualified students will be advanced to French 100C or 103.

107. Advanced Grammar III. Prerequisite: course 100C or equivalent. A placement examination will be administered and qualified students will be advanced to French 100C or 103.

108. Advanced French Phonetics. Classes meet twice weekly. Prerequisite: consent of instructor.

109. Advanced French Poetry. Classes meet three hours weekly. Prerequisite: consent of instructor.

110. Advanced French Prose. Classes meet three hours weekly. Prerequisite: consent of instructor.

111. Advanced French Literature. Classes meet three hours weekly. Prerequisite: consent of instructor.

112. Advanced French History. Classes meet three hours weekly. Prerequisite: consent of instructor.

113. Advanced French Philosophy. Classes meet three hours weekly. Prerequisite: consent of instructor.

114. Advanced French Psychology. Classes meet three hours weekly. Prerequisite: consent of instructor.

115. Advanced French Sociology. Classes meet three hours weekly. Prerequisite: consent of instructor.

116. Advanced French Sociology. Classes meet three hours weekly. Prerequisite: consent of instructor.

117. Advanced French Psychology. Classes meet three hours weekly. Prerequisite: consent of instructor.

118. Advanced French Philosophy. Classes meet three hours weekly. Prerequisite: consent of instructor.

119. Advanced French Sociology. Classes meet three hours weekly. Prerequisite: consent of instructor.

120. Advanced French History. Classes meet three hours weekly. Prerequisite: consent of instructor.

121. Advanced French Literature. Classes meet three hours weekly. Prerequisite: consent of instructor.

122. Advanced French Literature. Classes meet three hours weekly. Prerequisite: consent of instructor.

123. Advanced French Literature. Classes meet three hours weekly. Prerequisite: consent of instructor.

124. Advanced French Literature. Classes meet three hours weekly. Prerequisite: consent of instructor.
133. French Institutions from the Revolution to the Present. Classes meet three hours weekly. A fourth hour may be required for the viewing of films and other laboratory activities. Ms. Brichant

134. The "Ancien Régime." Classes meet three hours weekly. A fourth hour may be required for the viewing of films and other laboratory activities. Ms. Brichant

135. From Prehistoric Times to the Renaissance. Courses meet three hours weekly. A fourth hour may be required for the viewing of films and other laboratory activities. Ms. Brichant

138. Cinema and Literature in Contemporary France. Classes meet three hours weekly. Additional hours may be required for the viewing of films and other laboratory activities. Course may be taken as an elective in partial fulfillment of French Major Plans A, B or C. The Staff

140A-140B-140C. Honors Program in French. Prerequisites: junior or senior standing in French with a 3.5 grade-point average in the major, a 3.3 overall average and consent of department.

140A. Honors Seminar in French. Seminar on different aspects of a selected literary genre, such as drama, poetry, the novel, etc.

140B. Honors Seminar in French. Seminar on a chosen theme or particular problem of French literature, civilization or ideas.

140C. Individual study on a topic related to that of 140A or 140B leading to an essay to be written under the guidance of a faculty member. Ms. Metzler in charge

Undergraduate Seminars

Courses 150-157 may be repeated once for credit with consent of the major advisor.

150. Studies in Medieval Literature. The Staff

151. Studies in Sixteenth-Century Literature. The Staff

152. Studies in Seventeenth-Century Literature. The Staff

153. Studies in Eighteenth-Century Literature. The Staff

154. Studies in Nineteenth-Century Literature. The Staff

155. Studies in Twentieth-Century Literature. The Staff

156. Studies in Contemporary Literature of French Expression. The Staff

157. Studies in the French Language. The Staff

158. The Woman in French Literature. This course will explore a selected aspect of the situation of woman in French literature as author, character, symbol, etc.

160. Studies in the History of Ideas. Specific themes will be chosen and developed which will address a particular problem of French literature, civilization or ideas. The course may be repeated for credit with the approval of the major advisor. The Staff

199. Special Studies in French (1/2 to 2 courses). Prerequisites: junior or senior standing, consent of instructor and consultation with chairman of major advisors. Course may be taken twice.

Department Chairman in charge

Courses in English

The following courses may not be taken for graduate credit; they may be taken as out-of-department electives for undergraduate majors.

142. Contemporary French Theater in Translation. Classes meet two hours weekly. This course may be considered as an out-of-department elective for the purpose of satisfying major requirements. Ms. Korol-Ward

143. Modern French Thought. Classes meet two hours weekly. Contemporary works will be read and discussed in translation. Course may be taken as an elective in partial fulfillment of French Major Plan C. Course may be considered as an out-of-department elective for the purpose of satisfying major requirements.

144A-144C. The French Novel in Translation. Classes meet two hours weekly. Authors to be studied will be announced quarterly. Course may be considered as an out-of-department elective for the purpose of satisfying major requirements. The Staff

Graduate Courses

For complete descriptions of graduate-level courses offered by this department, please consult the UCLA Graduate Catalog.

Genetics

See the Departments of Biology and Microbiology

Geochemistry

See the Department of Earth and Space Sciences

Geography

(Department Office: 1255 Bunche Hall)

Charles F. Bennett, Ph.D., Professor of Biogeography.

C. Rainer Berger, Ph.D., Professor of Geography and Geophysics.

Henry J. Bruman, Ph.D., Professor of Geography.

William A. V. Clark, Ph.D., Professor of Geography.

Gary S. Dunbar, Ph.D., Professor of Geography.

Huey L. Kostanick, Ph.D., Professor of Geography.

Richard F. Logan, Ph.D., Professor of Geography.

Tom L. McKnight, Ph.D., Professor of Geography (Chairman of the Department).

Howard J. Nelson, Ph.D., Professor of Geography.

Antony R. Orme, Ph.D., Professor of Geography.

Jonathan D. Sauer, Ph.D., Professor of Geography.

Herman W. Terjung, Ph.D., Professor of Geography.

Norman J. W. Thower, Ph.D., Professor of Geography.

Hartmut Walter, Ph.D., Professor of Biogeography.

Robert C. Ordinning, Ph.D., Emeritus Professor of Geography.

Clifford H. MacFadden, Ph.D., Emeritus Professor of Geography.

Joseph E. Spencer, Ph.D., Emeritus Professor of Geography.

Benjamin E. Thomas, Ph.D., Emeritus Professor of Geography.

Gerry A. Hale, Ph.D., Associate Professor of Geography.

Christopher L. Salter, Ph.D., Associate Professor of Geography.

Stanley W. Trimble, Ph.D., Associate Professor of Geography.

Wallace E. Westman, Ph.D., Associate Professor of Geography.

J. Nicholas Enrikin, Ph.D., Assistant Professor of Geography.

James H. Johnson, Ph.D., Assistant Professor of Geography.

Frank W. Weirich, M.A., Acting Assistant Professor of Geography.

John D. Stephens, Ph.D., Visiting Assistant Professor of Geography.

Geography as a Major

The Department of Geography offers a choice between two undergraduate majors: (1) the major in Geography and (2) the major in Analysis and Conservation of Ecosystems. Prospective majors are urged to discuss the nature and opportunities of each program with the appropriate Undergraduate Advisor. In both programs, the department is committed to effective quality education concerning the manifold interactions of environment and society. As such, all students are encouraged to work in close and frequent association with faculty members appropriate to their interests. Students are assured of a warm response from faculty members in whose fields of instruction and research they show enthusiasm.

The Major in Geography

Geography is a vital discipline that explores the interface between environment and society. But geography is more than a discipline. It is also a method of study, a correlative science that seeks to establish relationships both within and between the many complex expressions of environment and society. In this guise, geography embraces many other disciplines of the physical, biological and social sciences, but in its use of data, its search for cause and effect, and its understanding of process and response, geography offers a unique approach to the study of the character and problems of the world we live in.

In essence, geography is concerned with three aggregate aspects of the world around us: (1) the physical and biological characteristics, processes and responses observable at or near the Earth's surface; (2) the activities by which men and women have modified this natural environment, both past and present; and (3) the order and disorder that these human activities have created in sculpturing the natural and artificial landscapes. Tools and concepts of the physical, biological and social sciences are used to analyze and explain these varied phenomena.

A geographer is concerned with the origins, development, morphology and processes of the landscapes inherited from nature and with the institutions and patterns associated with the human use of these landscapes. This information helps the geographer to predict the nature and direction of future landscape change.
A geographer is a person who has eyes for the world around him or her, concern for the processes and dynamics of the changes that shape that world, and interest in helping to chart future growth along lines of rational development and careful management of both human and nonhuman resources.

One or more of four general objectives may be recognized by those persons who select the major in Geography, namely: (1) a broad understanding of the Earth's many environments and peoples as part of a liberal education; (2) preparation for employment in areas concerned with environment and society, for example in environmental impact studies and urban planning; (3) preparation for graduate study in the discipline leading to advanced degrees and professional occupation in both academic and nonacademic areas; and (4) preparation for the student who desires a teaching credential with a specialty in geography and the physical, biological or social sciences.

Students majoring in Geography are encouraged to consult the Undergraduate Advisor (Geography) for the planning of a program suitable to the student's particular and individual objective. All faculty and other appropriate resources of the Department of Geography are available to Geography majors, though it is realized that students will work more closely with some faculty members than with others. The Undergraduate Advisor (Geography) advises majors concerning the faculty and other resources most pertinent to student needs.

Preparation Required: Geography 1, 2, 3, 4 and Mathematics 50A or equivalent are required of all majors. A mathematics background, such as Mathematics 3A, 3B, 3C or 4A-4B or 31A, 31B, 32A, is recommended. All prospective majors, including transfer students, should consult the Undergraduate Advisor (Geography) before arranging a program in geography and its allied fields.

Foreign Language or Mathematics Requirement: Every Geography major is required to pass five quarter courses in foreign language (in no more than two languages) or mathematics, in any combination. Each year of high school language (but not mathematics) will be accepted as equivalent to one quarter course. A score of 500 on an Educational Testing Service (ETS) language examination will also satisfy this requirement. In mathematics, only Mathematics 2, 3A, 3B, 3C, 4A-4B, 31A, 31B, 32A, 50B or equivalent are acceptable. This requirement may be satisfied on a Passed/Not Passed basis or by a letter grade, but Passed or at least a "C" grade is required in all courses intended to satisfy this departmental requirement. These courses may be used to meet the breadth requirements of the College of Letters and Science.

Major Requirements: The major requires a minimum of 10 upper division courses in geography chosen in consultation with a departmental advisor and taken for a letter grade. In meeting this minimum requirement, each major must take three courses from Group I—The Environment; three courses from Group II—Human Geography; one course from Group III—Procedures; two courses from Group IV—Regions; and one elective upper division course in geography. Majors are encouraged to take more than ten upper division courses.

Allied Fields: Every Geography major shall develop some competence in one or two allied fields. This program consists of a group of at least four upper division courses chosen from at least one but not more than two of the following disciplines: anthropology, atmospheric sciences, biology, chemistry, earth and space sciences, economics, folklore, history, management, mathematics, philosophy, physics, political science, psychology, public health, sociology. Other disciplines require departmental approval on an individual case basis in order to be classified as acceptable.

All courses that are required for the undergraduate major in Geography must be taken for a letter grade. This includes all lower and upper division courses in geography and all four upper division courses in the allied fields. A "C" average in the major is required for graduation.

Honors Program: Honors in the Geography Major may be obtained through procedures described under courses 199HA-199HB.

The Major in Analysis and Conservation of Ecosystems

The major in Analysis and Conservation of Ecosystems offers a choice between two plans, each of which has its foundations within the Department of Geography but is essentially interdisciplinary in scope.

Plan 1 is designed primarily for students seeking a general education that focuses on understanding the problems and issues related to past, present and future human manipulation and utilization of the world's ecosystems. It is also suited to those students who wish to lay the foundation for educational contributions to nonacademic social and political issues. This Plan is also suitable as preparation for graduate school.

Plan 2 is designed primarily for students who wish to focus careers in the environmental area or who wish to pursue future work at the graduate level and beyond in various aspects of this analysis and conservation of ecosystems. Like Plan 1, Plan 2 is deliberately broad in scope but is more rigorous in terms of the preparation and course work required.

Both Plan 1 and Plan 2 have certain features of which students should be appraised. First, a high degree of emphasis is placed on student input and student-faculty interaction—particularly with respect to seminars. It is therefore essential that close liaison be developed and maintained between all persons involved. The faculty is particularly receptive to student enthusiasm. Second, students majoring in Analysis and Conservation of Ecosystems are encouraged to consult with the Undergraduate Advisor (Ecosystems) for the planning of a program suitable to the student's particular and individual objective. All faculty and other appropriate resources of the Department of Geography are available to Ecosystems majors, though it is realized that students will work more closely with some faculty members than with others. The Undergraduate Advisor (Ecosystems) advises majors concerning the faculty and other resources most pertinent to student needs. Third, all courses that are required for the major in Analysis and Conservation of Ecosystems, both within and beyond the Geography Department, must be taken for a letter grade. This includes all lower and upper division courses including electives chosen to complete the major.

A "C" average in the major is required for graduation.

Honors Program: Honors may be obtained by students majoring in either Plan 1 or Plan 2 of the Analysis and Conservation of Ecosystems major as follows: attainment and maintenance of at least a 3.4 GPA in the major from commencement of senior year to graduation and completion of Geography 196—Senior Thesis in Ecosystem Analysis. The Senior Thesis is a substantial but not necessarily lengthy contribution to ecosystem analysis that must be submitted to the principal faculty member concerned not later than early in the student's final quarter. The topic is selected by the student in consultation with one or more faculty members, and a plan of work filed with the Undergraduate Advisor (Ecosystems) from whom further guidelines may be obtained.

Plan 1

Preparation Required: Biology 2, Geography 1, 2, 5 and Mathematics 50A are required of all majors. Geography 3 and 4 are recommended. A mathematics background, such as Mathematics 2, 3A, 3B, 3C or 4A-4B or 31A, 31B, 32A, is recommended. All prospective majors, including transfer students, should consult the Undergraduate Advisor (Ecosystems) before arranging a program in the analysis and conservation of ecosystems.

Major Requirements: Economics 100; Geography 129; three courses chosen from Group 1a; two courses chosen from Group 1b; one course from Group III.

Electives: Six courses should be chosen from the following list with the assistance of a faculty advisor: Anthropology 133R, 135P, 153A, 153B, 167; Art 168A, 168B; Architecture 190; Economics 110, 111, 170; Geography; not more than three courses from 100 to 199; one course only from History 195A-195J; Journalism 182A, 182B, 192; Political Science 141, 142; Public Health 150, 152, 186; Sociology 125, 126.
Plan 2

Preparation Required: Biology 5, 6, Chemistry 11A, Geography 1, 2, 5, Mathematics 3A, 3B, 3C or 31A, 31B, 32A and 50A. Engineering 10S are required of all majors. Geography 3 and 4, Mathematics 50B and Engineering 11 are recommended. A reading knowledge of a modern foreign language is required; this may be met by three years of language in high school or three quarters of one language at college level.

Major Requirements: One course chosen from Biology 103, 109, 111, 118; Economics 100; Geography 129; three courses from Group Ia; two courses from Group Ib; two courses from Group III.

Electives: No more than three courses may be taken in any one department to satisfy the elective requirement. Six courses should be chosen from the following list with the assistance of a faculty advisor: Anthropology 153A, 153B, 167; Biology 103, 109, 111, M118, 120, 122, 125, 131, 147; Earth and Space Sciences M139; Economics 111, 170; Engineering M107A, 180A, 181A, 184A, 184D; Geography: not more than three courses from 100 to 199; Political Science 141, 142; Public Health 102, 152; Sociology 126, 141.

Biology courses taken for elective requirements may not be used to fulfill the major requirement in biology.

Lower Division Courses

Check with the departmental office to learn of additional offerings, seminar topics and specific instructors for the quarter you wish to enroll in courses in geography.

1. Physical Environment. (Formerly numbered 1A.) Lecture, three hours; laboratory, one hour. A study of the Earth’s physical environment with particular reference to the nature and distribution of landforms and climate. The Staff

2. Biogeography. Lecture, three hours; laboratory, one hour. A study of the Earth’s biosphere with particular reference to the evolution and distribution of plants, animals and soils. The Staff

3. Cultural Geography. (Formerly numbered 1B.) Lecture, three hours; discussion, one hour. A broad examination of the cultural contributions made by human societies to the earth’s surface. The approach is ecological, spatial, and historical. The Staff

4. Human Location and Behavior. (Formerly numbered 1C.) Lecture, three hours; laboratory, one hour. Introduction to the basic concepts used in modern urban and economic geography. Emphasis on giving a better understanding of the effects of location on human behavior. Discussion and practical exercises focus on the analysis of problems in the Los Angeles urban environment. The Staff

5. People and the Earth’s Ecosystems. Lecture, three hours; laboratory, one hour. An examination of the historical and contemporary roles of man as a major agent of biological change in the earth’s ecosystems. The Staff

10. Freshman Seminar in Geography. Staff; student discussion; three hours; reading period, one hour. Prerequisite: course 1 or 2 or 3 or 4 or 5 as biblis the theme. A seminar designed to explore various themes and issues pertinent to environment and people. Seminar topics will be advertised in the department during previous quarter. The Staff

Upper Division Courses

GROUP I: THE ENVIRONMENT

LAS Basic Environmental Studies

M102. Geomorphology. (Same as Architecture and Urban Planning M196.) Lecture, three hours; reading period, one hour. Prerequisite: course 1 or equivalent or junior standing or consent of instructor. A study of the processes responsible for shaping the world’s landforms with emphasis on the relationship between the energy and materials involved and the magnitude and organization of the surface forms produced. Mr. Orme

103. Glacial Geomorphology. Lecture, three hours; reading period, one hour. Prerequisite: upper division standing. An introduction to both mountain and continental glaciers and their deposits. Topics covered will include: the classification of glaciers, mass balance, glacier motion, erosion processes, glacialfluvial and glaciolacustrine deposition. Mr. Weirich

104. Climatology. Lecture, three hours; reading period, one hour. The many relations between climate and the world of man are examined. The objective is to apply basic energy budget concepts to the microclimate of relevance to the ecosystems of agriculture, animals, man and urban places. Mr. Ternberg

105. Hydrology. Lecture, three hours; reading period, one hour. Prerequisite: course 1 or equivalent. The role of water in geographic systems: hydrologic phenomena in relation to climate, landforms, soils, vegetation, and cultural processes and impacts on the landscape. Field projects required. Mr. Trimble

106. Soils. Lecture, three hours; reading period, one hour. Prerequisites: course 1 or equivalent, Chemistry 11A or consent of instructor. A study of the soil’s properties and utilization of soils, with special emphasis on the world’s major soil groups. The Staff

108. World Vegetation. (Formerly numbered 110.) Lecture, three hours; reading period, one hour. Prerequisites: course 1 or equivalent, Chemistry 11A or consent of instructor. Characteristics, distribution, environment and cultural relationships of the world’s principal vegetation patterns. Mr. Sauer

109. Ecology of Vegetation. Lecture, three hours; field, twelve hours total. Prerequisites: course 2, Mathematics 50A, Biology 11 or consent of instructor. Principles of plant ecology at the community and ecosystem level. Emphasis on structure, dynamics and management of the characteristics of terrestrial vegetation. Mr. Westman

110. Plant Migration. (Formerly numbered 112.) Lecture, three hours; reading period, one hour. Prerequisites: courses 1, 2, Biology 2 or equivalent or consent of instructor. A study of mechanisms of geographic patterning of natural and artificially modified vegetation. Emphasis on range changes for which there is direct fossil or documentary evidence. Mr. Sauer

112. Animal Geography: Biophysical Aspects. (Formerly numbered 116A.) Lecture, three hours; reading period, one hour. Prerequisites: courses 1, 2, Biology 2. A study of the factors and principles of animal distribution and dispersal on continents and islands of the earth in time and space. Mr. Bennett, Mr. Walter

114. Physical Bases of Geography. Lecture, three hours; discussion, one hour. Prerequisites: courses 1, 2, three courses from Group Ib. Senior standing. An integrative study to the physical bases of geography, in a framework of world climatic regions. Mr. Logan

(1B) Applied Environmental Studies

116. Origins and Historys of Crop Plants. (Formerly numbered 116.) Lecture, three hours; reading period, one hour. Prerequisites: courses 1, 2, Biology 2 or equivalent or consent of instructor. Geographical patterns of domestication and diffusion of useful plants from antiquity to the present, based on detailed case histories of selected species. Mr. Sauer

117. Animal Geography: Cultural Aspects. (Formerly numbered 116B.) Lecture, three hours; reading period, one hour. Prerequisites: courses 1, 2, Biology 2 or equivalent. A study of human cultural factors influencing animal distributions; the role of animals in human societies; origins and diffusion of domesticated animals. Mr. Bennett, Mr. Walter

118. Medical Geography. Lecture, three hours; reading period, one hour. Prerequisite: course 5 or consent of instructor. The medical and cultural relationships of the world’s major human societies and the role of human cultural behavior-place-disease interactions and some effects of change and development on disease etiology and problems of health care. The Staff

119. Agricultural and Pastoral Ecosystems. (Formerly numbered 107.) Lecture, three hours; reading period, one hour. Prerequisites: courses 1, 2 or equivalent or upper division standing. An analysis of the basic principles and problems associated with the conservation of natural resources in the United States and Canada. Mr. Bennett, Mr. McKnight, Mr. Trimble

121. Conservation of Resources: Underdeveloped World. Lecture, three hours; reading period, one hour. Prerequisites: courses 1, 2 or equivalent or upper division standing. An analysis of the basic principles and problems of the conservation of natural resources of the underdeveloped world. Mr. Bennett

122. Man and Environment in Africa. (Formerly numbered 119.) Lecture, three hours; discussion, one hour. Prerequisites: courses 1, 2 or equivalent or upper division standing. An analysis of the basic principles and problems of the conservation of natural resources of the underdeveloped world. Mr. Bennett

125. Marine Ecosystems. (Formerly numbered 108.) Lecture, three hours; reading period, one hour. Prerequisites: courses 1, 2, Biology 5 or equivalent or upper division standing. Description and analysis of the principal marine ecosystems with particular emphasis upon those which are chiefly affected by human activity. Further, there will be a detailed examination of the ecological and conservation problems associated with human use of marine ecosystems. Mr. Bennett

M127. Soil, Plants, and Society. (Same as Biology M127.) Lecture, three hours; field trip. Prerequisites: Chemistry 11A, 11B, 11C or equivalent or consent of instructor. A general treatment of soil development and morphogenesis of the physical and chemical properties of soils as they relate to plant growth and distribution; soil resources, management, conservation and cultural aspects. Soil profiles examined on the field trip are used to explain developmental phenomena. The Staff
128. The World's Ecosystems: Problems and Issues. (Formerly numbered 123.) Lecture, three hours; discussion, one hour. Prerequisites: course 120 or 121. Principal objectives are (1) to relate past, current, and projected problems associated with man-induced ecological disturbances and (2) to identify and evaluate the societal and biophysical factors which have contributed to the identified ecological disequilibria. 

The Staff

129. Problems of the Environment: Seminar. Lecture, three hours; reading period, two hours. Prerequisites: senior standing, four courses from Group I; Math 152A highly recommended. Class enrollment limited. Qualitative-quantitative analysis of problems associated with rational protection and use of selected environmental systems (urban, rural, forest, desert, coastal, water, soil or others). The Staff

GROUP II: HUMAN GEOGRAPHY

130. Geographical Discovery and Exploration. Lecture, three hours; reading period, one hour. Prerequisites: courses 1, 3 or equivalent or upper division standing. A survey of the history of exploration, from earliest times to modern, with emphasis on the period from Marco Polo to the present. Mr. Dunbar, Mr. Thrower

132. Cultural Geography of the Pre-Modern World. Lecture, three hours; reading period, one hour. Prerequisite: course 3 or equivalent. An evolutionary and structural approach to the sociocultural geography of the earth prior to the rise of the modern-world system. Mr. Hale, Mr. Saller

133. Cultural Geography of the Modern World. Lecture, three hours; reading period, one hour. Prerequisite: course 3 or equivalent. An evolutionary and structural approach to the sociocultural geography of the modern-world system, with particular emphasis upon the geographic determinants of its hemispheric, and periphery. Mr. Hale, Mr. Saller

135. Reading the Cultural Landscape: Perspectives and Processes. Lecture, three hours; reading period, one hour. Prerequisite: upper division standing or consent of instructor. Understanding personal and societal environmental preferences begins with analysis of the landscape. This course deals with attitudes toward the cultural or humanized landscape, methods of landscape analysis, problem landscapes and environmental issues of the future through lectures, readings, and field study. Mr. Logan, Mr. Thrower

136. Historical Geography of the United States. (Formerly numbered 144.) Lecture, three hours; reading period, one hour. Prerequisites: courses 1, 3 or equivalent or upper division standing. A study of the evolution of the cultural landscapes of the area that is now the United States. Examination of past geographies and of geographical change through time. Mr. Dunbar

140. Political Geography. Lecture, three hours; reading period, one hour. Prerequisites: courses 1, 3 or equivalent or upper division standing. The principles of political geography as developed through regional studies of political phenomena throughout the world. Current problems in domestic and international affairs will be considered. Mr. Kostanick

142. Population Geography. Lecture, three hours; reading period, one hour. A study of the social and behavioral perspectives influencing people in their patterns of demographic change, migration and mobility with special emphasis on spatial relationships and selected case studies. The Staff

145. Spatial Organization of Society: Structure. Lecture, three hours; reading period, one hour. Prerequisites: course 4, elementary statistics or consent of instructor. A study of the spatial structure of society as an expression of human decisions. Emphasis is on the processes affecting city size and distribution, the internal structure of cities, rural land use, and industrial location. Mr. Entrikin

146. Spatial Organization of Society: Behavior. Lecture, three hours; reading period, one hour. Prerequisites: course 4, elementary statistics or consent of instructor. A study of human behavior in the spatial context. Discusses regularities in patterns of trade, consumer behavior, migration, mobility, communication and diffusion. Mr. Entrikin

148. Economic Geography. (Formerly numbered 160.) Lecture, three hours; reading period, one hour. Prerequisite: course 4 or consent of instructor. An analysis of those principal economic production systems especially involved with agriculture, foodstuffs, resources and industrialization in the underdeveloped world. The Staff

149. Transportation Geography. Prerequisite: course 3 or 4 or upper division standing. A study of the geographical aspects of transportation, focusing on the characteristics and functions of the various modes and on the complexities of intra-urban transport. Mr. McKnight

150. Urban Geography. Lecture, three hours; reading period, one hour. Prerequisites: courses 1, 3 or equivalent or upper division standing. An analysis of the development, functions, spatial patterns and geographic problems of American cities. Mr. Clark, Mr. Entrikin, Mr. Nelson

151. Historical Geography of Cities. Prerequisites: courses 3, 4 or equivalent or upper division standing. A survey of the development and growth of cities as illustrations of urban civilization. Two themes will be emphasized, the development of city systems and the evolution of urban internal spatial structure. Mr. Entrikin

152. World Cities. Lecture, three hours; reading period, one hour. Prerequisite: upper division standing. A discussion of the growth and structure of selected cities as illustrations of the processes of urbanization in different countries and societies. Topics will include rural to urban migration, cities as centers of power, spatial organization, and the tendency to megalopolitanization. Mr. Clark, Mr. Entrikin

156. Metropolitan Los Angeles. Lecture, three hours; reading period, one hour. Prerequisite: upper division standing. A study of the origins, growth processes, internal structure and pattern, interactions, environmental and spatial problems of the Los Angeles metropolitan area. Mr. Nelson

159. Problems in Human Geography. Staff-student discussion, three hours; reading period, one hour. Prerequisites: two courses from Group I, upper division standing. Class enrollment limited to fifteen students. A seminar type course in which students carry on intensive research projects. Designed as a "cap stone" to courses in this group, the subjects of research will grow out of the previous work. The Staff

GROUP III: PROCEDURES

160. Field Analysis: Physical Geography. (Formerly numbered 170.) Saturday field trips, 8:5. Prerequisites: courses 1, 2 or equivalent and consent of instructor. A student desiring to take this course must notify department chairman of his wish, in writing, at least two quarters in advance of enrolling in this course. The basic methods of geographic analysis of small areas, embracing a variety of physical environments in Southern California and including consideration of related human activities. Chieflly field training. Mr. Logan, Mr. Tramble

161. Field Analysis: Cultural Geography. (Formerly numbered 179.) Prerequisites: courses 1, 3, 4, 132, 133, at least two upper division courses in geography, consent of instructor. Enrollment privilege is given to students majoring in Geography. The class meets once a week from 8-6. The observation, analysis and mapping of landscape phenomena of human origin. Techniques of data collection will be examined for such topics as settlement form and pattern, environmental change, historical and demographic change, and land use. Mr. Salter

162. Field and Laboratory Analysis: Geomorphology, Climatology, Hydrology. Laboratory and field, eight hours per week. Prerequisites: course 1 or equivalent, two courses from 106, 107, 109, 112. Open to Geography and Ecosystems majors only with enrollment priority accorded Ecosystems majors. Examination of field and laboratory procedures and intellectual concepts used in the observation, measurement, analysis, and interpretation of phenomena pertinent to the physical environment and interrelated human influences. The Staff

163. Field and Laboratory Analysis: Biogeography. Lecture, laboratory and field, eight hours per week. Prerequisites: courses 2, 5 or equivalent, two courses from 106, 108, 109, 112. Open to Geography and Ecosystems majors only with enrollment priority accorded Ecosystems majors. Examination of field and laboratory procedures and intellectual concepts used in the observation, measurement, analysis, and interpretation of phenomena pertinent to biogeography and interrelated human influences. The Staff

166. Map Analysis. (Formerly numbered 171.) Lecture, two hours; laboratory, six hours; independent study. Prerequisites: courses 1, 3 or equivalent. A study of map reading and analysis. The Staff

167. Cartography (11½ courses). (Formerly numbered 172.) Lecture, two hours; laboratory, six hours; independent study. Prerequisites: courses 1, 3 or equivalent or consent of instructor. Survey of the field of cartography. Includes theory and construction of map projections, compilation procedures, principles of generalization, symbolization, terrain representation, lettering, drafting and scribbling, and map reproduction methods. The Staff

168. Computer Cartography. (Formerly numbered 175.) Lecture, one hour; laboratory, three hours; independent study. Prerequisites: two courses from 157 or consent of instructor. Theory and methods of mapping quantitative information with a computer. Includes problems of acquiring and processing machine readable map data and representing them as point symbols and surfaces. Mr. Thrower

169. The Earth from Above. Lecture, three hours; reading period, one hour. Prerequisites: courses 1, 3, or equivalent or consent of instructor. This course examines the interface between cartography and remote sensing. By means of a wide variety of imagery from maps and satellite photos, different landscapes are analyzed and explained. Mr. Thrower

170. Presentation and Analysis of Geographic Data. Lecture, two hours; laboratory, one hour. An introduction to the hardware and software tools that are used in organizing, measuring, and displaying data from field, map, interview and government sources. Mr. Clark

171. Quantitative Analysis. (Formerly numbered 178.) Lecture, three hours; laboratory, one hour. Prerequisite: Mathematics 50B or consent of instructor. An introduction to the methods of measurement and interpretation of geographic distributions and associations. Mr. McIlwaine

178. Dating Techniques in Environmental Sciences and Archaeology. (Same as Anthropology M116G.) Lecture, three hours; reading period, one hour. Prerequisite: consent of instructor. Introduction to scientific dating methods such as radiocarbon dating, radiometric dating, biological dating techniques and magnetic dating, and applications in environmental sciences, archaeology and physical anthropology. Mr. Berger

GROUP IV: REGIONS

180. North America. Lecture, four hours. Prerequisites: courses 1, 3 or equivalent or upper division standing. Delimitation and analysis of the principal geographic regions of the United States and Canada. Mr. McKnight, Mr. Nelson
181. Middle America. Lecture, three hours; reading period, one hour. Prerequisites: courses 1, 3 or equivalent or upper division standing. A study of the geographic factors, physical and cultural, that are basic to an understanding of the historical development of Middle America and of the contemporary economic and cultural geography of Mexico and the countries of Central America and the West Indies. Mr. Bennett, Mr. Bruman

182A. Spanish South America. Lecture, three hours; reading period, one hour. Prerequisites: courses 1, 3 or equivalent or upper division standing. A study of the geographic factors, physical and cultural, that are basic to an understanding of the historical development of Spanish South America and of the contemporary economic and cultural geography of the individual Spanish-speaking countries. Mr. Bruman

182B. Brazil. Lecture, three hours; reading period, one hour. Prerequisites: courses 1, 3 or equivalent or upper division standing. A study of the geographic factors, physical and cultural, that are basic to an understanding of the historical development of Portuguese South America and of the contemporary economic and cultural geography of Brazil. Mr. Bruman

183. Europe. Lecture, three hours; reading period, one hour. Prerequisites: courses 1, 3 or equivalent or upper division standing. A study of geographic conditions and their relation to economic, social and political problems in Europe. Mr. Kostanick, Mr. Thrower

184. Soviet Union. Lecture, three hours; reading period, one hour. Prerequisites: courses 1, 3 or equivalent or upper division standing. A regional synthesis with varying emphases upon the people of South or Southeast Asia in their physical, biotic, and cultural environment and its dynamic transformation. Consult department about term emphasis. The Staff

185. South and Southeast Asia. Lecture, three hours; reading period, one hour. Prerequisites: courses 1, 3 or equivalent or upper division standing. A regional synthesis with varying emphases upon the people of South or Southeast Asia in their physical, biotic, and cultural environment and its dynamic transformation. Consult department about term emphasis. The Staff

186. Contemporary China. Lecture, three hours; reading period, one hour. Prerequisites: courses 1, 3 or equivalent or upper division standing. A systematic geographic analysis of the elements of landscape, resources, population, and socioeconomic characteristics of the People's Republic of China. The course goal is comprehension of the dynamics that have led to China's major role in the East Asian and international scene, with special attention given to China-Japan and Sino-American relations and their geographic bases. Mr. Sailer

187. Middle East. Lecture, three hours; reading period, one hour. Prerequisites: courses 1, 3 or equivalent or upper division standing. An analysis of the economic, social and political geography of the area extending from Iran to Morocco and from Turkey to Sudan. Emphasis on geographical themes and problems during historical and modern times. Mr. Hale

188. Northern Africa. Lecture, three hours; reading period, one hour. Prerequisites: courses 1, 3 or equivalent or upper division standing. An analysis of the economic, social and political geography of the area including Mediterranean Africa, the Sahara, the Sudanic belt, and the eastern Horn. Emphasis on geographical themes and problems during historical and modern times. Mr. Hale

189. Middle and Southern Africa. Lecture, four hours. Prerequisites: courses 1, 3 or equivalent or upper division standing. The regions of Africa south of the Sahara (mid and south Africa) in terms of physical features, human settlement, economic production, and political patterns. Mr. Hale

190. Australasia. Lecture, four hours. Prerequisites: courses 1, 3 or equivalent or upper division standing. A regional synthesis of the physical and cultural features which characterize Australia, New Zealand, and the islands of the South Pacific. Mr. McKnight

191. California. Lecture, four hours. Prerequisites: courses 1, 3 or equivalent or upper division standing. A systematic and regional treatment of the geography of California including the physical, cultural, and economic aspects and detailed studies of the various regions. Mr. Logan, Mr. McKnight

UNGROUPED

196. Senior Thesis in Ecosystems Analysis. Study schedule to be arranged individually. Prerequisites: courses 129, 162 or 163 and senior standing. Preparation and data collection and analysis for a senior thesis under the guidance and assistance of a faculty sponsor. The Staff

199A-199B. Honors in Geography: I & II. Study schedule to be arranged individually with the instructor. Prerequisites: senior standing and consent of instructor. The Staff

199HA-199HB. Senior Honors Thesis. Lecture, four hours. Prerequisites: completion of 199HA and have attained a 3.5 GPA for such work and have a 3.25 overall GPA. 199HA will be an independent study course taught by a team of two faculty members who will assist an enrolled student with bibliographic research and/or field research into a topic of mutual interest to the student and the faculty members. Successful completion of 199HA will entail the preparation of a detailed bibliography and outline for the writing of a substantial paper during the course of 199HB. The two faculty members will evaluate the bibliographic and/or field preparation of the student in 199HA. If that work is determined to be of "A" quality, the student will be allowed to continue in the Honor's Program. If that work is "B" or below, credit will not be awarded to the student, but he or she will not be permitted to continue in the Honor's Program. 199HB will be devoted to the writing of the substantial paper researched and outlined in 199HA. The two faculty members will evaluate the paper. If the paper is determined to be an "A", the student will graduate with Honors in Geography. If the paper is determined to be a "B" or lower, credit will be given the student, but there will be no Honors.

Graduate Courses
For complete descriptions of graduate-level courses offered by this department, please consult the UCLA Graduate Catalog.

Geology
See the Department of Earth and Space Sciences

Geophysics and Space Physics
See the Department of Earth and Space Sciences

Graduate Courses
For complete descriptions of graduate-level courses offered by this institute, please consult the UCLA Graduate Catalog.
Germanic Languages

(Deartment Office: 310 Royce Hall)

Ehrhard Bahr, Ph.D., Professor of German.
Franz H. Bäuml, Ph.D., Professor of German.
Wolfgang Schryer, Ph.D., Professor of German.
Eli Sobel, Ph.D., Professor of German.
Hans Wagener, Ph.D., Professor of German (Chairman of the Department).
Donald J. Ward, Ph.D., Professor of German and Folklore.
Terence H. Wilbur, Ph.D., Professor of Germanic Linguistics and Philology.
Gustave Otto Atti, Ph.D., I.L.D., Emeritus Professor of German.
Carl William Hagge, Ph.D., Emeritus Professor of German.
Wayland D. Hand, Ph.D., Emeritus Professor of German and Folklore.
William J. Mulloy, Ph.D., Emeritus Professor of German.
Victor A. Oswald, Jr., Ph.D., Emeritus Professor of German.
Vern W. Robinson, Ph.D., Emeritus Associate Professor of German.
Erik Wahlgren, Ph.D., Emeritus Professor of Scandinavian and Germanic Languages.
Alexander Stephan, Ph.D., Associate Professor of Germanic Languages.
Janet R. Hadda, Ph.D., Associate Professor of Yiddish.
Robert S. Kirner, Ph.D., Associate Professor of Dutch and Afrikaans.
T. Craig Christy, Ph.D., Assistant Professor of Germanic Linguistics and Philology.
Dieter Jedan, Ph.D., Assistant Professor of German.
Kathleen Komar, Ph.D., Assistant Professor of German and Comparative Literature.

Marianna B. Birnbaum, Ph.D., Adjunct Associate Professor of Hungarian.

Preparation for the Major in German

Required: German 1, 2, 3, 4, 5, 6 or equivalents.

The Major in German

Fifteen upper division courses offered by the department are required for the major in German: 100A or 100B or 100C, 108A, 108B, 129; four courses chosen from among 100A or 100B or 100C (whichever was not taken to satisfy the first listed requirement), 101A, 101B, 101C, 121H, 128, 134; three courses chosen from among 103, 105, 106, 107, 117; four courses chosen from among 121H, 122, 123, 124, 126, 127, 130, 132. German undergraduate majors with secondary interests in other fields such as folklore, history, linguistics, music, philosophy and theater arts may arrange to pursue studies in those areas. Such students should consult with the departmental undergraduate advisors.

Lower Division Courses

No credit will be allowed for completing a less advanced course after satisfactory completion of a more advanced course in grammar and/or composition. Prerequisites for lower division courses are listed under the course descriptions. Students with demonstrated preparation may be permitted a more advanced program by the department, or such students may be transferred to a more advanced course on recommendation of the instructor.

1. Elementary German. Lecture, five hours per week; laboratory, one hour. Not available for academic credit to those students who have completed more than one year of high school German or equivalent. The student will, however, be credited with four units toward the minimum progress requirement. Mr. Jedan

1G. Elementary German for Graduate Students (No credit). Lecture, four hours per week. To provide preparation for Graduate Division foreign language reading requirement. The Staff

2. Elementary German. Lecture, five hours per week; laboratory, one hour. Prerequisite: course 1. Not available for academic credit to those students who have completed two years of high school German or equivalent. The student will, however, be credited with four units toward the minimum progress requirement. Mr. Jedan

2G. Elementary German for Graduate Students (No credit). Continuation of course 1G. The Staff

2R. Elementary German for Reading Knowledge. Prerequisite: course 1. This course will continue the study of the German language and guide the student to an acquisition of basic reading skills. Mr. Jedan

3. Elementary German. Lecture, five hours per week; laboratory, one hour. Prerequisite: course 2 or two years of high school German. Mr. Jedan

3R. Elementary German for Reading Knowledge. Prerequisite: course 2 or two years of high school German. This course will complete the study of the German language and introduce the student to readings in the various humanistic and scientific disciplines. Conducted in groups according to field of study. Mr. Jedan

4. Intermediate German. Lecture, five hours per week. Prerequisite: course 3 or three years of high school German. Mr. Jedan

5. Intermediate German. Lecture, four hours per week. Prerequisite: course 4 or four years of high school German. Mr. Jedan

6. Intermediate German. Lecture, four hours per week. Prerequisite: course 5 or equivalent. Mr. Jedan

12. German Conversation (½ course). Lecture, two hours per week. Prerequisite: course 1 or one year of high school German. This course will utilize German language teaching films; students will have the opportunity to practice spoken German in small groups. Mr. Jedan

14. Intermediate Conversation (½ course). Lecture, two hours per week. Prerequisite: course 3 or three years of high school German. Students will have the opportunity to practice spoken German in small groups. Mr. Jedan

95. Freshman Seminar. Course of variable content limited to topics of current interest; to be offered whenever a member of the staff is available. The Staff

Upper Division Courses

The prerequisites for all upper division courses except 100A, 100B, 100C, 121A, 121B, 121C, 121D, 121E, 121F, 121G, 121H, 121J, 121L is course 6 or equivalent.

Courses Open to Majors and Nonmajors, But Not to Graduate Students in German

100A. German Civilization and Culture before 1700. A study of the development of German civilization and institutions from the earliest times to 1700. Study of German culture as represented in its literature, art, music, and architecture before 1700. Students who have taken previous course 100 may receive credit for one of the following courses only: 100A, 100B, 100C. Lectures, discussions and readings in English; no knowledge of German required. Mr. Bäuml, Mr. Sobel, Mr. Wagener

100B. Modern German Civilization and Culture from 1700-1919. A study of the development of German civilization and institutions from 1700 to 1919. Study of German culture as represented in its literature, art, music, and architecture from 1700-1919. Students who have taken previous course 100 may receive credit for one of the following courses only: 100A, 100B, 100C. Lectures, discussions and readings in English; no knowledge of German required. Mr. Sobel, Mr. Wagener

100C. German Civilization and Culture in the 20th Century. A study of the development of German culture and institutions from 1919 to the present emphasizing developments in literature, the arts, and architecture. Lectures, discussions and readings in English; no knowledge of German required. Mr. Stephan

101A. Introduction to German Poetry. Close analysis of representative examples of German lyric poetry from early as well as modern literary periods, including a systematic consideration of poetic conventions and forms, diction, tone, imagery, symbolism and metrics. Recommended to be taken at the beginning of literary studies. The Staff

101B. Introduction to German Drama. Analysis of selected examples of drama (e.g., tragedy, comedy, one-act play, lyric drama, lyric theater, etc.), including a systematic introduction to dramatic forms, techniques, and theories. Texts will be selected from modern literature as well as from other periods. Recommended to be taken at the beginning of literary studies. Mr. Bahr, Mr. Nehring

101C. Introduction to German Narrative Prose. Analysis of significant examples of narrative prose (e.g., short story, novelle, novel, fairy tale, etc.), including a systematic introduction to narrative forms, techniques, styles. Texts will be selected from modern literature as well as from other periods. Recommended to be taken at the beginning of literary studies. Ms. Komar, Mr. Nehring, Mr. Stephan

103. Introduction to German Enlightenment, Sturm und Drang, and Classicism. Reading and discussion of representative works by Lessing, Goe- the and Schiller; their historical and social background, their relationship to music (Bach, Mozart) and philosophy (Leibniz, Kant) as well as their place in the history of ideas. Mr. Bahr

105. Introduction to 19th-Century German Literature. Reading and analysis of selected works from Romanticism to Realism. Ms. Komar, Mr. Nehring

106. Introduction to Modern Literature. Analysis of selected works of the period from 1890 to 1945. Mr. Wagener

107. Introduction to Contemporary Literature. Analysis of selected works of the period 1945 to the present time. Mr. Stephan

108A. Composition and Conversation. Composition and conversation. Mr. Christy, Mr. Jedan

108B. Composition and Conversation. Composition and conversation. Prerequisite: course 108A or consent of instructor. Mr. Christy, Mr. Jedan

117. Language and Linguistics. Prerequisites: courses 100A or 100B and 108A. Introduction to the historical development of the German language; theories and methods of linguistics. Mr. Christy, Mr. Wilbur
121A. Older German Literature in Translation. Analyses in English of works of German literature from the Medieval period to Baroque. No credit toward completion of the major in German. Mr. Bäuml, Mr. Sobel, Mr. Ward

121B. Classical German Literature in Translation. Analyses in English of the works of the period of Classicism. No credit toward completion of the major in German. Mr. Bahr

121C. 19th-Century German Literature in Translation. Readings and lectures in English on selected 19th-century authors. No credit toward completion of the major in German. Ms. Komar, Mr. Nehring

121D. Modern German Literature in Translation—Narrative Prose I. Readings, lectures and discussions in English on selected modern authors, including Mann, Kafka, Hesse and Rilke. No credit toward completion of the major in German. Mr. Nehring, Mr. Stephan, Mr. Wagener

121E. Modern German Literature in Translation—Narrative Prose II. Readings, lectures and discussions in English on post-1945 narrative prose. No credit toward completion of the major in German. Mr. Stephan, Mr. Wagener

121F. Modern German Literature in Translation—Drama and Lyrics. Readings, lectures and discussions in English on modern German drama and lyric poetry. No credit toward completion of the major in German. Mr. Stephan, Mr. Wagener

121G. Modern German Jewish Literature in Translation. Readings, lectures in English on selected authors, including Mendelssohn, Heine, Schnitzler, Kraus, Kafka, Feuchtwanger, Anne Frank, Nelly Sachs. No credit toward completion of the major in German. Ms. Hadda

121J. The Faust Tradition from the Renaissance to the Modern Age. Readings and discussions in English of the Faust theme and Faust tradition in European literature and intellectual history, including the chapbook of Doctor Faustus, Christopher Marlowe’s and Goethe’s Faust dramas as well as Thomas Mann’s novel Doctor Faustus: The Life of the German Composer Adrian Leverkuhn. No credit toward completion of the major in German. Mr. Bahr

Courses Open to Graduate Students in German

121H. Special Problems in Literature. Prerequisite: upper division standing in any department. Varying topics of current importance and immediate relevance to literary study. The course is designed to introduce the student to contemporary trends in literary study and is predominantly concerned with topics related to German literature and criticism. The Staff

121I. The German Film in Cultural Context. A survey of various aspects of the German film in relationship to literary, artistic, and political directions of the times, with emphasis on the film as a separate mode of artistic expression. Lectures in English. Mr. Stephan

122. Studies in German Literature Before 1750. Prerequisites: three upper division courses, including course 100A or consent of instructor. Readings and analysis of major works from the Middle Ages to the Baroque. The Staff

123. Goethe. Prerequisites: courses 100A or 100B and 103 or consent of instructor. Reading and discussion of representative works (except Faust) from Goethe’s early period to his maturity and old age. Mr. Bahr

124. Romanticism. Prerequisites: courses 100A or 100B, 105 or consent of instructor. Reading and analysis of major works of the Romantic period. Authors included are Tieck, Novalis, E.T.A. Hoffmann, and Eichendorff. Ms. Komar, Mr. Nehring

126. Advanced Study In Modern Literature. Prerequisites: courses 100A, 100B or 100C, 106 or consent of instructor. Reading and analysis of a wide range of the literature from 1890-1945. Mr. Wagener

127. Advanced Study In Contemporary Literature. Prerequisites: courses 100A, 100B or 100C, 107 or consent of instructor. Analysis of a wide range of German literature from 1945 to the present. Mr. Stephan

128. Advanced Composition, Grammar and Conversation. Prerequisites: courses 120A, 120B or consent of instructor. Grammar, composition, conversation. Mr. Christy, Mr. Jedan

129. German Phonetics. Study of the articulatory basis of the sounds of German and practice in standard pronunciation. Mr. Bahr

130. Methodology of Literary Criticism. Prerequisite: senior standing or consent of instructor. Introduction to the methodology of literary criticism, including a systematic study of motif, topos, plot, space and time, semantics, stylistics, rhetoric, metrics, imagery (emblem, metaphor, allegory, symbol), structural elements (act, stanza, book, flash-back, anticipation, inter-teron monologue), narrator and reader’s response, humor and irony, hermeneutics. Mr. Bahr, Mr. Bäuml

131. Goethe’s Faust. Prerequisites: courses 100A or 100B, 123 or consent of instructor. Detailed interpretation of Goethe’s Faust. Parts I and II, together with more general consideration of other treatments of the Faust theme in European literature. Mr. Bahr

134. German Folklore. A survey of the various genres of German folklore. Mr. Ward

195. Senior Thesis Course. Extensive reading, research, and writing of senior thesis. Course may be used for writing Honors thesis. The Staff

199A-199Z. Special Studies (1/2 to 1 course). Prerequisite: consent of instructor. To be arranged with the member of the faculty who will direct the study. The member of the faculty directing the study will be identified by the same two-letter code used to identify his 599 research course. A course of independent study for students who desire more intensive or specialized investigation of material covered in a regular course, and who present such a course as a prerequisite. The Staff

Graduate Courses

For complete descriptions of graduate-level courses offered by this department, please consult the UCLA Graduate Catalog.

Dutch-Flemish and Afrikaans

Upper Division Courses

101A. Elementary Dutch-Flemish. Mr. Kirner

101B. Elementary Afrikaans. Mr. Kirner

101C. Intermediate Dutch-Flemish. Prerequisite: course 101A or equivalent. Mr. Kirner

101D. Intermediate Readings in Dutch-Flemish. Prerequisite: course 101C or equivalent. Mr. Kirner

101E. Intermediate Readings in Afrikaans. Prerequisite: course 101B. Mr. Kirner

112. Dutch, Flemish, Afrikaans Literature in Translation. Readings and analysis of selected works in translation from Dutch, Flemish, and Afrikaans literature. Mr. Kirner

120. Introduction to Dutch Studies. Prerequisite: consent of instructor. Brief review of Dutch grammar. Reading and discussion of selections from contemporary literature, contemporary Dutch art criticism, and modern Dutch linguistics. Emphasis is on developing reading skill and on acquiring familiarity with and an appreciation of the scope of twentieth-century Nederlandstaligse literature. Mr. Kirner

131. Introduction to Modern Dutch Literature. Prerequisite: either course 101D or 120. Analysis of selected works of the literature of the Netherlands and Flemish Belgium, from the symbolist Beweging van Tachtig of the 1880’s to the present. Mr. Kirner

135. Introduction to Afrikaans Literature. Prerequisite: course 101E or equivalent. Analysis of selected works, from the founding of the Genootskap van Regte Afrikaners in 1875 to the present time. Mr. Kirner

199. Special Studies in Dutch-Flemish and Afrikaans (1/2 to 1 course). Mr. Kirner

Hungarian

Upper Division Courses

101A. Elementary Hungarian. Introduction to grammar and reading exercises, emphasis on the spoken language. Ms. Bimbam

101B. Elementary Hungarian. Prerequisite: course 101A or equivalent. Grammatical exercises, conversation, and reading of texts. Ms. Bimbam

101C. Elementary Hungarian. Prerequisite: course 101B or equivalent. Conversation and readings in literary texts. Ms. Bimbam


101E. Advanced Hungarian. Prerequisites: courses 101A-101D completed or equivalent. Conversation, and reviewing Hungarian grammar from a typological point of view. Ms. Bimbam

120A-120B. Readings in Hungarian. (Formerly numbered Finno-Ugric 153A-153B.) Prerequisite: course 101C or equivalent. Large selections of Hungarian prose and poetry read in the original. Ms. Bimbam

120C. Readings in Hungarian Literature. Prerequisite: reading knowledge in Hungarian. Course 101C or equivalent completed. Large selections of Hungarian prose and poetry read in the original. Discussion will be conducted in Hungarian. Ms. Bimbam

121A-121B. Survey of Hungarian Literature in Translation. (Formerly numbered 158A-158B.) Intended for students in general and comparative literature as well as students interested in Finno-Ugric studies. Main trends and contacts with other literatures are surveyed. Ms. Bimbam

130. Hungarian Civilization and Culture. A study of Hungarian civilization and institutions from the earliest times to the present. Study of Hungarian culture as represented in its arts (literature, fine arts, music). Ms. Bimbam

M135. Hungarian Folklore and Mythology. (Same as Folklore M128.) A general course for the student in folklore and mythology, with emphasis on types of folklore and varieties of folklore research. Ms. Bimbam

M136. Folklore and Mythology of the Ugric Peoples. (Same as Folklore M129.) Survey of the traditions of the smaller Ugric nationalities (Voguls, Osyakas, etc.). Ms. Bimbam

199. Special Studies in Hungarian (1/2 to 1 course). Prerequisite: consent of instructor is required. A course of independent study for students who desire more intensive or specialized investigation of material covered in a regular course, and who present such a course as a prerequisite. Ms. Bimbam

Yiddish

Lower Division Courses

1. Elementary Yiddish. Lecture, five hours per week. Introduction to grammar; instruction in listening, speaking, reading and writing skills. Ms. Hadda

2. Elementary Yiddish. Lecture, five hours per week. Prerequisite: course 1 or equivalent. Ms. Hadda
1 Elementary Yiddish. Lecture, five hours per week. Prerequisite: course 2 or equivalent. Ms. Hadda

**Upper Division Courses**

104. Intermediate Yiddish. Lecture, five hours per week. Prerequisite: course 3 or equivalent. Grammatical exercises, reading and linguistic analysis of texts, conversation. Ms. Hadda

121A. 20th-Century Yiddish Prose in English Translation. Prerequisite: upper division standing or consent of instructor. Readings in 20th-Century Yiddish Prose and Drama. Lectures, discussions. Ms. Hadda

121B. 20th-Century Yiddish Prose and Drama in English Translation. Prerequisite: upper division standing or consent of instructor. Readings in 20th-Century Yiddish Prose. Lectures, discussions. Ms. Hadda

131A. Modern Yiddish Poetry. Prerequisite: course 104 or consent of instructor. Readings in modern Yiddish poetry. Lectures, discussions. Ms. Hadda

131B. Modern Yiddish Prose and Drama. Prerequisite: course 104 or consent of instructor. Readings in modern Yiddish prose and drama. Lectures, discussions. Ms. Hadda

196. Special Studies in Yiddish (1½ to 1 course). Prerequisite: consent of instructor. A course of independent study for students who desire more intensive or specialized investigation of material covered in a regular course, and who present such a course as a prerequisite. Ms. Hadda

**SCANDINAVIAN LANGUAGES**

*Section Office: 332 Royce Hall*

Kenneth G. Chapman, Ph.D., Professor of Scandinavian Languages.
Ross P. Shideler, Ph.D., Professor of Scandinavian Languages and Comparative Literature.
Erik Wahlgren, Ph.D., Emeritus Professor of Scandinavian and Germanic Languages.
James R. Massengale, Ph.D., Associate Professor of Scandinavian Languages (Vice-Chairman of the Department).
Mary Kay Norseng, Ph.D., Associate Professor of Scandinavian Languages.
Jesse L. Byock, Ph.D., Assistant Professor of Scandinavian Languages.

**Preparation for the Major**

Required: Scandinavian Languages 1, 2, 3, 4, 5 or 11, 12, 13, 14, 15 or 21, 22, 23, 24, 25, 30 or equivalents.

The **Undergraduate Major in Scandinavian**

Nine upper division courses in Scandinavian, including courses 105 and 106 or 110 for two quarters, and 141, 142, 143. As an additional requirement, three upper division courses in Scandinavian or a related field must be taken. These three courses must be approved in advance by the undergraduate advisor. It is recommended that students who plan to do graduate work in Scandinavian take German 1 through 6.

**Lower Division Courses**

No credit will be allowed for completing a less advanced course after satisfactory completion of a more advanced course in grammar and/or composition. Prerequisites for lower division courses are listed under the course descriptions. Students with demonstrated preparation may be permitted a more advanced program by the department, or such students may be transferred to a more advanced course on recommendation of the instructor.

**Admission to Language Courses in the Scandinavian Section**

Native speakers of Norwegian, Swedish or Danish may not enroll in any language course (including courses 105, 106, 110) in the Scandinavian Section, except by petition in writing to the section. Non-Scandinavian students with a knowledge of one of these Scandinavian languages may not take courses in the others except by petition in writing. These petitions must include a description of the student’s linguistic background and his reason for wanting to take the language course in question.

1. **Elementary Swedish.** Mr. Shideler in charge

2. **Elementary Swedish.** Prerequisite: course 1 or equivalent. Mr. Shideler in charge

3. **Elementary Swedish.** Prerequisite: course 2 or equivalent. Mr. Shideler in charge

4. **Intermediate Swedish.** Prerequisite: course 3 or equivalent. Mr. Shideler in charge

5. **Intermediate Swedish.** Prerequisite: course 4 or equivalent. Mr. Shideler in charge

6. **Intermediate Norwegian.** Mr. Chapman, Ms. Norseng

7. **Elementary Norwegian.** Prerequisite: course 11 or equivalent. Mr. Chapman, Ms. Norseng

8. **Elementary Norwegian.** Prerequisite: course 12 or equivalent. Mr. Chapman, Ms. Norseng

9. **Intermediate Norwegian.** Prerequisite: course 13 or equivalent. Mr. Chapman, Ms. Norseng

10. **Intermediate Norwegian.** Prerequisite: course 14 or equivalent. Mr. Chapman, Ms. Norseng

11. **Elementary Danish.** Mr. Massengale

12. **Elementary Danish.** Prerequisite: course 21 or equivalent. Mr. Massengale

13. **Elementary Danish.** Prerequisite: course 22 or equivalent. Mr. Massengale

14. **Intermediate Danish.** Prerequisite: course 23 or equivalent. Mr. Massengale

15. **Intermediate Danish.** Prerequisite: course 24 or equivalent. Mr. Massengale

16. **Intermediate Danish, Norwegian and Swedish.** Prerequisite: either course 5, 15 or 25 or equivalent. Readings in Danish, Norwegian and Swedish. Written and oral exercises. Majors as well as nonmajors may take this course on P/NP or S/U basis. The Staff

40. **The Heroic Journey in Northern Myth and Legend.** Introductory survey to Norse myth, legend, and epic. Mr. Byock

**Upper Division Courses**

105. **Advanced Swedish.** Prerequisite: course 30 or equivalent. Readings, composition, and conversation. Conducted in Swedish. The Staff

106. **Advanced Swedish.** Prerequisite: course 105 or equivalent. Readings, composition, and conversation. Conducted in Swedish. The Staff

110. **Advanced Danish and Norwegian.** Prerequisite: course 30 or equivalent. Advanced reading, composition, and conversation in Danish and Norwegian. Majors may be taken twice for credit. The Staff

M123A. **Finnish Folkslore and Mythology.** (Same as Folklore M123A.) The methods and results of Finnish folklore studies and the mythic traditions of the Finns. Special attention is paid to the oral epic, beliefs and legendary motifs. Ms. Rank

M123B. **Finnish Folksong and Ballads.** (Same as Folklore M123B.) Course M123A is not prerequisite to M123B. A survey of Finnish balladry and folksong, with attention to historical development, ethnic background, and poetic and musical values. Ms. Rank

M125. **Folkslore and Mythology of the Lapps.** (Same as Folklore M125.) A survey of Lappish beliefs, customs, and various genres of oral tradition including tales, legends, songs and music. Attention is also paid to the material manifestations of Lappish culture: arts and crafts, textiles, costume, folk technology. Ms. Rank

130. **Elementary Finnish.** Introduction to pronunciation and grammar. Ms. Rank

131. **Intermediate Finnish.** Prerequisite: course 130 or equivalent. Grammatical exercises and readings. Ms. Rank

132. **Advanced Finnish.** Prerequisite: course 130 or equivalent. Readings, composition and conversation. Ms. Rank

138. **Survey of Finnish Literature.** Intended for students interested in Finnish literature as well as students interested in Finnish studies. Readings and discussions of selected works from the literature of Finland in the 19th and 20th centuries. Conducted in English; no knowledge of Finnish required. Ms. Rank

141. **Viking Civilization and Literature.** Readings and discussions of selected works from the Old Icelandic sagas, the Eddas, and early ballad literature. Conducted in English, and no knowledge of a Scandinavian language is required. The Staff

142. **Scandinavian Literature of the 18th and 19th Centuries.** Prerequisite for Scandinavian majors: course 30 or equivalent. For nonmajors: no knowledge of a Scandinavian language is required. Readings and discussions of selected works from the literature of Scandinavia in the 18th and 19th centuries. The Staff

143. **Modern Scandinavian Literature.** Prerequisite for Scandinavian majors: course 30 or equivalent. For nonmajors: no knowledge of a Scandinavian language is required. Readings and discussions of selected works from the literature of modern Scandinavian literature. The Staff

144. **Ibsen.** Prerequisite for Scandinavian majors: course 30 or equivalent. For nonmajors: no knowledge of a Scandinavian language is required. Readings and discussions of selected plays by Henrik Ibsen. Ms. Norseng

C145. **Strindberg.** Prerequisite for Scandinavian majors: course 30 or equivalent. For nonmajors: no knowledge of a Scandinavian language is required. Readings and discussions of selected plays by August Strindberg. Concurrent scheduling with course C252. Mr. Massengale

C146. **Kierkegaard.** Prerequisite for Scandinavian majors: course 30 or equivalent. For nonmajors: no knowledge of a Scandinavian language is required. Readings and discussions of selected works by Søren Kierkegaard. Concurrent scheduling with course C253. Mr. Massengale

C147. **Hamsun.** Prerequisite for Scandinavian majors: course 30 or equivalent. For nonmajors: no knowledge of a Scandinavian language is required. Readings and discussions of selected works by Knut Hamsun. Concurrent scheduling with course C254. Ms. Norseng

151. **Elementary Old Icelandic.** Prerequisite: at least one year of a modern Scandinavian language or consent of instructor. Grammar and readings of prose literature. The Staff
Intermediate Old Icelandic. Prerequisite: course 151. Readings of Old Icelandic prose and poetry. The Staff

Modern Icelandic. Prerequisite: course 152. Grammar, readings, composition, and conversation. The Staff

C180. Literature and Scandinavian Society. Discussion of selected aspects of Scandinavian society based on readings of the contemporary literature as well as other documentary material. No knowledge of a Scandinavian language is required. May be repeated for credit when undergraduate advisor determines that course content is completely different. Concurrent scheduling with course C265. The Staff

Contemporary Swedish Literature. Prerequisite: a reading knowledge of a Scandinavian language is required. Reading and analysis of selected texts by major twentieth-century Swedish authors. The course covers not only specific novelists, playwrights, and poets, but places them within a social and historical milieu. Mr. Shideler

Honors Course in Scandinavian. Prerequisites: senior standing with a minimum 3.0 grade-point average in the major and consent of the Honors Committee of the Scandinavian Section. Intensive study of a selected special topic in Scandinavian. Discussions, oral and written reports. The Staff

199A-199Z. Special Studies in Scandinavian (1/2 or 1 course). Prerequisites: senior or graduate standing and consent of instructor. To be arranged with the member of the faculty who will direct the study. The member of the faculty directing the study will be identified by the same two- letter code used to identify his or her S99 research course. A course of independent study designed for graduates or senior undergraduates who desire more intensive or specialized investigation of material covered in a regular course, and who present such a course as a prerequisite. The Staff

Graduate Courses

For complete descriptions of graduate-level courses offered by this section, please consult the UCLA Graduate Catalog.

History

(Department Office: 6265 Bunche Hall)

Robert L. Benson, Ph.D., Professor of History
Kees W. Boile, Ph.D., Professor of History
John G. Burke, Ph.D., Professor of History
E. Bradford Burns, Ph.D., Professor of History
Robert I. Burns, S.J., Ph.D., Professor of History
Robert N. Burr, Ph.D., Professor of History
Mortimer H. Chambers, Jr., Ph.D., Professor of History
Clara Irene Ciasen, Ph.D., Professor of History
Stanley Cohen, Ph.D., Professor of History
Robert Dallek, Ph.D., Professor of History
Christopher Echert, Ph.D., Professor of History
Amos Funkenstein, Ph.D., Professor of History
John S. Galbraith, Ph.D., Professor of History
Frank G. Gatell, Ph.D., Professor of History
Juan Gómez-Quiñones, Ph.D., Professor of History
Richard Grabanas, Ph.D., Professor of History
Daniel W. Howe, Ph.D., Professor of History (Vice-Chairman of the Department)
Norris C. Hundleby, Ph.D., Professor of History
Nikki Keddie, Ph.D., Professor of History
Bariska Kraljic, Ph.D., Professor of History
John H.M. Laslett, D.Phil., Professor of History
James Lockhart, Ph.D., Professor of History
Peter Loewenberg, Ph.D., Professor of History
Andrew Losacky, Ph.D., Professor of History
Afaf Marzouk, D.Phil., Professor of History
Lauro R. Martins, Ph.D., Professor of History
D.C. Moore, Ph.D., Professor of History
Gary B. Nash, Ph.D., Professor of History
Boniface I. Obichere, D.Phil., Professor of History
Merrick Possansky, Ph.D., Professor of History
Hans J. Roger, Ph.D., Professor of History (Chairman of the Department)
Richard H. Rouse, Ph.D., Professor of History
Damodar R. SarDesai, Ph.D., Professor of History
Alexander P. Saxton, Ph.D., Professor of History
Stanford J. Shaw, Ph.D., Professor of History
Spores Vronis, Jr., Ph.D., Professor of History
Eugen Weber, M.Litt., Professor of History
Robert S. Westman, Ph.D., Professor of History
James W. Wilkie, Ph.D., Professor of History
Robert Woli, Ph.D., Professor of History
Stanley A. Wolpert, Ph.D., Professor of History
Milton Anastos, Ph.D., Emeritus Professor of Byzantine Greek and History
Eleanore N. Anderson, Ph.D., Emeritus Professor of History
Trueblood S. Brown, Ph.D., Emeritus Professor of History
John W. Caughey, Ph.D., Emeritus Professor of History
Raymond H. Fisher, Ph.D., Emeritus Professor of History
Yu-Shan Han, Ph.D., Emeritus Professor of History
Joe C. King, Ph.D., Emeritus Professor of History
Gerhart B. Ladner, Ph.D., Emeritus Professor of History
Lynn White, Jr., Ph.D., Emeritus Professor of History (University Professor)
Robert A. Wilson, Ph.D., Emeritus Professor of History
Edward A. Alpers, Ph.D., Associate Professor of History
Robert P. Brenner, Ph.D., Associate Professor of History
David M. Farquhar, Ph.D., Associate Professor of History
Thomas S. Hines, Ph.D., Associate Professor of History
Philip C. Huang, Ph.D., Associate Professor of History
Michael O. Jones, Ph.D., Associate Professor of History
Temma E. Kaplan, Ph.D., Associate Professor of History
Ronald J. Melior, Ph.D., Associate Professor of History
Eric H. Monklofen, Ph.D., Associate Professor of History
Fred G. Noteloff, Ph.D., Associate Professor of History
Peter H. Reill, Ph.D., Associate Professor of History
Kathryn Kish Sklar, Ph.D., Associate Professor of History
Geoffrey W. Symcox, Ph.D., Associate Professor of History
Richard Weiss, Ph.D., Associate Professor of History
Mary A. Yeager, Ph.D., Associate Professor of History
Edward G. Berenson, Ph.D., Assistant Professor of History
Robert A. Hill, M.Sc., Assistant Professor of History
Michael G. Morony, Ph.D., Assistant Professor of History
Kenneth M. Morrison, Ph.D., Assistant Professor of History
M. Norton Wise, Ph.D., Assistant Professor of History

The Undergraduate Program

The undergraduate program in history is designed to give students an insight into the world in which they live and the forces and events that have served to shape and mold that world. In its broadest sense the discipline of history provides a background for all other subjects and disciplines. Along more specific lines the goal of history is the classical goal of self-knowledge. History is therefore concerned with "why we are what we are" and "how we came to be where we are today." In this sense 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 the student of history comes not only from self-discovery, but from a comparison of his or her 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 purpose of historical study is therefore not only an understanding of our own past and our present self, but an understanding of, and empathy for, the cultures and civilizations of other peoples and other nations.

It is in keeping with these broad goals that the History Department's undergraduate major has been established. As listed below, the department's undergraduate program begins with a three-quarter survey of Western civilization and a two-quarter study of United States history. For comparative purposes the students are asked to spend two quarters studying non-Western history. In addition they are required to devote one quarter to the study of historical methodology and philosophy. At the upper division level students are encouraged to develop their own problem consciousness and to follow their personal interests into whichever area they choose. The only further requirement at this level is a one-quarter colloquium and writing course which is designed to give the student some experience in formal historical discourse.

Students interested in careers in the field of law, teaching, public service, journalism and a variety of other areas involving the social sciences will find the History major beneficial and rewarding.

Preparation for the Major and the Major

The History Department's undergraduate program consists of 16 courses in history (6 lower division: the "Preparation for the Major"; 10 upper division: the "Major") and 4 courses in the social sciences outside the department. The following courses are required in the program:

1. History 1A-1B-1C. Western Civilization.
2. Two courses in U.S. history.

(1) History 1A-1B-1C. Western Civilization.
(2) Two courses in U.S. history.
(3) Two courses in non-Western history from the same area (i.e., Latin America, Asia, Near and Middle East, Africa) or in science and technology. Candidates for the California Standard Teaching Credential may not choose science and technology to fulfill their non-Western requirement.

(4) History 99 (for freshmen and sophomores), History 101 (for juniors and seniors) or History 100 (no restriction by class).

(5) History 197 (Undergraduate Seminar) or History 199 (Special Studies in History).

(6) Four courses in the social sciences outside of history (must be taken for a letter grade).

The requirements for U.S. and non-Western history may be met with either upper or lower division courses. Students are, however, reminded that normally only six lower division courses in history need to be included in their program. This will generally mean that if they meet the U.S. history requirement at the lower division level they will have to meet the non-Western requirement at the upper division level (or vice versa). If they choose to meet both requirements at the lower division level they will still be required to do 10 upper division courses to fulfill the upper division requirements of the major. The department recommends the following lower division courses to meet the U.S. history and non-Western requirements: History 6A-6B-6C (U.S. History); History 7A-7B (Political U.S.); History 8A, 8B (Latin America); History 9A-9B-9C (Asia); History 9D plus one suitable upper division course (Near and Middle East); History 10A-10B (Africa); History 2A-2B-2C (Technology); History 3A-3B-3C (Science). If only one non-Western course is taken in lower division, an appropriate upper division non-Western course must be included in the major.

All History majors are required to take at least four courses in other departments in the division of social sciences, whether lower or upper division (anthropology, geography, economics, political science, sociology, psychology). These courses may not be taken for Pass/Not Passed grades. A one-quarter course from the History 6A-6B-6C (U.S. History) sequence may be applied to this requirement, provided the same quarter course is not used to satisfy any other requirement of the major.

Advanced Placement Credit in History: The College of Letters and Science allows ten quarter units towards the B.A. for each Advanced Placement Test in history. The History Department applies this credit to the "Preparation for the Major" as follows: AP European History fulfills History 1C; AP American History fulfills the U.S. history requirement at the lower division level.

Only one course offered outside the History Department will count as a major course without petition: Medical History 107B, Historical Development of Medical Sciences.

Transfer students with deficiencies in lower division may by petition substitute appropriate upper division courses in history for the lower division requirements. See the department advisor.

There is no language requirement for the major; however, students wishing to take the Honors Program or planning to do graduate work in history are urged to pursue language study early in their undergraduate careers.

History Honors Program

The Honors Program is designed for History majors who are interested in carrying out a year-long independent research project that will culminate in an honors thesis. Special honors seminars are also offered during a student's junior year. The program gives qualified students the opportunity of working closely with an individual professor in a supervised research and writing project. Students contemplating graduate work in history should find this program particularly beneficial and rewarding.

Admission: A 3.5 departmental grade-point average is normally required for admission, but students with a lower GPA may apply to the Honors Committee for admission. Students desiring to enroll in the Honors Program should consult the History Department Undergraduate Advisor at the beginning of their junior year in order to fill out the required application form.

Requirements: Candidates for honors will be required to meet all normal requirements of the History major described in the preceding section. An honors seminar on historiography and philosophy of history (History 101H) will satisfy requirement 4. All honors students will be required to take a three-quarter honors sequence, History 199HA-199HB-199HC, which will count as three courses of the upper division courses required of all History majors. The first course of this sequence (History 199HA), taken in the Spring of the junior year, will help students define their research topics, identify a faculty sponsor and explore problems of historical research. Honors students will then continue the other two courses of the sequence (History 199HB and 199HC) in the Fall and Winter Quarters of their senior year under the guidance of the sponsoring professor. The Justin Turner Prize is awarded to the outstanding honors thesis.

Lower Division Courses

1A-1B-1C. Introduction to Western Civilization. Lecture and discussion. A broad, historical study of major elements in the Western heritage from the world of the Greeks to the end of the 19th century. Designed to further beginning students' general education, introduce them to ideas, attitudes, and institutions basic to Western civilization, and to acquaint them, through reading and critical discussion, with representative contemporary documents and writings of enduring interest. The Staff

2A-2B-2C. History of Technology from Antiquity to the Twentieth Century. Designed for students in the natural sciences, social sciences, and fine arts. It is a survey of the development of man's ability to understand and to use more effectively his natural environment, stressing technology's changing social, economic, scientific and cultural relationships. Mr. Burke

3A-3B-3C. Introduction to the History of Science. 3A. The Scientific Revolution. A survey of the beginnings of the physical sciences involving the transformation from Aristotelian to Newtonian cosmology, the mechanization of the natural world, the rise of experimental science, and the origin of scientific societies. Mr. Burke, Mr. Westman, Mr. Wise

3B. The Physical Sciences since the Enlightenment. A broad survey of the development of ideas in classical and modern physical science since Newton. The unifying theme will be theories of matter, but more specifically Chemistry, Thermodynamics, Electromagnetic Theory of Light, Energy Conservation, Relativity, and Quantum Mechanics, will be discussed. Mr. Burke, Mr. Wise

3C. The Biological Sciences, 1800-1955. A survey of the development of the biological sciences from the pre-Darwinian era of Geoffroy and Müller to the discovery of the double helix. Mr. Frank

4. Introduction to the History of Religions. A discussion of the various systems, ideas, and fashions of thought that have dominated western approaches to the religions of the world since Antiquity. The course surveys the development from classical Greek and early Christian theories to modern history with its discoveries of the religions of India, China, the ancient Near East, etc., and the problem of the encounter of various religions in the 19th and 20th centuries. Mr. Bolle

6A-6B-6C. History of the American Peoples. A survey of the American Peoples from the advent of aboriginal society to the present, emphasizing racial and ethnic interaction, industrialization, urbanization, and cultural change. Mr. Nash, Mr. Saxton and Staff

6BH. History of the American Peoples (Honors). A survey of the American Peoples from the advent of aboriginal society to the present, emphasizing racial and ethnic interaction, industrialization, urbanization, and cultural change. Mr. Monkonen

7A-7B. Survey of the Political History of the U.S. Lecture and discussion. A survey of the history of the U.S. from the Revolutionary Era to the present. Emphasis will be given to political developments, and to the American cultural and political bases of American politics. The courses are designed for students in the social sciences and other departments who desire a thorough grounding in American political culture. This sequence (or two quarters of History 6) is strongly recommended for History majors planning to take more advanced courses in U.S. history. Mr. Gates, Mr. Howe, Mr. Saxton

8A. Latin America: Reform and Revolution. A general introduction to Latin America emphasizing those institutions from the past which have shaped the present and the struggle for change in the twentieth century. Movies and discussions complement the topical lectures. Mr. Burns and Staff

8B. Latin American Social History. The historical and contemporary perspective of the role 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. May be taken independently of 8A. Mr. Burns and Staff

9A-9D. Introduction to Asian Civilizations (1 course each).

9A. History of India. An introductory survey for beginning students of the major cultural, social, and political ideas, traditions, and institutions of Indic civilization. Mr. Wolkert

9B. History of China. Survey of the history of China: the evolution of characteristic Chinese institutions and modes of thought from antiquity to 1950; the problems of political change; China's response to the western impact in modern times. Mr. Farquhar
9C. History of Japan. A survey of Japanese history from earliest recorded times to the present with emphasis on the development of Japan as a cultural daughter of China. Attention will be given to the manner in which Chinese culture was Japanized and the aspects of Japanese civilization which became unique. The creation of the modern state in the last century and the impact of western civilization on Japanese culture will be treated. Mr. Notelheber

9D. History of the Near and Middle East. An introduction to the history of the Muslim world from the advent of Islam to the present day. Ms. Marsot

10A-10B. Introduction to the Civilizations of Africa. Explores African themes within a broader framework of political change over time. Intended for students with a general interest in Africa, but also strongly recommended for those intending to take upper division courses in African history. Mr. Dyck

M70. Survey of Medieval Greek Culture. (Same as Classics M70.) Classical roots and medieval manifestation of Byzantine civilization: political theory, Roman law, pagan critique of Christianity, literature, theology, and contribution to the Renaissance (including the discovery of America). Mr. Ryckman

99. Introduction to Historical Practice. Prerequisite: restricted to freshmen and sophomores. This course will take the form of discussion classes of not more than 15 students meeting with a faculty member. They will explore how works of history are written by focusing on problems of historiography and method. The Staff

99H. Introduction to Historical Practice (Honors). Prerequisite: restricted to freshmen and sophomores. This course will take the form of discussion classes of not more than 15 students meeting with a faculty member. They will explore how works of history are written by focusing on problems of historiography and method. Mr. Burns, Mr. Posnansky

*Upper Division Courses*

The prerequisite for all upper division courses is upper division standing or consent of instructor, unless otherwise stated. Certain graduate courses (the 200 series) are open to students with upper division standing and with permission of instructor. See the UCLA Graduate Catalog or check with the History Department's Undergraduate Advisor (8248 Bunche Hall) for course descriptions.

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101. Introduction to Historical Practice. Prerequisite: restricted to juniors and seniors. This course will take the form of discussion classes of not more than 15 students meeting with a faculty member. They will explore how works of history are written by focusing on problems of historiography and method. The Staff

101H. Introduction to Historical Practice (Honors). Prerequisite: restricted to juniors and seniors in the History Honors Program. This course will take the form of discussion classes of not more than 15 students meeting with a faculty member. They will focus on problems in the philosophy of history, historiography, and method. The Staff

102. Exploration in Psychoanalysis and History. (Formerly numbered 104.) Prerequisite: consent of instructor. The course will study the art of psychological and historical interpretation, and test modern writings in the field of psycho-history. Limited to 35 students. Mr. Loewenberg, Mr. Wohl

M103. Historical Archaeology. (Same as Anthropology M115S.) A survey of the aims and methods of Historical Archaeology, as practiced on both sides of the Atlantic, with case studies drawn from North America, the Caribbean, Africa and Europe. Mr. Posnansky

104. History of Ancient Egypt. (Formerly numbered 117.) A cultural history of ancient Egypt from pre-dynastic times to the end of the new kingdom. The Staff

105A-105B. History of Ancient Mesopotamia and Syria. (Formerly numbered 140A-140B.) The political and cultural development of the "Fertile Crescent," including Palestine, from the Neolithic to the Achaemenid period. Mr. Buccellati

106A-106B-106C. Survey of the Middle East from 500 to the present. (Formerly numbered 106A-106B and 106A-108B.) Background and circumstances of the rise of Islam, the creation of the Islamic Empire and their development. The rise of Dynastic Successor States and the Modern Nation States. Social, intellectual, political and economic development. Mr. Posnansky

106A. 500 to 1300 Mr. Morony

106B. 1300 to 1700 Ms. Marsot

106C. 1700 to Present Ms. Keddie

107A-107B. Islamic Civilization. (Formerly numbered 135A-135B.)

107A. Pre-Modern Islam: origins of Islamic civilization, Muhammad and the Quran; development of Islamic doctrine, ritual, piety and law, sectarian Islam and mysticism. Mr. Morony


108A-108B. History of the Arabs. Course 108A is prerequisite to 108B. Political, social, intellectual and economic history of the Arabs from the 8th century to the present. Ms. Marsot

109A-109B. History of North Africa from the Moslem Conquest. (Formerly numbered 133A-133B.)

109A. To 1558 Mr. Morony

109B. From 1558 to the present Mr. Reill

110A-110B. Iranian History. (Formerly numbered 110A-110B-110C.) Political, social and cultural history of Persia.

110A. Islamic Iran to 1800 Mr. Banani

110B. Iran from 1800 to the present Ms. Keddie

111A. History of the Turks. (Formerly numbered 139A-139B-139C.) A survey of the society, government, and political history of the Turks from earliest times to the present.

111A. Origins to 1800. Turkish origins, early Central Asian and Middle Eastern states. The Rise and Fall of the Ottoman Empire. Mr. Shaw

111B. 1808 to the present. Modernization of the Ottoman Empire, 1808-1923. The Turkish Republic. The Turks in the world. Mr. Shaw

112A-112B-112C. Armenian History. (Formerly numbered 131A-131B-131C.) The Armenian experience from ancient to modern times.

112A. From epic origins to the Bagradit kingdom, 7th-10th centuries. Mr. Benson

112B. From the Crusades to the Armenian Question, 1091-1799. The Cilician Kingdom, Mongol and Mamluk conquests; the Armenian experience under Seljuk, Ottoman, and Safavid rule; the union of Eastern Armenia to the Russian empire; the Armenian intellectual and political revival. Mr. Posnansky

112C. Modern and Contemporary times. The Armenian Question since 1876; from reform movements to resistance; the massacres of 1894-1896; the Turkish Armenian and the Russian Armenian provinces; the Armenian Holocaust, 1915-1923; the Armenian republic, Soviet Armenia, and the Armenian communities. Mr. Posnansky

C112D. Introduction to Armenian Oral History. (Formerly numbered 131D.) The uses and techniques of Armenian oral history; the presentation, the interview, and post-interview procedures; methods of compilation and evaluation. The course includes field assignments and interviews. May be concurrently scheduled with course C212. Mr. Posnansky

113. The Caucasus Under Russian and Soviet Rule. (Formerly numbered 132.) A survey of the political, economic, social, economic, and cultural history of the Caucasus region from 1801. The Georgian, Armenian, and Azerbaijani response to Russian and Soviet rule; the nationalities question and the Soviet national republics. Mr. Posnansky

115A-115B. History of the Ancient Mediterranean World. (Formerly numbered 111A-111B-111C.)

115A. A survey of the history of the ancient East from earliest times to the foundation of the Persian Empire. Mr. Mellor

115B. The history and institutions of the Greeks from their arrival to the death of Alexander. Mr. Chambers, Mr. Mellor

115C. The history and institutions of Rome from the founding of the city to the death of Constantine. Mr. Chambers, Mr. Mellor

116A-116B. History of Ancient Greece. (Formerly numbered 112A-112B.)

116A. The Greek city-state. The emphasis will be on the period between the Persian Wars and the rise of Macedonian power. Mr. Chambers

116B. The Hellenistic Period. A consideration of the new patterns in government, social, life, science, and the arts that appeared between the Macedonian conquest and the decisive intervention of Rome. Mr. Chambers

117A-117B. History of Rome. (Formerly numbered 113A-113B.)

117A. To the death of Caesar. Emphasis will be placed on the development of imperialism and on the constitutional and social struggles of the late republic. Mr. Mellor

117B. From the death of Caesar to the time of Constantine. The early empire will be treated in more detail supplemented by a survey of the social and economic changes in the third century. Mr. Mellor

118. Introduction to Roman Law. (Formerly numbered 115.) This course will provide a survey of the public (constitutional), criminal, and private law of the Romans. Some subjects treated will be the social context of Roman law, the historical evolution of Roman law, mechanisms and procedures by which the law was administered, and the content of private law. Mr. Mellor

119. The Christian Church. (Formerly numbered 118A.) Constitutional, political, and economic history of the Church: Christianization of the Roman Empire and the Germanic kingdoms; government and institutions of the Church; relations between Church and monarchy; the high tide of papalism; crises of authority on the eve of the Reformation. Mr. Benson
139. Renaissance England. (Formerly numbered 150C-150D.) Culture and Society. Emphasis on literary culture (Elizabethans, Jacobean, Caroline), but with readings on political, economic and cultural life as well. Mr. Martin

140A-140B. Early Modern England, 1450-1700. (Formerly numbered 153A-153B.)

140A. The development of capitalism in England, especially the countryside, 1450-1700; the transformation of class relations; the emergence of political conflicts; state centralization and military aristocracy. Crown versus Parliament, the English Revolution. Mr. Brenner

140B. Analysis of the transformation of culture and political ideology in relationship to socioeconomic and political conflicts. The English Reformation and the development of the State; Protestantism and political opposition; religious radicalism and the English Revolution; and the others. (Separate course list as History 140A from different angle, so it is preferable to take History 140A-140B in sequence.) Mr. Brenner

141A-141B. Modern England. (Formerly numbered 154A-154B.) Analyses of the English economy, society, and culture since 1760, focusing upon the dynamics of both stability and change.

141A. 18th and 19th centuries, 1688-1832. Mr. Galbraith, Mr. SarDesai

141B. 19th and 20th centuries, 1832 to World War II and its aftermath. The Staff

142A-142B. The British Empire Since 1783. (Formerly numbered 158A-158B.) The political and economic development of British Empire, focusing on the colonial nationalism, the development of the commonwealth idea, and changes in British colonial policy. Mr. Galbraith, Mr. SarDesai

143. History of Canada. (Formerly numbered 159.) A survey of the growth of Canada into a modern state from its beginnings under the French and British colonial empires.

144. History of Australasia. The history of Australia and New Zealand from the European settlement, with emphasis on the interrelationships between the settlers and the aboriginal peoples and the effects on their culture. Mr. Galbraith

145A. Colonial America, 1600-1763. (Formerly numbered 171A.) An examination of the development of an American society in English North America from 1600 to 1763. Emphasis is given to the interaction of three crucial elements: economic, social, and intellectual. (Formerly numbered 150A-150B.) Mr. Galbraith

145B. Revolutionary America, 1760-1800. (Formerly numbered 172B.) An investigation into the causes and consequences of the American Revolution, the nature of the revolutionary process, the creation of a constitutional national government, and the development of a capitalist economy. Mr. Nash

146A. The United States: 1800-1850. (Formerly numbered 172A-172B.)

146A. Jeffersonian America. Jeffersonian Republican ascendency and the Era of Good Feelings, 1800-1828; disintegration of the Federalist opposition; the testing of American nationality in the second war with Britain; beginnings of the transportation and industrial revolutions; restructuring of politics in an increasingly egalitarian age. Mr. Galbraith, Mr. Howe

146B. Jacksonian America and Beyond. The "Jacksonian Revolution" and its aftermath, 1829-1850; the problem of national power versus state sovereignty; problems of rapid social change through industrialization and urbanization; reform impulses; abolitionist movements; territorial expansion as focus for sectional readings on frontier themes. Mr. Howe

147A. The United States: Civil War and Reconstruction. (Formerly numbered 173A.) The topics studied will include: the rise of sectionalism, the anti-slavery crusade; the formation of the Confederate States; the war years; political and social reconstruction. The Staff

147B. The United States, 1875-1900. (Formerly numbered 173B.) American political, social, and institutional history in a period of great change. Emphasis on the altering concepts of the role of government and the responses to that alteration. Mr. Saxton

148A-148B. The United States: The Twentieth Century. (Formerly numbered 174A-174B.) The political, economic, intellectual, and cultural aspects of American democracy in the twentieth century. Mr. Coben, Mr. Weiss

148C. The United States Since 1945. (Formerly numbered 174C.) A history of the political, social and diplomatic developments that have shaped the United States since the end of World War II. Mr. Dallek, Mr. Weiss

149A. The history and economic history of the United States. (Formerly numbered 175A-175B.)

149A. The role of economic forces, institutions, individuals and groups in promoting or impeding effective change in the American economy, 1790-1910. During this period the technical skeleton of the modern industrial structure was formed. The course explains why and how the American economy evolved into a dual economy, characterized by a center of firms large in size and influence, and a periphery of smaller firms. Mr. Yeager

149B. Examinations of the American economy in the change of the dual economy, focusing in greater detail upon interrelationships between macro and micro developments in the economy and upon the growing interdependency between the U.S. and the world economy, down to the present. Ms. Yeager

150A-150B. Intellectual History of the United States. (Formerly numbered 177A-177B.) The principal ideas about humanity and God, nature and society, which have been at work in American history. In addition, each course will focus on the profound connections with one another, their relationship to American life, and their expression in great documents of American thought. Mr. Howe

150C. History of Religion in the United States. (Formerly numbered 177C.) Considerations of the religious dimension of people's experience in the United States. A number of religious traditions which have been important in this country will be examined, and attempts to relate developments in religion to other aspects of American culture. Mr. Howe

151A. Constitutional History of the United States. (Formerly numbered 179A-179B.)

151A. A study of the origins and development of constitutionalism in the United States. Particular emphasis will be placed upon the Constitution of 1787 and its subsequent interpretation. Topics of special emphasis include: judicial review, significance of the Marshall Court, and the effects of slavery and the Civil War on the Constitution. Mr. Gatell

151B. A study of constitutionalism since the Civil War. Particular emphasis on the development of the Supreme Court, the due process revolution, the Court and political questions, and the fact of judicial supremacy within self-prescribed limits. Mr. Dallek

152A-152B. American Diplomatic History. (Formerly numbered 178A-178B.)

152A. The establishment of an independent foreign policy, the territorial expansion of the United States, and the emergence of a world power. Mr. Dallek

152B. The role of the United States in the 20th-century world. Mr. Dallek

153. The United States and the Philippines. (Formerly numbered 183.) An examination of the inter-relationships of immigration and of colonialism and independence between the United States and the Philippines focused mainly within the time period 1898 to 1941. Mr. Dallek, Mr. Yeager

154A-154B. United States Urban History. (Formerly numbered 189A-189B.)

154A. The pre- and early industrial city. Focuses on the social, spatial and economic development of U.S. cities. Special attention will be paid to the social consequences of the pre- and early industrial economic relationships. Mr. Monkkonen

154B. The industrial and post-industrial city. (154A is not a prerequisite.) Focuses on the mature urban network, with concentration on social, spatial, and economic interac-tions. The issues of mass society, neighborhood, crime, poverty, ethnicity and racial discrimination will be covered. Mr. Monkkonen

155C-155D. History of American Architecture and Urban Planning: 1800 to the Present. (Formerly numbered 190C-190D.) rooftop courses in American history as explored through architecture, urban planning and the arts. Mr. Hines

155A-155B. American and European Working Class Movements. (Formerly numbered 185A-185B.) Examines major episodes in the institutional, economic, and cultural development of the American working class from colonial times to the present, emphasizing both organized and unorganized labor in a comparative context. A.F. of L., rise of industrial unionism, and labor politics are also discussed. Mr. Laslett

156A-156B. American Social History, 1750-1900. (Formerly numbered 180A-180B.) A historical analysis of American culture and culture, with emphasis on the family, religious values, Afro-American life, women's work, urbanization and industrialization, immigration and nativism, and movements for social reform. Mr. Hines. This course will cover the period 1750-1860, 1860-1900. Mr. Coben

156C-156E. Social History of American Women. (Formerly numbered 171C-171D-171E.) A survey of the major demographic, economic, social and intellectual factors shaping the lives of women in families, at work, and in larger social collectivities. Class, regional, racial, and ethnic comparisons will be emphasized. Mr. Sklar

156C. Colonial and Early National—1600-1820. Ms. Sklar

156D. Victorian and Industrial—1800-1920. Ms. Sklar

156E. 20th Century—1900-1975. Ms. Sklar

157A-157B-157C. North American Indian History. (Formerly numbered 180F-180G-180H.) History of Native Americans from contact to the present. Emphasizes the ethnocultural dimensions of culture change and the role of the contact and the continuation of Native American cultures. Focuses on selected Indian peoples in each period.

157A. Contact to 1760. Mr. Morrison

157B. 1760-1860. Mr. Morrison

157C. 1860 to Present. Mr. Morrison

158A. Comparative Slavery Systems. (Formerly numbered 176C.) An examination of the slavery experience in various New World slave societies. The course focuses on outlining the similarities and the differences among the legal status, treatment and slave cultures of North American, Caribbean and Latin American Slave Societies. Mr. Sklar

158B-158C. Introduction to Afro-American History. (Formerly numbered 176A-176B.) A survey of the African-American experience. These courses focus on the three great transits of African-American life: the transition from Africa to New World slavery, the transition from slavery to freedom, the transition from rural to urban milieus. Mr. Hill

158D. Afro-American Urban History. (Formerly numbered 176D.) An examination of African-American urban life in the modern period. The course focuses on the transformation from slavery to freedom and the shift from southern to northern areas. It looks closely at the forces which both propelled Afro-Americans to the cities and which also inhibited their adjustment to them. The Staff
158E. Afro-American Nationalism in the First Half of the Twentieth Century. (Formerly numbered 167E.) A critical examination of the Afro-American search in the first half of the twentieth century for national self-expression through collectivities, institutions, associations, organized protest movements, and ideological self-definition. Mr. Hill

159A-159B. History of the Chicoano Peoples. (Formerly numbered 168A-168B.) The character, values, economic, social, cultural, intellectual and perceptual life history views in contrast to other areas of the world beginning with 19th-century Mexico. Mr. Gómez-Quiñones

160. The Immigrant in America. (Formerly numbered 182.) An historical analysis of the social and economic causes and effects of immigration, particularly after the 1880's, emphasizing the problems of acculturation and adjustment. The restrictionists and the implications of immigration policy on U.S. foreign policy will be stressed. Mr. Laslett


162. The American West. (Formerly numbered 181.) A study of the West as frontier and as region, in transit from the Atlantic seaboard to the Pacific, and from the 17th to the 19th centuries. Mr. Hundley

163. History of California. (Formerly numbered 188.) The economic, social, intellectual, and political development of California from the earliest times to the present. Mr. Hundley

163A-165B. Colonial Latin America. (Formerly numbered 168A-168B.) Studies in the general development of Latin America prior to 1825 with emphasis on social history. Mr. Lockhart

165C. Indians of Colonial Mexico. A survey of the social and cultural history of the Indians of Mexico, especially central Mexico, from the time of the European conquest until the independence of Mexico, emphasizing an internal view of Indian groups and patterns on the basis of records produced by the Indians themselves. Mr. Lockhart

166. Latin America in the 19th Century. (Formerly numbered 162A.) An intensive analysis of the economic, social, and political problems of the Latin American nations from their independence to around 1910. Mr. Burns, Mr. Burr

167A-167B-167C. Latin America in the 20th Century. (Formerly numbered 168A-168B.) Studies in the general development of national development are analyzed for "visible" and "invisible" historical problems and processes. Timing of primary and secondary social changes are related to economic, political, cultural and geographic context. Successive country case studies each focus on world pressures and interplay of centralized-decentralized power struggles (emphasized in 167A), the role of personalist leaders (emphasized in 167B) and definition of the national policy (emphasized in 167C). Mexico is treated in course 171.

167A. Haiti, Uruguay, Costa Rica, Guatemala, Cuba, Chile. Mr. Wilkie

167B. Bolivia, Dominican Republic, Nicaragua, Argentina, Paraguay, Venezuela. Mr. Wilkie

167C. Panama, Colombia, Ecuador, Peru, Honduras, El Salvador, Brazil. Mr. Hundley

168. History of Latin American International Relations. (Formerly numbered 166.) Emphasis is given to the developing interests of the Latin American nations in their relationship with one another and with other areas of the world beginning with 19th-century independence.

169. Latin American Elitloire. (Formerly numbered 164.) Prerequisite: course 167A or 167B or 171. Study focuses on Elitloire (defined as oral or noninstitutionalized knowledge involving the leaders' conceptual and expressive ideas) in Latin America. Folklife (the followers' traditional or popular views). Elitloire genres include oral history, literature, and cinema. Mr. Wilkie

170. Latin American Cultural History. (Formerly numbered 162C.) Intellectual, artistic, and folk expressions of the Latin American spirit and character are examined in readings and lectures with emphasis on the unique contribution of Latin Americans to develop self-interpretation. Music, films, and slides supplement discussions. Mr. Burns, Mr. Wilkie

171. The Mexican Revolution Since 1910. (Formerly numbered 166.) The concept of "Permanent Crisis" is examined to describe and explain the structure of "Permanent under one-party democracy." Mr. Wilkie

173. Modern Brazil. (Formerly numbered 163B.) Lectures treat selected topics in the political, economic, social, and cultural history of Brazil. The emphasis falls on modernization and the struggle for change, 1850 to the present. Discussions, films, slides, and guest speakers supplement and complement the lectures. Mr. Burns

174. Brazilian Intellectual History. (Formerly numbered 163C.) The general intellectual development of Brazil with emphasis on those introspective movements in which the Brazilians attempted to interpret themselves, their nation, and their civilization. Mr. Burns

175A-175Z. Topics in African History. (Formerly numbered 125A-125Z.) Prerequisite: one previous course in African history at UCLA or consent of instructor. Examines specific topics which have a continental context and other than proceeding on a strictly chronological or regional basis.

175A. Prehistoric Africa—Technological and Cultural Traditions. A survey of the nondocumentary sources of early African history with particular reference to technological, economic, and cultural development from the origins of Man until the colonial period. Mr. Posnansky

175B. Africa and the Slave Trade. Focuses on the social, economic, political, and cultural impact of the slave trade on African society. Emphasizes the Atlantic trade but also considers interactions with the Mediterranean, Islamic, and Indian Ocean worlds. Abolition and the African diaspora are also explored. Mr. Alpers, Mr. Obichere

175C. Africa in the Age of Imperialism. Topics of investigation include the penetration of pre-capitalist African societies by capital, the emergence of classes, the nature of the colonial and post-colonial state, and the struggle for national liberation in a global context. Mr. Alpers

176A-176B. History of West Africa. (Formerly numbered 126A-126B.)

176A. West Africa from earliest times to 1800. Mr. Obichere

176B. West Africa since 1800. Mr. Obichere

177. Ethiopia and the Horn of Africa. (Formerly numbered 129.) Surveys the history of Ethiopia, Somalia, and Sudan from earliest times to the Twentieth Century. Mr. Alpers, Mr. Ehret

178A-178B. History of East and Central Africa. (Formerly numbered 127A-127B.)

178A. Examines the cultural diversity of East and Central African societies, the growth of more complex political systems, and the impact of international trade to the late nineteenth century. Mr. Alpers, Mr. Ehret, Mr. Posnansky

178B. Concentrates on the economic, social, and political history of Uganda, Kenya, Tanzania, Zambia, Malawi, Zimbabwe, and Mozambique since the imposition of colonial rule. The themes of underdevelopment and protest will provide a focus for the course. Mr. Alpers

179A-179B. History of Southern Africa. (Formerly numbered 128A-128B.)

179A. History of Southern Africa from origins to 1870. The origin of the South African peoples and their interactions to 1870 are given to social and economic as well as political aspects. Mr. Ehret

179B. History of Southern Africa since 1870. The interactions between the inhabitants of Southern Africa since 1870. Attention will be given to social and economic as well as political aspects. Mr. Galbraith

182A-182B-182C. History of China. (Formerly numbered 191A-191B-191C.) Prerequisite: course 9B or 182A or equivalent readings are prerequisite to 182B.

182A. Origins to 900. Bronze age and iron age China; the classical thinkers; the birth of the imperial state and the development of an imperial society.

182B. 900-1500. The end of aristocratic rule; the mature imperial state and bureaucratic government; the foreign presence; trade, agriculture, and the growth of cities.

182C. 1500-1800. The background to modern China; landholding and agriculture; nascent capitalism; peasant movements; Neo-Confucianism and the Manchu state. Mr. Farquhar, Mr. Huang

183. Modern China, 1840-1920. (Formerly numbered 191D.) From the Opium War to the May Fourth Movement, comparing the modernization of China, and the development of popular movements; some attention to contrasts between established and revolutionary interpretations. Mr. Huang

184. The Chinese Revolution. (Formerly numbered 191E.) From the founding of the Chinese Communist Party to the present. Special emphasis on: the evolution of Mao's thought, the history of the Communist movement, the conditions in the Chinese countryside, the revolutionary developments under the People's Republic. Mr. Huang

185. The Mongols in East Asian History. (Formerly numbered 191F.) Prerequisite: course 9B or 182B or 182C. Emphasis on the period 1200-1900. Special attention will be paid to nomadic pastoralism, Mongolian history, the first empire, and relations with China and Tibet. Mr. Farquhar

186. Diplomatic History of the Far East. (Formerly numbered 193.) The role of the Far Eastern states in the international community beginning with the establishment of the Treaty System in China and the opening of Japan to intercourse with the rest of the world in 1854. The Staff


187A. Ancient. Prehistory to 1600. Mr. Nottebohm

187B. Early Modern: 1600-1868. Mr. Nottebohm

187C. Modern: 1668 to present. Mr. Nottebohm

188A. Early History of India. (Formerly numbered 196A.) Introduction to the civilization and institutions of India. A survey of the history and culture of the South Asian subcontinent from the earliest times to the founding of the Mughal Empire. Mr. Wolpert

188B. Recent History of India and Pakistan. (Formerly numbered 196B.) History of the South Asian subcontinent from the founding of the Mughal Empire, through the eras of European expansion, British rule, and the nationalist movement, to the present. Mr. Wolpert

190A-190B. History of Southeast Asia. (Formerly numbered 196C-196D.)

190A. Early History of Southeast Asia. A political and cultural history of the peoples of Southeast Asia from the earliest times to about 1815. Mr. SarDesai

190B. Southeast Asia since 1815. History of modern Southeast Asia with emphasis on expansion of European influence in the political and economic spheres, growth of nationalism and the process of decolonization and the development of an aristocratic elite. Mr. SarDesai


M191A. From biblical times to the end of the Middle Ages. Mr. Funkenstein

M191B. From the end of the Middle Ages to the present. Mr. Funkenstein

191C-191D. Focal Themes in Jewish History. (Formerly numbered 138C-138D.) The course will treat in depth one major theme in Jewish history (such as the history of Messianic Movements, the structure of the Jewish Communities) through the ages. Mr. Funkenstein
the changing character of industrialized science.

The Rise of Nazi totalitarianism; anti-Semitic theories, movements, and practices, and their impact on German Jewry.

The Second World War, Nazi policies in the occupied territories, expulsion and extermination, Jewish resistance, and the fate of the Jewish communities of Eastern Europe. Mr. Frank

1923A-1924A. Jewish Intellectual History. (Formerly numbered 137A-137B.) 192A will cover the medieval period; 192B the modern period. This course studies the development of Jewish self-understanding in relation to the intellectual climate of the environment, as expressed in the halachic, in philosophy, and in religious, universalist, and messianic traditions. Mr. Funkenstein

193A. History of Religions: Myth. (Formerly numbered 124D.) The nature and function of myth in the history of religion and culture. Examples are selected from nonliterate as well as from other Asian and European traditions. Mr. Bolle

193B. Religions of South and Southeast Asia. (Formerly numbered 124E-124F.) Prerequisites: course 4 or 193A. Topics vary from year to year: Religion of the Vedas; Brahmanism; (later) Hinduism. See Schedule of Classes for specifics. Mr. Bolle

193C. Religions of South and Southeast Asia. (Formerly numbered 124B-124C.) Prerequisites: course 4 or 193A. Topics vary from year to year: Buddhism in India; the Religions of Java and Bali; the Shamanistic religions of India and Southeast Asia. See Schedule of Classes for specifics. Courses 193B and 193C may be taken independently for credit. Mr. Bolle

193D. Religions of the Ancient Near East. (Formerly numbered 124C.) The main polytheistic systems of the ancient Near East, with emphasis on Mesopotamia and Syria, and with reference to the religion of ancient Israel: varying concepts of divinity, hierarchies of gods, prayer and cult, magic, wisdom, and moral conduct. Mr. Buccellati

193E. Special Topics in the History of Religions. Topics will be announced in the Schedule of Classes and selected from the following: Ancient Germanic Cults; Renaissance Mysticism; Mystics of the Low Countries; Goddesses; Religion in a Secular Age. Mr. Bolle


195A. Medieval and Renaissance Science. Prerequisite: course 3 or consent of instructor. A detailed study of selected topics in the development of the physical sciences 1600-1750, with a focus on explanations of historical change in science. Normally, four topics will be studied in order to cover a broad range of scientific, philosophical, and social conditions. Mr. Funkenstein, Mr. Westman

195B. Perspectives on the Early Modern Physical Sciences. Prerequisite: course 3 or consent of instructor. Continuity and discontinuity in scientific traditions from the 12th to the 17th century; interrelationships between theology, scientific thought, and social conditions. Mr. Funkenstein, Mr. Westman

195C. The Classical Physical Sciences: 18th and 19th Centuries. Prerequisite: course 3B or consent of instructor. A detailed study of selected topics in the development of classical physical science from Newton's Mechanics to Maxwell's Electromagnetic Theory, with special attention to demands of the Enlightenment, the Industrial Revolution, and 19th-century professionalized science. Mr. Funkenstein, Mr. Westman

195D. Physical Sciences in the 20th Century. Prerequisite: course 3B or consent of instructor. Provides a nonmathematical but nevertheless detailed look at selected physical sciences and Scientific issues: for example, the birth of quantum mechanics and relativity; stellar evolution and cosmological theories; nuclear physics, nuclear weapons, and nuclear power; and the changing character of industrialized science. Mr. Burke, Mr. Wise

195F-195G. History of Biological Sciences. (Formerly numbered M106E-M106F.) Same as Medical History M108A-M108B. Three hours per week in Fall and Winter Quarters. Prerequisite: upper division standing.

195F. Biological sciences from ancient times to the early nineteenth century. Mr. Frank

195G. Biological sciences from the early nineteenth century to the mid-twentieth century. Mr. Frank

197. Undergraduate Seminars. (Two courses only may be taken for credit.) Limited to 15 students meeting with a faculty member. Seminars will be organized on a topics basis with readings, discussions, papers. Signups and descriptions of offerings each quarter at the History Department Undergraduate Advisor's office (6248 Bunche Hall). When concurrently scheduled with courses 201A-201U or 203, undergraduates must obtain instructor's consent to enroll.

199. Special Studies in History. Prerequisite: consent of instructor. Two courses only may be taken for credit. An intensive directed research program. Enroll in department.


199HA. Seminar meetings to help students define their research topics and explore problems of historical research. Extensive reading and research in the field of the student's proposed honors thesis.

199HB. Continued reading and research culminating in a draft of the student's honors thesis.

199HC. Revisions of the draft and preparation of polished honors thesis; oral examination on thesis.

Graduate Courses

For complete descriptions of graduate-level courses offered by this department, please consult the UCLA Graduate Catalog.

Humanities

Program Office: 334D Royce Hall
Arnold J. Band, Ph.D., Professor of Hebrew and Comparative Literature.

Pier-Maria Pasinetti, Ph.D., Professor of Italian and Comparative Literature.

Ross P. Shidel, Ph.D., Professor of Scandinavian Languages and Comparative Literature (Chairman of the Department).

Katherine C. King, Ph.D., Assistant Professor of Classics and Comparative Literature.

Kathleen L. Komar, Assistant Professor of German and Comparative Literature.

Albert R. Braunmuller, Ph.D., Associate Professor of English.

Albert D. Hutter, Ph.D., Associate Professor of English.

The following courses are made up of selected masterpieces of world literature. They are recommended to satisfy the humanities breadth requirements in the College of Letters and Science.

Lower Division Courses

1A. World Literature: Antiquity to Renaissance. Prerequisite: satisfaction of Subject A requirement. Class meets three hours a week plus one section per week.

1B. World Literature: Renaissance to Modern Period. Prerequisite: satisfaction of Subject A requirement. Class meets three hours a week plus one section per week.

2A. Survey of Literature: Antiquity to the Renaissance. Lecture, two hours; discussion, two hours. Prerequisite: satisfaction of Subject A requirement. The study of selected texts from Antiquity to the Renaissance with emphasis on literary analysis and expository writing. Essays on topics related to the assigned readings will be required. Not open to students who have taken Humanities 1A. This course may be taken to satisfy the Letters and Science English composition requirement.

2B. Survey of Literature: Renaissance to Modern. Lecture, two hours; discussion, two hours. Prerequisite: satisfaction of Subject A requirement. The study of selected texts from the Renaissance to the Modern Period with emphasis on literary analysis and expository writing. Essays on topics related to the assigned texts will be required. Not open to students who have taken Humanities 1B. This course may be taken to satisfy the Letters and Science English composition requirement.

Upper Division Courses

101. The Romantic Dilemma. Prerequisites: courses 1A, 1B or English 1, 2 or consent of instructor. The theme of Romantic individualism and rebellion against the oppressive forces of society. Mr. Frank

102. Satire. Prerequisites: courses 1A, 1B or English 1, 2, or consent of instructor. The changing nature of satire as illustrated by examples of the genre from Horace and Juvenal to Ionesco and Nabokov.

104. The Twentieth-Century Continental Novel: Mann and Proust. Prerequisites: courses 1A, 1B or English 1, 2, or consent of instructor. An intensive study of The Magic Mountain and The Remembrance of Things Past as works of art and as expressions of the sense of social and cultural dissolution felt in early twentieth-century Europe. Mr. Pasinetti

105. The Comic Spirit. Prerequisites: upper division standing and a literature major. May be concurrently scheduled with Comparative Literature C205. Literary masterpieces both dramatic and nondramatic, selected to demonstrate the varieties of comic expression. Undergraduates will be allowed to read all works in translation. Mr. Band

117. The Classical Tradition: Epic. Seminar, three hours. Prerequisites: upper division standing, literature major, consent of instructor. (May be concurrently scheduled with courses 1A, 1B.) The Iliad, The Odyssey, the Aeneid, the German and European Traditions. Mr. Band

108. The Faust Theme. Prerequisites: courses 1A, 1B or English 1, 2, or consent of instructor. The course will explore artist's and intellectuals' use and abuse of their disciplines to find refuge from spiritual dryness. Readings of works by such writers as Mme. de Stael, Goethe, the Melville, Valery, Mann, and Lowry. The Staff

110. The Crisis of Consciousness in Modern Literature. Prerequisites: upper division standing and a literature major. (May be concurrently scheduled with Comparative Literature C209.) Study of modern European and American works which are concerned both in subject matter and artistic methods with the growing self-consciousness of human beings and their society, focusing on the works of Kafka, Rilke, Woolf, Sartre and Stevens. Undergraduates will be allowed to read all works in translation. Ms. King

*For concurrently scheduled courses ("C" prefix), activities and/or standards for performance and evaluation are applied separately for undergraduates and graduates.
110. *Man and His Fictions*. Prerequisites: courses 1A, 1B or English 1, 2 or consent of instructor. An exploration of dialogue and tale-telling, the wisdom or knowledge they possess, how the exchange of tales defines and sustains a community, how a narrator carries his form and meaning for his audience.

Ms. Komar

C111. *The Classical Tradition: Tragedy*. Seminar, three hours. Prerequisite: upper division standing or consent of instructor. (May be concurrently scheduled with *Comparative Literature C211.* Analysis of selected Greek dramas and their re-creations in Rome, in the Renaissance and in the modern period.)

Ms. King

114. *The Short Novel*. Prerequisites: courses 1A, 1B or English 1, 2 or consent of instructor. A study of selected short novels as works of literary art and as relevant intellectual statements. Texts by Balzac, Flaubert, Dostoevsky, Kafka, et al. Mr. Pasinetti

115. *Four Modern Dramatists*. A study of several works by four major modern dramatists, focusing on understanding specific elements in each work and the authors’ possible interrelations. Pirandello, Beckett, and Pinter. Mr. Pinter

Mr. Braunmuller

116. *Man and Society in the Renaissance*. Lecture, three hours; discussion, one hour. Prerequisites: courses 1A, 1B or English 1, 2 or consent of instructor. Exploration of a change in Western man’s relationship to his world, himself, and his art; reading of such works as Don Quixote, the *Essays* of Montaigne, *Gargantua* and *Pantagruel*, *Tristram Shandy*, and *Utopia*.

Mr. Allen

C117. *The Mystery Novel*. Prerequisites: upper division standing and a literature major or consent of instructor. (May be concurrently scheduled with *Comparative Literature C297.* A study of mystery fiction will be developed through close readings of selected works.)

Mr. Hutter

C120. *Archetypal Heroes in Literature*. Prerequisites: upper division standing and a literature major. (May be concurrently scheduled with *Comparative Literature C229.* A study of mystery and detective fiction in England, France, and the United States. The origin, form and historical significance of mystery fiction will be developed through close readings of selected works. Undergraduates will be allowed to read all works in translation.)

Mr. Hutter

C145. *Renaissance Drama*. Prerequisites: upper division standing, a literature major, consent of instructor. (May be concurrently scheduled with *Comparative Literature C245.* The course is a historical introduction to the subject matter and types of plays in the Renaissance. Historical and literary influences on the plays will be considered. Readings will include works of such dramatists as: Tasso, Machiavelli, Lope de Vega, Racine, Jonson, Shakespeare. Undergraduates will be allowed to read all works in translation.)

Mr. Braunmuller

C160. *Literature and the Other Arts*. Prerequisites: upper division standing and a literature major. (May be concurrently scheduled with *Comparative Literature C260.* A comparative study of literature and the other art media. Students seeking undergraduate credit will be allowed to read all works in translation. The Staff

C170. *The Dream in English and German Romantic Literature*. Prerequisites: upper division standing and a literature major. (May be concurrently scheduled with *Comparative Literature C270.* A study of the use of the dream as a standard narrative technique in English and German Romantic literature. Undergraduates will be allowed to read all works in translation.)

Mr. Burwick

C172. *The grotesque in Romantic Literature and Art*. Prerequisites: upper division standing and a literature major or consent of instructor. (May be concurrently scheduled with *Comparative Literature C272.* A study of the grotesque in the visual and verbal arts of the Romantic period; interpretation will address the aesthetics of tragic-comic interaction, the demonic vision, and the satirical sketches of man’s abnormality and perversity. Undergraduates will be allowed to read all works in translation.)

Mr. Burwick

C175. *The Nineteenth-Century Novel*. Seminar, three hours. Prerequisites: upper division standing and a literature major. (May be concurrently scheduled with *Comparative Literature C275.* A comparative study of the 19th-century novel in England and on the continent. Novels will be selected so as to allow the seminar to concentrate on a particular tradition or critical problem. Undergraduates may read the texts in translation.)

Mr. Lehan

C176. *Fiction and History*. Prerequisites: upper division standing and a literature major. (May be concurrently scheduled with *Comparative Literature C276.* The course analyzes the use of historical events, situations, and figures in works of fiction that are not necessarily “historical novels.” Texts and individual assignments range from nineteenth-century authors such as Stendhal, Tolstoy, Verga, to Proust and contemporaries like Vidal, Grass, Garcia Marques. Use of fictional methods by historians may also be analyzed. Undergraduates will read all works in translation.)

Mr. Pasinetti

C180. *The Symbolist Tradition in Poetry*. Prerequisites: upper division standing and a literature major or consent of instructor. (May be concurrently scheduled with *Comparative Literature C280.* A study of the symbolist tradition in 19th- and 20th-century English, French and German poetry. Undergraduate students will be allowed to read all works in translation.)

Mr. Shidefer

C181. *Poetry and Poetics of the Post-Symbolist Period*. Prerequisites: upper division standing and a literature major or consent of instructor. (May be concurrently scheduled with *Comparative Literature C281.* A study of some of the dominant poetic trends and figures in American and European poetry in the first half of the 20th century, including such surrealists as Pound, Eliot, Valery, Rimke, George and Stevens. Undergraduates will be allowed to read all works in translation.)

Ms. Komar

C195. *The Modern Short Story*. Prerequisites: upper division standing and a literature major. (May be concurrently scheduled with *Comparative Literature C295.* An introduction to the subject matter and types of American short fiction. Historical and literary influences on the texts will be considered. Readings will include works of such writers as: Hemingway, Faulkner, Dostoevsky, Kafka, et al. Mr. Pasinetti

118. *The Middle Ages*. Lecture, three hours; discussion, one hour. Prerequisites: courses 1A, 1B or English 1, 2 or consent of instructor. A study of the Middle Ages, integrating the history of Western Europe with the political, social, technological, and economic factors of the times. Undergraduates will be allowed to read all works in translation. Mr. Pinter

Graduate Courses

For complete descriptions of graduate-level courses offered by this program, please consult the UCLA Graduate Catalog.

Related Upper Division Courses in Other Departments


161A-161B-161C. Archaeology of Mesoopotamia.

Anthropology 110. World Archaeology.

112. Old Stone Age Archaeology.

115C. Archaeological Research Techniques.

115R. Strategy of Archaeology.

116P. Laboratory Analysis in Archaeology.

M160Q. Dating Techniques in Environmental Sciences and Archaeology.

183. History of Archaeology.

Armenian (Near Eastern Languages) 130A-130B. Elementary Classical Armenian.


Classics 161. Introduction to Classical Mythology.

166A. Greek Religion.

166B. Roman Religion.

168. Introduction to Comparative Mythology.

180. Introduction to Classical Linguistics.

English M111D. Celtic Mythology.

M111E. Survey of Medieval Celtic Literature.

Immunology

The Immunology faculty is associated with several departments and is joined in a common instructional program designed to meet the diverse needs of undergraduate, graduate and professional students, as well as postdoctoral fellows. An Interdisciplinary Course Sequence in Immunology with a brief description of each course and the faculty involved may be obtained by writing the Department of Microbiology and Immunology. 43-239 Center for Health Sciences. Students seeking degrees with emphasis in immunology may choose to meet the general requirements of any of the following four departments: Anatomy, Biology, Microbiology or Microbiology and Immunology.
Organized colloquia involving several disciplines are offered from time to time in conformity with faculty and student interests. They are open to all faculty members and to graduate students assigned to the colloquia by their advisors. Graduate credit is not awarded directly, but may be given through appropriate departmental courses.

For information about the committees in charge of these colloquia, call the secretary of the Dean of the College of Letters and Science at 825-4453.

The Jacob Marschak
Interdisciplinary Colloquium on Mathematics in the Behavioral Sciences

Meetings are announced in the University Calendar.

A colloquium on mathematics in the behavioral sciences will meet biweekly throughout the year. Papers presented and discussed in this colloquium use mathematical language to improve communication between behavioral sciences, and also between these sciences and other branches of knowledge.

International Relations

(Program Office: 3280 Bunche Hall)

Special Program in International Relations

This program can only be taken jointly with a major in Political Science, and all requirements for the Political Science major must be met by or in addition to meeting the requirements for this special program. The student completing this special program will receive a degree with a major in Political Science and specialization in International Relations. The program is designed to serve the needs of: (1) students desiring a general education focused on international affairs and (2) students preparing for graduate work in international affairs, whether in a social science or area study.

The program also partially serves the needs of: (1) students planning careers (in business, law, journalism or library service) with an international emphasis and (2) students preparing to teach social science in the secondary schools. These students should govern their programs primarily by the preparation requirements of the professional school or teaching credential of their choice.

Courses in management and administration, and in verbal and written communications, will ordinarily increase the career options of students in this program.

Preparation for the Program

Political Science 1, 2A or 2B and 3; History 1A-1B-1C or any three courses selected from History 8A, 8B, 9A, 9B, 9C, 9D, 10A, 10B; Economics 1 and 2 or 100; Sociology 1 or 101; Anthropology 5 or 22; Geography 3 or 5.

Islamic Studies

(Interdepartmental)

(Program Office: 10286 Bunche Hall)

For details of the undergraduate major, please refer to "Near Eastern Studies" later in this section of the catalog.

For detailed information on graduate degrees offered by this program, please refer to the UCLA Graduate Catalog.
Italian

(Department Office: 340 Royce Hall)

Giovanni Cocco, Dottore in Lettere, Professor of Italian.
Freda Chiappelli, Dottore in Lettere; Doct. Lett. "Honoris Causa," Professor of Italian.
Margherita Cotino-Jones, Ph.D., Dottore in Lettere, Professor of Italian (Chairman of the Department).
Pier-Maria Pasinetti, Ph.D., Dottore in Lettere, Professor of Italian and Comparative Literature.
Charles Speroni, Ph.D., Emeritus Professor of Italian.
Franco Betlii, Ph.D., Associate Professor of Italian.
Franco Masciandaro, Ph.D., Associate Professor of Italian.
Edward F. Tuttle, Ph.D., Associate Professor of Italian (Upper Division Undergraduate Advisor).

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Mirela Cheeseman, Dottore in Legge, Lecturer in Italian (Director of Language Instruction Program).
Althea Reynolds, B.A., Lecturer in Italian (Lower Division Undergraduate Advisor).
Lyn Richards, C.Ph., Lecturer in Italian.

The program of studies leading to the Bachelor of Arts in Italian consists of two distinct phases: preparation in the language and study of the literature. While literature courses constitute the bulk of the program, a good knowledge of the language is a prerequisite to all upper division literature courses credited toward the major in Italian. All degree programs are designed to give students the best possible preparation in the field at the appropriate level. The use of Italian is stressed at all levels of study. Detailed information on programs and specific degree requirements may be obtained in the department publication, Programs in Italian Studies, and in the office of the Department of Italian located in 340 Royce Hall.

Preparation for the Major

Italian 1, 2, 3, 4, 5, 6, 25 or equivalents are required.

The Major in Italian

Required: 14 upper division courses out of 16 courses regularly offered once every or every other academic year. Seven of these are required: Italian 101, 102A-102B-102C, 113A-113B, 190; an additional seven are to be chosen from the other nine courses ranging from 114 through 122.

Strongly Recommended: Three upper division courses from other departments as follows: Classics 143, History 132A or 132B and English 110. Recommended: Art 106A, 106B or 106C; upper division courses in another literature and philosophy and a second language (Latin, French, Spanish or German) at least on level 3. All majors must organize their programs in consultation with the department undergraduate advisor.

The Major in Italian and Special Fields

Preparation: Italian 1, 2, 3, 4, 5, 6 or equivalents are required, plus additional required courses associated with the field of specialization in consultation with the departmental undergraduate advisor.

Required: 14 upper division courses, seven of which must be in Italian. Italian 102A-102B-102C series is required, while the remaining four may be chosen from the other thirteen courses ranging from 113 through 122 as determined by the student's area of specialization. The other seven courses are to be chosen from offerings in another department, as determined by the field of specialization.

Study programs fulfilling requirements for the major in Italian and Special Fields have been developed with the Departments of Anthropology, Art, Classics (Latin), English, French, History, Linguistics, Music, Political Science and Theater Arts. Students should consult the Department of Italian undergraduate advisor for requirements in the various fields of specialization.

NOTE: Students participating in the major in Italian and Special Fields will be required to plan their Study Lists each quarter in consultation with the departmental undergraduate advisor. Courses will be assigned in accordance with the student's needs as determined by the area of specialization pursued. When consultation with an area advisor is deemed necessary, the Study List will require his approval also. In certain cases, as many as two courses (8 units) on the graduate level may be applied toward the 14-course minimum requirements.

Study in Italy: Students are encouraged to spend up to one year in Italy either (a) to study with an education abroad program or (b) to study in an Italian university. Students are also urged to take advantage of summer language workshops and study programs, either at American campuses or in Italy. Full credit will be granted according to the individual programs arranged in consultation with the undergraduate advisor.

Honors Program: Majors with an overall grade-point average of 3.25 and a 3.5 grade-point average in Italian, or better, are eligible to participate in the Honors Program. Prerequisites: Italian 102A-102B-102C.

The candidates to this program will select three upper division literature courses, in which additional readings are required. In the last quarter of the senior year, students are required to write a thesis on a subject related to one of the three above-mentioned courses. The average for the three courses should not fall below "A-". Applications should be made during the last quarter of the junior year.

Lower Division Courses

Enrollment in the Italian open language laboratory is required of all students in Italian 1, 1A, 2, 2A and 3. Enrollment in Italian culture sections is required of all students in Italian 2, 2A and 3 as the fifth hour of instruction for these courses.

1. Elementary Italian—Beginning. Sections meet five hours weekly plus one hour in the laboratory. Prerequisite: course 1 or one year of high school Italian.

2. Elementary Italian—Continued. Sections meet five hours weekly plus one hour in the laboratory. Prerequisite: course 1 or two years of high school Italian.

3. Elementary Italian—Continued. Sections meet five hours weekly plus one hour in the laboratory. Prerequisite: course 2 or two years of high school Italian.

4. Intermediate Italian. Sections meet five hours weekly plus one hour in the laboratory. Prerequisite: course 3 or three years of high school Italian.

5. Intermediate Italian. Sections meet five hours weekly plus one hour in the laboratory. Prerequisite: course 4 or four years of high school Italian.

6. Intermediate Italian. Sections meet five hours weekly plus one hour in the laboratory. Prerequisite: course 5.

8A-8B-8C. Italian Conversation (4 course each). Sections meet two hours weekly. Prerequisite: permission of instructor. This sequence of courses is intended for students who have taken three to six quarters of language instruction and have developed considerable skills in Italian. Its purpose is to help the students to improve their spoken proficiency through constant exposure and practice of the language. Each of these courses may be repeated once for credit.

25. Advanced Italian. Sections meet five hours weekly. Prerequisite: course 6. An advanced grammar and composition course with readings from selected literary works.

Upper Division Courses

Sixteen quarter units in Italian are required for admission to any upper division course. Upper division courses for the majors will be conducted in Italian, will all be 4-unit courses and will meet three hours weekly.

101. Preparation for Advanced Italian Studies. A course designed to acquaint juniors with the research tools fundamental to the study of Italian culture. Will focus on how to find texts and collateral material, how to use bibliographies, dictionaries, vocabularies, manuals and periodicals and how to proceed in literary literature.

102A. From the disruption of Roman unity to feudal and communal society and culture.

102B. From Renaissance civilization to the Baroque Age.
102C. Historical and cultural issues from the Age of Enlightenment to the 19th Century. The Staff

113A-113B. Dante’s “Divina Commedia”. This course focuses on the Divine Comedy. Selective readings from the text will be integrated with relevant information on scholasticism, classical tradition, medieval literature and poetics, and the sociopolitical structure of Dante’s time. Mrs. Cottino-Jones, Mr. Tuttle

113A. A General Introduction and Readings from Inferno.
113B. Readings from Purgatorio and Paradiso.

Mr. Cecchetti, Mr. Masciandaro

114A-114B. Italian Literature of the Middle Ages. Classes meet three hours weekly. Emphasis on “Stil Novo,” Dante’s minor works, Petrarch, Boccaccio. Mrs. Cottino-Jones, Mr. Tuttle


Mr. Betti, Mr. Masciandaro

118. Italian Literature of the Eighteenth Century. Emphasis on Goldoni, Parini, Alfieri. Mr. Betti

119. Italian Literature of the 19th Century. This course surveys the ‘Romantic Age’ as it expresses values and national aspirations of 19th-Century Italy. Emphasis is placed on the innovative aspects of Italian poetry as seen in the works of Foscolo and Leopardi, and to the socio-historical novel of Foscolo, Manzoni and Verga.

Mr. Betti

120. Italian Literature of the Twentieth Century. Following a brief introduction to Italian literature after unification of the country, the course will concentrate on selected writers seen in their political, social, and artistic contexts. Mr. Cecchetti

121. Italian Cinema. A comparative study of specific literary works and their translations into films, and of the different techniques in the two forms of expression. Texts will include literary works, screenplays, and works on literary and film theory. The Staff

122. The Italian Theater. The course concentrates on what is alive today (read and performed) in the Italian theater. Texts will range from the Renaissance to the present. Mrs. Cottino-Jones

130. Advanced Grammar and Composition (Teaching). The Teaching of Italian idiomatic Structure: Grammar. A study in depth of the idiomatic phenomena of the language from both the grammatical and syntactical points of view. Mr. Chiappelli

131. Reading and Reciting. Prerequisite: consent of instructor based on sufficient knowledge of the language. Emphasis on diction, interpretation and performance of one-act plays as vehicles for perfection of pronunciation, comprehension and fluency.

Mrs. Reynolds

190. History of the Italian Language. Examines the main forces which have shaped literary or Standard Italian and specific ways in which the language has evolved. Traces its changing relations with other European languages, and surveys the effects wrought by historical events, changes in taste and altered social functions.

Mr. Tuttle

199. Special Studies (1/2 to 1 course). Prerequisite: consent of instructor. A course of independent study for advanced undergraduates who wish to pursue a special research project under the direction and close supervision of a faculty member. The Staff

Service Courses

No knowledge of Italian is required for these courses. No credit is given toward the major.

1G. Special Reading Course (No credit). Class meets three hours weekly. Mainly designed for graduate students in other areas.

The Staff

2G. Special Reading Course (No credit). Class meets three hours weekly. Mainly designed for graduate students in other areas.

The Staff

42A-42B. Italian Civilizations or Italy Through the Ages. (Formerly numbered 42A-42B-42C) Lecture, three hours. A general survey of the history, literature, art, music and architecture audio-visually illustrated with emphasis on Italy’s cultural contributions to Western Civilization. A service course designed to meet the breadth requirements.

42A. From the origins through the Renaissance. Mrs. Cottino-Jones, Mr. Tuttle

42B. From the Enlightenment to Modern Italy. Ms. Cottino-Jones

46A-46C. Italian Cinema and Culture (in English). Italian cinema as seen through the eyes of its greatest filmmakers and writers. Major Italian films and literary works will be presented and discussed in their social and historical context.

46A. The period of “neo-realism” (1942-51) when Italian cinema gained international fame. The early films of Luchino Visconti, Roberto Rossellini and Vittorio De Sica. Readings include works by Giovanni Veronesi, Carlo Levi, and Marcello Mastroianni. Ms. Cottino-Jones

46B. The films of the 1950’s and early 1960’s. Included are works by Federico Fellini, Luchino Visconti, Michelangelo Antonioni and Pier Paolo Pasolini. A special emphasis is given to Fellini, from his earliest work through the famous La Vita D’Arte. Readings from Luigi Pirandello, Alberto Moravia and Pasolini.

46C. Italian cinema from the early 1960’s to the present. Classics by Fellini, Antonioni, Pasolini, Bertolucci and others. Selections include 81/2, Amarcord, Blow-Up, The Passenger, Decamerone, The Conformist. Readings from Boccaccio, Moravia, Tommaso Lambasadusa, etc. Ms. Cottino-Jones in charge

50A-50B. Main Trends in Italian Literature.

50A. Italian Literature to the Baroque Period. A study of selected works of the major writers of the period, including Dante, Petrarch, Boccaccio, Ariosto, Machiavelli, Castiglione, Tasso, Bruno, Galileo, Marino.

50B. Italian Literature from 1700 to the Present. A study of selected works by the major writers of the period, including Vico, Parini, Alfieri, Foscolo, Leopardi, Manzoni, Varga, Pirandello, Svevo, Moravia, Ungaretti, Montale.

105. Tradition and Innovation in Italian Culture. Italy’s basic social structures and cultural institutions are delineated through their historical development and as they are manifest in the stresses to which the industrializing state currently is subject.

Mr. Tuttle

110A-110B. The Divine Comedy in English. Class meets three hours weekly.

The Staff

M140. From Boccaccio to Basile (in English). (Same as Folklore M140.) Class meets three hours weekly. A study of the origins and the development of the Italian novella as an institution, in its structure, in its historical context, and in its European ramifications. The course is designed for students in other departments who wish to become acquainted with either the premises or the growth of similar literary genres. It is also intended for students majoring in folklore and anthropology. The Staff.

M158. Women in Italy. (Same as Women’s Studies M158.) This course is designed with the intent of examining the role that women have played in Italian society. It will concentrate alternatively on the world of the Medieval and Renaissance “Matriarch” and on the “liberated” women of our times. Historical and political documents and novels and religious taboos will be presented and discussed together with other data derived from literature and art.

Mrs. Cottino-Jones

Graduate Courses

For complete descriptions of graduate-level courses offered by this department, please consult the UCLA Graduate Catalog.

Journalism

(Department Office: 360 Kinsey Hall)

Walter Wilcox, Ph.D., Professor of Journalism (Chairman of the Department).
Joseph A Brandt, M.A. (Oxon.), B.Litt. (Oxon.) L.L.D., Emeritus Professor of Journalism.
William W. Johnson, M.A., Emeritus Professor of Journalism.

James H. Howard, M.A., Emeritus Lecturer in Journalism.
W. Lewis Perdue, B.S., Visiting Lecturer in Journalism.

Undergraduate Courses

The department offers the following undergraduate courses (primarily upper division courses):


101A. Reporting. Fundamentals of the news communication process.

101B. Photojournalism. Basic graphic arts illustration, and photojournalism for the mass media.

112. The History of American Journalism. History of the news media and their ancillary agencies with special attention to the news and information function. Course emphasizes historical context, including the main forces in development of the free press and social responsibility concepts.

180. Radio and Television News. Lecture, two hours; laboratory, three hours. Prerequisite: course 2 or equivalent. Fundamentals of broadcast news; FCC regulations; network, station, and news agency problems and policies; laboratory, exercises and experiments in preparing the newscast, with emphasis on television.

181. Reporting of Public Affairs. Prerequisite: course 2 or equivalent. Reporting governmental functions with emphasis upon judicial, legislative and administrative procedures at the state and county level.

182A. Article Writing. Analysis of the magazine and of newspaper depth reportage. Writing nonfiction articles; research, style and structure.

182B. Magazine Writing. Continuation of course 182A. Prerequisites: course 182A or equivalent and consent of instructor.

190. The Foreign Press. Analysis of the four theories of the press; study of the flow of international news; analysis of the foreign media including problems of propaganda, government control, language and economic support.

192. The Media of Mass Communications. Institutional analysis of the mass media with emphasis upon the press and broadcasting in the mass communications process; interaction with other institutions; critical evaluation.

193. The Press, the Law and the Constitution. Legal sanctions and constitutional freedoms affecting the printed and broadcast media.

195. The Critical Function of the Press. Analysis and evaluation of the role of the press as critic of the popular arts, including television, books and motion pictures. Special lectures by professional critics.
Kinesiology

(Department Office and Student Affairs Office: 206 Men's Gym)
V. Reggio Edgerton, Ph.D., Professor of Kinesiology.
Glen H. Egstrom, Ph.D., Professor of Kinesiology. Gerald W. Gardner, Ph.D., Professor of Kinesiology (Chairman of the Department). Louis J. Goldberg, D.D.S., Ph.D., Professor of Dentistry. Anatomy and Kinesiology.
Jack F. Keogh, Ed.D., Professor of Kinesiology. Laurence E. Morehouse, Ph.D., Professor of Kinesiology.
Richard A. Schmidt, Ph.D., Professor of Kinesiology.
Judith L. Smith, Ph.D., Professor of Kinesiology (Chairwoman of the Department).
Serena E. Arnold, Ed.D., Emeritus Professor of Kinesiology.
Rosalind Cassidy, Ed.D., Emeritus Professor of Kinesiology.
Donald T. Handy, Ed.D., Emeritus Professor of Kinesiology. Valerie V. Hunt, Ed.D., Emeritus Professor of Kinesiology.
Wayne W. Massey, Ph.D., Emeritus Professor of Kinesiology.
Ben W. Miller, Ph.D., Emeritus Professor of Kinesiology.
Norman P. Miller, Ed.D., Emeritus Professor of Kinesiology.
Raymond A. Synder, Ed.D., Emeritus Professor of Kinesiology.
Carl H. Young, Ed.D., Emeritus Professor of Kinesiology.
Marjorie E. Latchaw, Ph.D., Associate Professor of Kinesiology.
Tara K. Scanlan, Ph.D., Associate Professor of Kinesiology. Ronald F. Zernicke, Ph.D., Associate Professor of Kinesiology.
Robert J. Gregor, Ph.D., Assistant Professor of Kinesiology.
Diane Shapiro, Ph.D., Assistant Professor of Kinesiology.

Bachelor's Degree in Kinesiology

Kinesiology is the study of the biochemical, morphological and general physiological responses of the human to exercise and environmental conditions; the description of movement and the neuromuscular and biomechanical determinants of motor performance; and the development, acquisition and modification of motor performance. The purpose of this study is intended to develop and integrate principles and concepts of human movement.

Pre-Kinesiology Major

All students intending to major in Kinesiology are identified as Pre-Kinesiology majors until the premajor requirements have been satisfied, allowing students to identify with the Kinesiology Department while completing courses in preparation for the major.

The Pre-Kinesiology major requirements are:
- Kinesiology 12, 14; Chemistry 11A; Chemistry 15/15L or 23; Biology 5 or 7; Physics 3A (or 6A or 8A); one introductory statistics course; Psychology 10; and one additional introductory course from one of the following departments: Anthropology, Psychology or Sociology.

Premajor courses outside the department may be taken for a letter grade or on a P/NP basis; Kinesiology 12 and 14 must be taken for a letter grade. All premajor courses must be passed with a grade of "C" or better or a Passed. Upon completion of premajor courses, students must petition for admission to the Kinesiology major. Petitions are initiated through the Student Affairs Office in 206 Men's Gym.

In addition to the preparation courses required in the premajor, additional courses are strongly recommended or required as prerequisites for some upper division courses. Students should particularly note that two years of chemistry (11A, 11B/11BL, 11C/11CL, 21, 23, 25) are required for Kinesiology 118.

Premajors may enroll in restricted upper division core courses and electives if they meet prerequisite requirements specified for each course. Permission to enroll in these courses should be obtained from the Student Affairs Office (206 Men's Gym) prior to filing the Study List.

Students in the Kinesiology major or premajor must confer with the departmental counselor on a regular basis. Students who are interested in this major and who are transferring from another college or university should consult with the departmental counselor at least six months prior to the expected enrollment date at UCLA. This is to assist these students in meeting the departmental premajor requirements. Advisor appointments can be made in the Student Affairs Office, 206 Men's Gym (825-3891).

Requirements of the Major

Required Courses in the Department: 120, 120L, 122, 122L, 124, 124L, 126, 126L.

Upper Division Electives: A total of eight electives (32 units) is required. Although all eight courses may be taken in kinesiology, six upper division courses (24 units) must be taken in the department. Courses 196A-196B and 400-level courses may not be used to satisfy this requirement. One or two of the eight courses (up to 8 units) may be taken in other departments related to the student's course of study. A list of approved extradepartmental courses is available in the Student Affairs Office, 206 Men's Gym.

A "C" average must be maintained in all upper division courses taken in the department. If the student fails to attain these minimal standards, dismissal from the major will be recommended. All upper division courses required for the major (including extradepartmental electives) must be taken for a letter grade.

Preparation for Graduate Study in Kinesiology

Undergraduate students who intend to pursue graduate studies in kinesiology should be aware that both admission to graduate work and progress toward the degree will be impeded in certain areas of kinesiology if additional preparation is not obtained at the undergraduate level. For this reason, students who plan to do doctoral studies in kinesiology are advised to complete Math 3A, 3B and Physics 3B. Students who wish to pursue doctoral studies in biomechanics must complete two full years of calculus. Students interested in graduate study (master's degree or Ph.D.) in areas of physiological kinesiology must complete two full years of chemistry (11A, 11B, 11C, 21, 23, 25). Consult the Student Affairs Office, 206 Men's Gym, for additional information regarding graduate study in kinesiology.

Honors in Kinesiology

Honors in Kinesiology are intended to recognize superior academic achievement and to encourage undergraduate students with distinguished scholastic records to conduct independent research. Requirements for admission to candidacy are the same as those required for admission to the Honors Program in the College of Letters and Science. Honors in Kinesiology are awarded at graduation to honor or students who have achieved a 3.5 or better in upper division kinesiology courses, at least 9 of which must be completed at UCLA. Highest Honors in Kinesiology are awarded at graduation to honor students who have satisfactorily completed an honors research project (199H) and who have achieved at least a 3.7 in upper division kinesiology courses. Inquiries concerning Honors in Kinesiology should be directed to the Student Affairs Office, 206 Men's Gym.
Departmental Scholar Program

Under the Departmental Scholar Program, honor students in kinesiology (juniors and seniors) are permitted to pursue bachelor's and master's degree programs simultaneously. The Departmental Scholar must be provisionally admitted to the Graduate Division, and no course can be used to fulfill requirements for both degrees. The two degrees may be awarded simultaneously, but this is not a requirement of the program. The master's degree can be completed after the bachelor's degree has been awarded. Inquiries concerning the Departmental Scholar Program should be directed to the Student Affairs Office, 206 Men's Gym.

Lower Division Courses

12. Introduction to Human Physiology (1½ courses). Lecture, five hours; laboratory, three hours. Prerequisites: Biology 5 or 7, Chemistry 15 and 15L or 25. An introduction to human physiology.

13. Introduction to Human Anatomy (1½ courses). Lecture, four hours; laboratory, four hours. A structural and functional survey of the human body including the skeletal, muscular, nervous, circulatory, respiratory, digestive, and genito-urinary systems. Laboratory includes examination of human cadaver specimens. Course is not intended for Kinesiology majors; combination of Kinesiology 13 and 14 will be equivalent to nine units.

14. Human Neuromuscular Anatomy (1½ courses). Lecture, four hours; laboratory, four hours. A thorough study of the skeletal, articular, muscular, and neuromuscular anatomy and physiology emphasizing the relationships between these body structures and human movement capabilities. Laboratory includes examination of pre¬served human cadaver specimens.

Upper Division Required Courses


120L Laboratory in Behavioral Bases of Movement (¼ course). Must be taken concurrently with course 120.

122. Biomechanical Bases of Movement. Prerequisites: courses 12, 14, Physics 3A. Kinematic and kine¬letic principles underlying human movement focusing on the human neuromuscular and skeletal systems.

122L Laboratory in Biomechanical Bases of Movement (¼ course). Must be taken concurrently with course 122.


125. Neuromuscular and Metabolic Bases of Movement. Prerequisites: courses 12, 14. Metabolic, muscular and neural processes underlying movement and adaptation to exercise. (M. Edgerton, Ms. Smith

Upper Division Elective Courses

105. Movement Taxonomy and Composition. Lecture, three hours; laboratory, two hours. Prerequisite: course 12. Clarification and organization of movement classified through the study of definitions, classification, division and composition of human movement.

106. Theories of Kinesiology. A study of the ethical, logical and aesthetic valuing of human movement and human development with special consideration given to traditional and modern approaches.

115. Aquatic Kinesiology. Lecture, three hours; laboratory, two hours. Prerequisites: courses 12, 14 or consent of instructor. A study of man's adaptation to the aquatic environment.

117. Conditioning for Maximum Performance. Prerequisites: courses 12, 14, 122, 122L or consent of instructor. Study of factors and conditions accelerating and retarding levels of performance and work under various physiological and environmental conditions.

118. Cellular Dynamics of Exercise. Prerequisites: courses 124, 124L, 126, 126L, Chemistry 11C, 11CL or consent of instructor. Cellular responses to acute and chronic exercise.

119. Laboratory Experimentation in Exercise Biology. Lecture, two hours; laboratory, six hours. Prerequisites: course 118 and consent of instructor. Assessment of biochemical properties of muscle and blood, histochemistry of muscle, physiological properties of muscle and cardiorespiratory systems during exercise.

132. Biomechanics of Musculoskeletal Injury. Prerequisites: courses 122, 122L and consent of instructor. Anatomical, physiological and mechanical characteristics of cartilaginous, fibrous, and bony tissues are examined in normal and abnormal stress situations. Connective tissue growth processes, normal physiology and repair mechanisms are analyzed in conjunction with musculoskeletal injuries and effects of exercise and physical activity.

134A. Electromyographic Assessment. Lecture, three hours; laboratory, two hours. Prerequisites: courses 122, 122L. Techniques of electromyographic analysis combining theoretical aspects with laboratory experiences.

134B. Cinematographic Assessment. Lecture, three hours; laboratory, two hours. Prerequisites: courses 122, 122L. High-speed motion picture films of human movement; techniques of data collection, analysis, and interpretation.

134C. Performance Assessment. Lecture, three hours; laboratory, two hours. Prerequisites: courses 120, 120L. Critical analysis of theore¬tical and practical aspects of assessment techniques as well as individual and group evaluation procedures.

137. Therapeutic Exercise. Prerequisites: courses 122, 122L, 124, 124L, 125, 126, 126L. The role of exercise in the improvement of movement in physically handicapped individuals. Care and prevention of athletic injuries.

139. Dissection Anatomy. Lecture, two hours; laboratory, six hours. Prerequisites: courses 122, 122L and consent of instructor. Study and dissection of upper and lower extremities of human cadavers; dissection of thorax and abdomen limited to musculature and neurovascular supply.

140. Mechanisms of Neuromuscular Control. Lecture, three hours; laboratory, two hours. Prerequisites: courses 126, 126L. Psychology 15 or 115 recommended. Neuromuscular mechanisms for the control of somatic muscles are covered in detail including skeleto-motor and fusimotor systems and proprioceptive feedback necessary for motor control. Laboratory emphasizes neuroanatomy.


150. Human Movement Development. Prerequisites: courses 120, 120L. Movement development through movement with emphasis upon individual and social factors.

165. Perceptual Motor Education. Prerequisites: courses 120, 120L; course 160 recommended. Movement problems of the minimally-neurologically handicapped with emphasis on the clumsy child syndrome.

178. Group Dynamics in Sport. Lecture, three hours; laboratory, two hours. Prerequisites: courses 120, 120L or consent of instructor. Examination of group dynamics in sport. Topics include: group productivity, group structure, leadership, motivational factors, cohesion, conflict.

191A-191Z. Proseminars in Kinesiology. Prerequisites: upper division standing and consent of instructor. Enrollment is limited to 15 students. Courses offer an opportunity for advanced study of special topics. Students may take more than one 191 course for major elective credit.

196A-196B. Laboratory Practicum in Kinesiology (½ course each). Laboratory, four hours. Prerequisites: courses 139 (for A) and 119 (for B), which may be taken concurrently, and consent of instructor. Supervised practicum and training for advanced students who will serve as undergraduate assistants in the basic anatomy (A) or physiology (B) courses in the preparation of laboratory materials and innovative projects. This course may not be applied toward the major.

199. Special Studies in Kinesiology (½ or 1 course). Prerequisites: last quarter junior or senior major in Kinesiology with an overall 3.0 GPA and consent of instructor and chairperson of the department. A course application (available in 206 Men's Gym) signed by the instructor shall be submitted to the chairperson on or before the first day of class. The course section will be identified by a two-letter code using the initials of the sponsoring instructor (see department for code). The number of units of 199 or 199H that an individual student may take toward an undergraduate degree is limited to 4 units toward the major and an additional 4 units toward the University graduation requirements, for a total of 8 units. Honor students may substitute 199H for the 199, but in no case can they exceed 4 units total of either 199 or 199H or any combination thereof to be applied toward the major.

199H. Special Studies—Honors (½ or 1 course). Prerequisites: senior major in Kinesiology, achievement of College Honors status, at least a 3.5 GPA for the upper division required courses and two upper division electives in kinesiology, and consent of instructor and chairperson of the department. A course application (available in 206 Men's Gym) signed by the instructor shall be submitted to the chairperson on or before the first day of class. The course section will be identified by a two-letter code using the initials of the sponsoring instructor (see department for code). The number of units of 199 or 199H that an individual student may take toward an undergraduate degree is limited to 4 units toward the major and an additional 4 units toward the University graduation requirements, for a total of 8 units. No student may exceed 4 units total of either 199 or 199H or any combination thereof to be applied toward the Kinesiology major.

Graduate Courses

For complete descriptions of graduate-level courses offered by this department, please consult the UCLA Graduate Catalog.
Latin American Studies
(Interdepartmental)

Program Office: 10347 Bunche Hall
Rolando Armijo, M.D., M.P.H., Professor of Epidemiology in Residence
Shirley L. Arora, Ph.D., Professor of Spanish
John Belkin, Ph.D., Professor of Biology
Ruben Benitez, Ph.D., Professor of Spanish
Charles F. Bennett, Ph.D., Professor of Geography
C. Rainer Berger, Ph.D., Professor of Anthropology, Geography and Geophysics
William O. Bright, Ph.D., Professor of Linguistics and Anthropology
Henry J. Bruman, Ph.D., Professor of Geography
E. Bradford Burns, Ph.D., Professor of History
Robert Burns, S.J., Ph.D., Professor of History
Robert N. Burr, Ph.D., Professor of History
Bertram Russell, Ph.D., Professor of Engineering
C. Martin Duke, M.S., Professor of Engineering
David L. Eiteman, Ph.D., Professor of Finance
Howard Freeman, Ph.D., Professor of Sociology
John Friedmann, Ph.D., Professor of Planning
Juan Gómez-Quriones, Ph.D., Professor of History
Edward Gonzalez, Ph.D., Professor of Political Science
Kenneth R. Haddad, Ph.D., Professor of Economics
Maurice Zeitlin, Ph.D., Professor of Economics
Carlos Velez, Ph.D., Assistant Graduate Catalog

External Breadth:
From the approved list, six breadth courses may be chosen from Electives. No more than two of these may be chosen from the list of Latin American Studies.

Electives:
(a) Core Concentration: Five courses from Literature and Folklore or Fine Arts (art, music, dance, theater arts) or Linguistics. No more than one course from the core area list of Electives may be applied to the core concentration.
(b) Theory and Methods: One course from the core concentration list of Theory and Methods courses.
(c) Internal Breadth: Four additional courses from the Arts and Humanities core area but outside of the core concentration. No more than two of these may be chosen from the list of Electives.

External Breadth: From the approved list, six upper division courses outside of the Arts and Humanities core area and distributed as follows: two courses in each of three core concentrations such that at least one core concentration is chosen from the Social Science core (e.g., history) and at least one is developed within the Ecology and Environment core (e.g., public health). No more than three external breadth courses may be chosen from Electives.

The Bachelor's Degree in Latin American Studies

Undergraduate studies of the Latin American region are designed to serve the needs of (1) students desiring a general education focused on the Latin American cultural region; (2) students planning to enter business, government or international agency service; (3) students preparing to teach social science or language; and (4) students preparing for advanced academic study of Latin America.

For the undergraduate major in Latin American Studies, students must meet the requirements given in the University catalog for the academic year prior to the year of graduation.

Core Areas: Students choose one of three core areas as the focus of their major: Arts and Humanities, Social Sciences or Ecology and Environmental. Requirements for each core area are listed below.

Major Language Requirements: Language requirements are uniform for all students in the major regardless of core area. Proficiency equivalent to (a) Spanish 25 and Portuguese 3 OR (b) Portuguese 25 and Spanish 5 is required. In lieu of Portuguese 1-3, students may take Portuguese 102A-102B which is designed for students with a background in Spanish. An indigenous language of Latin America may be substituted for the minor language.

Core I. Arts and Humanities
Preparation: History 8A, 8B; Latin American Studies 99; Spanish and Portuguese 444; Spanish 5 or Portuguese 3; Art 55 or Music 81K and Dance 71J.

Core Area: Ten upper division courses from the approved list and distributed as follows:

The Latin American Studies Program, coordinated through UCLA's NDEA Latin American Studies Center, offers the Bachelor of Arts and Master of Arts degrees. Special aspects include articulated programs with professional master's and doctoral degrees.

Interdepartmental faculty committees are appointed annually to supervise and administer the B.A. and M.A. degrees in Latin American Studies. For detailed information on the M.A. degree program, please refer to the UCLA Graduate Catalog.
Core II. Social Sciences
Preparation: History 8A, 8B; Latin American Studies 99; Economics 1 and 2 or 100; Spanish 5 or Portuguese 3; Economics 40 or Sociology 18.
Core Area: Ten upper division courses from the approved list and distributed as follows:
(a) Core Concentration: Five courses from Anthropology and Sociology or Economics or Geography or History or Political Science. No more than one course from the core area list of Electives may be applied to the core concentration.
(b) Theory and Methods: One course from the core concentration list of Theory and Methods courses.
(c) Internal Breadth: Four additional courses from the Social Sciences core area but outside of the core concentration. No more than two of these may be chosen from the list of Electives.
External Breadth: From the approved list, six upper division courses outside of the Social Sciences core area and distributed as follows: two courses in each of three core concentrations such that at least one core concentration is chosen from the Arts and Humanities core (e.g., fine arts) and at least one is developed within the Ecology and Environment core (e.g., public health). No more than three external breadth courses may be chosen from Electives.

Core III. Ecology and Environment
Preparation: History 8A, 8B; Latin American Studies 99 or Geography 5; Mathematics 50A; Engineering 10S; Spanish 5 or Portuguese 3.
Core Area: Ten upper division courses from the approved list and distributed as follows:
(a) Core Concentration: Five courses from the core area, no more than one of which may be chosen from the core area list of Electives.
(b) Theory and Methods: One course from the core area list of Theory and Methods courses.
(c) Internal Breadth: Four additional courses from the Ecology and Environment core area; may be chosen from core courses in Theory and Methods or Electives.
External Breadth: From the approved list, six upper division courses outside of the Ecology and Environment core area and distributed as follows: two courses in each of three core concentrations such that at least one core concentration is chosen from the Arts and Humanities core (e.g., fine arts) and at least one is chosen from the Social Sciences core (e.g., history). No more than three external breadth courses may be chosen from Electives.

Course Limitations: No student may take more than 8 units of 199 for letter grade credit nor more than 8 units in any single term. No course taken on a Passed/Not Passed basis can be counted toward the major. In order to register in a 199 course, a student must have advanced junior standing and an overall GPA of 3.0 or senior standing.

Graduate Courses: Advanced undergraduates may enroll in graduate courses with the professor's approval. Refer to the UCLA Graduate Catalog.

Double Majors: Through judicious use of electives, students may find it possible to secure the B.A. degree with two majors, e.g., Latin American Studies and History. Interested students who have achieved junior standing should consult the undergraduate advisors of both departments involved, initiating the appropriate petition with the undergraduate advisor in Latin American Studies.

Study in Latin America: Students are encouraged to spend up to one year in Latin America either (a) to study with an education abroad program; (b) to study in Latin American universities; (c) to conduct research; or (d) to complete an internship in an international or development agency. Full credit will be granted according to the individual programs arranged in consultation with the undergraduate advisor. Proposals must be presented in writing to the Interdepartmental Committee.

Departmental Scholar Program: Exceptionally promising undergraduate students may be nominated as Departmental Scholars to pursue bachelor's and master's degree programs simultaneously.

Undergraduate Courses
99. Introduction to Latin American Problems. An interdisciplinary seminar for lower division students; enrollment limited to 15 students. Since this course is not a general survey and its content varies with each section, students will be permitted to repeat it for credit. The Staff
M155. Disease Problems of Socioeconomic and Political Impact in Latin America. (Same as Public Health M115.) Prerequisite: one upper division course in Latin American Studies Program. Social, economic and political impact of important disease problems in Latin American countries. Mr. Work
197. Interdisciplinary Topics in Latin American Studies. Advanced interdisciplinary course for upper division students. Content varies with each section. May be repeated for credit. The Staff
199. Special Studies in Latin American Studies (1 or 2 courses). Prerequisite: upper division standing. An intensive directed research program in which students conduct interdisciplinary research or complete an internship with an international agency or program dealing with Latin America. Faculty sponsorship and written reports are required. The Staff

Spanish 121A-121B. Survey of Spanish American Literature.
137. The Literature of Colonial Spanish America.
139. 19th-Century Spanish American Literature.
141. Mexican Literature.
142A. Spanish American Literature in the 20th Century: Poetry and Drama.
142B. Spanish American Literature in the 20th Century: Fiction and the Essay.
M149. Folk Literature of the Hispanic World (same as Folklore M149).
151. Folk Song in Spain and Spanish America.
170B. Senior Seminar: Topics in Spanish American Literature (requires consent).

Theory and Methods
Folklore 101. Introduction to Folklore.
190. Selected Topics.
199. Special Studies.
Portuguese 199. Special Studies.
Spanish 119. Literary Analysis.
199. Special Studies.

(B) Fine Arts
Art 117A. Advanced Studies in Pre-Columbian Art Mexico.
117B. Advanced Studies in Pre-Columbian Art: Central America.
117C. Advanced Studies in Pre-Columbian Art: The Andes.
118B. The Arts of Pre-Columbian America.
Dance 146. Dance in Latin America.
171J. Dance of Mexico (½ course).
Music 131A-131B. Music of Hispanic America.
157. Music of Brazil.
Theater Arts 106C. History of African, Asian and Latin American Film.

Theory and Methods
Anthropology 118A, 118B. Museum Studies.
123R. Aesthetic Anthropology.
137. Ethnography on Film.
Art 199. Special Studies.
Dance 199. Special Studies.
Music 180. Analytic Approaches to Folk Music (same as Folklore M180).
190A-190B. Proseminar in Ethnomusicology.
199. Special Studies.
Theater Arts 199. Special Studies.

(C) Linguistics
Portuguese 100. Phonology and Pronunciation.
103. Syntax.
M118. History of the Portuguese and Spanish Languages.
Spanish 100. Phonology and Pronunciation.
103. Syntax.
M118. History of the Portuguese and Spanish Languages.
119. Literary Analysis.
170C. Senior Seminar: Topics in Hispanic Linguistics (requires consent).

Theory and Methods
Anthropology 143A, 143B. Field Methods in Linguistics Anthropology.
Public Health 100A, 100B, 100C. Introduction to Biostatistics.
102. Demography.

Electives
Anthropology 132. Technology and Environment.
167. Urban Anthropology.

Economics 120. Introduction to Urban and Regional Economics.

118. Medical Geography.
142. Population Geography.
148. Economic Geography.
152. World Cities.

Latin American Studies 197. Interdisciplinary Topics in Latin American Studies.
199. Special Studies.
Public Health 161. Nutrition and Health (½ course).

Sociology 126. Social Demography.

Upper Division Courses
110. Information Resources and Libraries. Prerequisite: sophomore standing or consent of instructor. Provides an introduction to bibliographic and information resources and relevant research methodology. Covers both general and specialized materials. Designed to facilitate knowledgeable use of libraries and efficient retrieval of information. Some sections will focus on specific subject areas (such as science and technology). Letter grade.

111A-111D. Ethnic Groups and their Bibliographies. Introduction to bibliographical and research tools and methods for students with interests in ethnic groups. Specific sections focus on particular groups. 111A is concerned with American Indian history and culture; 111B with Afro-American history and culture; 111C with Latin history and culture; and 111D with Asian American history and culture. Sections on other ethnic groups may be added. Offered in collaboration with the several centers for ethnic studies. Students may take this course only once for credit.

Graduate Courses
For complete descriptions of graduate-level courses offered by this School, please consult the UCLA Graduate Catalog.

Linguistics

(Department Office: 2113 Campbell Hall)

Stephen R. Anderson, Ph.D., Professor of Linguistics.
Raimo A. Anttila, Ph.D., Professor of Indo-European and General Linguistics.
William Bright, Ph.D., Professor of Linguistics and Anthropology.
Victoria A. Fromkin, Ph.D., Professor of Linguistics.
Talmy Givon, Ph.D., Professor of Linguistics.
Edward L. Keenan, Ph.D., Professor of Linguistics.
Peter Ladefoged, Ph.D., Professor of Phonetics.
Paul M. Schachter, Ph.D., Professor of Linguistics.
Robert P. Stockwell, Ph.D., Professor of Linguistics (Chairman of the Department).
Sandra A. Thompson, Ph.D., Professor of Linguistics.
William E. Welmers, Ph.D., Professor of Linguistics and African Languages.
George D. Bedell, Ph.D., Associate Professor of Linguistics.
Thomas J. Hinnebusch, Ph.D., Associate Professor of Linguistics and African Languages.
Mazisi R. Kunene, M.A., Associate Professor of African Languages and Literature.
Pamela L. Munro, Ph.D., Associate Professor of Linguistics.
Russell G. Schuh, Ph.D., Associate Professor of Linguistics and African Languages.
Patricia A. Keating, Ph.D., Assistant Professor of Linguistics.

Roger W. Andersen, Ph.D., Assistant Professor of English.
Christian A. M. Baitse, Ph.D., Adjunct Associate Professor of Psychiatry.
Henrik Birnbaum, Ph.D., Professor of Slavic Languages.
J. Donald Bowen, Ph.D., Professor of English.
Russell N. Campbell, Ph.D., Professor of English.
Edward C. Carterette, Ph.D., Professor of Psychology.
Marianne Cocce-Murcia, Ph.D., Associate Professor of English.
T. Craig Christy, Ph.D., Assistant Professor of Germanic Linguistics and Philology.

Keith S. Donnelian, Ph.D., Professor of Philosophy.
Christopher Ehret, Ph.D., Professor of History.
Michael S. Fiser, Ph.D., Professor of Slavic Languages.
Jose Galvan, Ph.D., Lecturer in English.
Patricia M. Greenfield, Ph.D., Professor of Psychology.
Evelyn R. Hatch, Ph.D., Associate Professor of English.
Frances B. Hinofotis, Ph.D., Assistant Professor of English.
Robert S. Kirsner, Ph.D., Associate Professor of Dutch-Flemish and Afrikaans.
Paul V. Kroskity, Ph.D., Associate Professor of Anthropology.
Bengt Lofstedt, Ph.D., Professor of Medieval Latin.
Donald G. MacKay, Ph.D., Associate Professor of Psychology.
Claudia Mitchell-Kernan, Ph.D., Associate Professor of Anthropology.
Michael Moerman, Ph.D., Professor of Anthropology.
C.P. Otero, Ph.D., Professor of Spanish and Romance Linguistics.
Thomas G. Penchoen, Ph.D., Associate Professor of Near Eastern Languages.
Jaan Puhvel, Ph.D., Professor of Indo-European Studies.
A. Carlos Quicoli, Ph.D., Assistant Professor of Portuguese.
Earl Rand, Ph.D., Associate Professor of English.
Emanuel A. Schegloff, Ph.D., Professor of Sociology.
John A. Schumann, Ph.D., Associate Professor of English.
Michael Shapiro, Ph.D., Professor of Russian Linguistics and Poetics.
Alan H. Timberlake, Ph.D., Professor of Slavic Languages.
Terence H. Wilbur, Ph.D., Professor of German.
Dean S. Worth, Ph.D., Professor of Slavic Languages.
Eran Zaidel, Ph.D., Associate Professor of Psychology.

Undergraduate Majors
The majors described below are of three types: (1) a major which concentrates entirely on general linguistics; (2) several majors which combine the basic courses of the general program with a language concentration or other related fields; and (3) a major which concentrates entirely on an African language area. The combined majors in conjunction with teacher certification programs are especially appropriate for students who have nonuniversity teaching careers as goals, and the African major is for students with specific African interests.

The Major in Linguistics
This major should be elected only by students with an exceptional interest in and aptitude for the study of languages and linguistics. It enables the undergraduate to gain substantial familiarity with several languages and types of linguistic structure, and to become conversant with the historical study of language and formal theories of linguistics.

Preparation for the Major: In the lower division, in addition to the general University requirements, the student must complete the equivalent of the sixth quarter of work in two foreign languages or the sixth quarter in one language and the third quarter in each of two others. In addition the student must take Linguistics 1 and two of the following three courses: Philosophy 31, Psychology 10, one course in cultural anthropology.

Law

(School Office: 1242 Law)
The School of Law does not offer an undergraduate degree. For detailed information on graduate degrees offered by this School, please consult the Announcement of the School of Law.
The Major: A minimum of eleven upper division or graduate courses which must include Linguistics 100, 103, 110, 120A, 120B and either 164 or both 165A and 165B (the 165A, 165B option is recommended for students planning to go into linguistics graduate work); the other five courses are electives, three of which must be upper division linguistics courses, to be selected by the student subject to the approval of his advisor. These electives have typically been selected from the following list, though it is not exhaustive: Linguistics 104, 125, 127, 130, M135, 140, M146, M150, 160, 165A, 165B, 170, 175, 180, 195, 199 (if four units), African Languages 190, Anthropology 143B, Indo-European Studies 160, 161, 162, Philosophy 127A, 127B, 127P, Psychology 122, 123, English 121, 122, 123 or advanced courses in a foreign language or literature (those beyond the sixth quarter of language instruction). In addition to the eleven upper division courses, at least three courses (which may be either upper or lower division) are required in a language other than those in the Romance, Slavic or Germanic families. These courses may be applied toward fulfillment of the foreign language requirement described above under "Preparation for the Major." A student who completes an advanced language course is considered to have completed the equivalent of whatever courses are prerequisite to that one: e.g., if he completes French 101, he has automatically satisfied the requirement of the sixth quarter of work in one language. Courses 165A, 165B and 195 are recommended for students planning to pursue graduate work in linguistics at UCLA.

To enroll in Linguistics 195, the student must consult with the department's Senior Essay Counselor.

Honors in Linguistics
Honors in Linguistics will be awarded at graduation to those students who have a grade-point average of 3.6 or better in their junior and senior years and who have received a grade of "A" in Linguistics 195.

The Major in Linguistics and Computer Science
Preparation for the Major: Linguistics 1, Engineering 10C, Computer Science 20, 30, Philosophy 31, completion of the sixth quarter in a foreign language and the third quarter in a second foreign language.
The Major: Fourteen upper division courses as follows: Linguistics 100, 103, 104, 120A, 120B, 164, 180, two upper division electives in linguistics, Computer Science 111, M123B, 131, 132, 141.

The Major in Linguistics and English
Preparation for the Major: Linguistics 1, English 3, 10A, 10B, 10C, Philosophy 31, completion of the sixth quarter of work in two foreign languages or the sixth quarter in one foreign language and the third quarter in each of two other foreign languages.

The Major: Fifteen upper division courses as follows: Linguistics 100, 103, 110, 120A, 120B, 164, two upper division electives from other linguistics courses or English 123; English 121, 122, 140 and four electives chosen from 141, 142A, 142B, 143, the 150 series (one course only), the 160 series (one course only), the 170 series (one course only).

The Major in Linguistics and French
Preparation for the Major: Linguistics 1, French 1-6, 12, 15, completion of the sixth quarter of work in one other foreign language or the third quarter in each of two other foreign languages.
The Major: Sixteen upper division courses as follows: Linguistics 100, 103, 110, 120A, 120B, 164, two upper division electives in linguistics, French 100A, 100B, 100C, 103, 105, 106 and two elective upper division literature courses.

The Major in Linguistics and Italian
Preparation for the Major: Linguistics 1, Italian 1-6, Latin 1-3, completion of the third quarter in another foreign language or the sixth quarter in Latin, Philosophy 31, one course in cultural anthropology.
The Major: Fourteen upper division courses as follows: Linguistics 100, 103, 110, 120A, 120B, 164, two upper division electives in linguistics, Italian 102A, 130 and three additional upper division electives in Italian.

The Major in Linguistics and Oriental Languages
Preparation for the Major: Completion of the sixth quarter in either Chinese or Japanese; Linguistics 1; Philosophy 31; one course in cultural anthropology; either Oriental Languages 40A or 40B, as appropriate; completion of the sixth quarter in another foreign language or the third in each of two others.

The Major in Linguistics and Philosophy
Preparation for the Major: Linguistics 1; Philosophy 31 and two courses from 1, 6, 7, 21; completion of the sixth quarter in each of two foreign languages or the sixth quarter in one language and the third quarter in each of two others.

The Major: Fourteen upper division courses as follows: Linguistics 100, 103, 120A, 120B, 164, 165B, two upper division electives in linguistics; six upper division courses in Philosophy including at least five from 125-135, 170-174 and 184-188, of which at least two must be from 127A, 127B, 172.

The Major in Linguistics and Psychology
Preparation for the Major: Linguistics 1, Psychology 10, 41, completion of the sixth quarter in a foreign language and the third quarter in a second foreign language. Engineering 10 strongly recommended.
The Major: Fourteen upper division courses as follows: Linguistics 100, 103, 120A, 120B, 130, 195, two upper division electives in linguistics, Psychology 110, 120, 121, 122 or 123, 130 and the remaining elective to be chosen from 112, 115, 116, 124, 135, 137 (½ course). Psychology 115 strongly recommended.

The Major in Linguistics and Scandinavian Languages
Preparation for the Major: Linguistics 1, Scandinavian 1-5 or 11-15 or 21-25, 30, completion of the sixth quarter in one other foreign language or the third quarter in each of two other foreign languages.
The Major: Fourteen upper division courses as follows: Linguistics 100, 103, 110, 120A, 120B, 164, two upper division electives in linguistics, Scandinavian 105 and 106 or 110 twice, 199 (in a topic related to Scandinavian linguistics, under the direction of a Scandinav-ian or Linguistics faculty member) and three upper division electives in Scandinavian.

The Major in Linguistics and Spanish
Preparation for the Major: Linguistics 1, Spanish 1-5, 25, M42, M44, completion of a sixth quarter of work in one other foreign language or the third quarter in each of two other foreign languages.
The Major: Fifteen upper division courses distributed as follows: Linguistics 100, 103, 110, 120A, 120B, 164, two additional upper division courses in linguistics (preferably 130 and 170), Spanish 100, 103, 115 or 118, 119 and three additional upper division courses in Spanish.

The Major in African Languages
Preparation for the Major: In the lower division, in addition to the general University requirements, the student must complete Linguistics 1 and nine courses in African languages (1-42, 199), six in one language and three in another.
The Major: A minimum of fifteen upper division courses which must include three courses in an African language; African Languages 150A-150B, 190, 192; Linguistics 100, 103; three courses selected from English 114, 123, Geography 199, History 125A, 125B, 125C, 126A, 126B, 127A, 127B, 128A, 128B, 140, 110, 120A, 120B, 140, 114A, 130A, Political Science 166A, 166B, 166C, 166D. Completion of the sixth quarter of one of the following non-African languages is strongly recommended: French, Dutch-Flemish-Afrikaners, German, Portuguese, Arabic.

General Linguistics

Lower Division Courses

1. Introduction to the Study of Language. A summary, for the general undergraduate, of what is known about human language; the unique nature of human language, its structure, its universality, and its diversi-
ty; language in its social and cultural setting; language in relation to other aspects of human inquiry and knowledge. The Staff

2. Language and Social Issues. Prerequisite: course 1 or consent of instructor. A survey of linguistic problems that have social or political importance. Topics to be discussed include minority languages and dialects (particularly "Black English" and Chicano-American), bilingualism, literacy, second-language education and language standardization in developing and developed nations. The Staff

3. Language in Africa. A survey of the languages spoken in Africa and their social and cultural context; languages found on the African continent; history of African language study; literature in African languages; African languages in the mass media; language policy and planning in modern Africa. The Staff

4. The Structure of English Words. Lecture, three to four hours. An introduction to the structure of English words of classical origin including the most common base forms and the rules by which alternate forms are derived. The student may expect to achieve substantial vocabulary while learning also about etymology, semantic change, and ablative rules of English word formation. Mr. Stockwell

*Upper Division Courses*

110. Introduction to Historical Linguistics. Prerequisites: courses 100, 103. The methods and theories appropriate to the historical study of language, such as the comparative method and method of internal reconstruction. Sound change, grammatical change, semantic change.

Mr. Anttila, Mr. Schuh, Mr. Stockwell

114A. American Indian Linguistics. Lecture, four hours. Prerequisite: course 100 strongly recommended; course 114A is not prerequisite to 114B. Survey of genetic, areal, and typological classifications of American Indian languages, stressing representative features of phonology, morphology, and syntax; writing systems for American Indian languages; American Indian languages in social and historical context.

Mr. Munro

114B. American Indian Language Structures. Lecture, four hours. Prerequisite: course 100 strongly recommended; course 114A is not prerequisite to 114B. Detailed introduction to the linguistic structure of three different American Indian languages, representing at least two separate genetic groupings.

Ms. Munro

120A. Linguistic Analysis: Phonology. Prerequisites: courses 100, 103; course 120A is not prerequisite to 120B. Descriptive analysis of phonological structure with particular attention to factors leading to the nature of such structures rather than linguistic formalization.

Mr. Anderson, Mr. Bedell, Mr. Bright

120B. Linguistic Analysis: Grammar. Prerequisite: course 100; course 120A is not prerequisite to 120B. Descriptive analysis of morphological and syntactic structures in natural languages; emphasis on insight into the nature of such structures rather than linguistic formalization.

Mr. Bright

125. Semantics. Prerequisite: course 120B. A survey of the most important theoretical and descriptive claims about the nature of meaning.

Ms. Thompson

127. Syntactic Typology and Universals. Prerequisite: course 120B. A study of the essential similarities and differences among languages in the grammatical devices they use to signal the following kinds of concepts: relations between nouns and verbs (case and word order), negation, comparison, existence/localization, possession, causation, interrogation, reflexivation, relativization, attribution (adjectives), tense (tense and aspect), and occurring depending on context.

Data from a range of languages will be presented and analyzed.

Mr. Givon, Mr. Keenan, Ms. Thompson

130. Child Language Acquisition: Introduction. Prerequisites: courses 120, 120B, 120C or consent of instructor. A survey of contemporary research and theoretical perspectives in the acquisition of language. Emphasis on linguistic interpretation of existing data with some attention to relationship with second language learning, cognitive development, and other topics. Includes discussion of acquisition of English and other languages, and universals of linguistic development.

The Staff

131. Child Language Acquisition (for Nonmajors). Prerequisite: course 1 strongly recommended. A survey of current knowledge of the acquisition of a first language by children, including some general processes of language learning and some specific cases from several languages. Some attention to animal communication, relation between language learning and teaching. Not open to Linguistics majors or Linguistics graduate students.

The Staff

CM135. Theoretical Issues in Disorders of Language Development. (Same as Psychiatry and Biobehavioral Sciences CM135.) Prerequisites: courses 1 or 100 and 130 or 131 or consent of instructor. An introduction to the field of language disorders of childhood. The course begins with some clinical syndromes which are associated with delayed or deviant language acquisition: aphasia, autism, mental retardation. Theories regarding etiology and the relationship of these disorders to each other will be examined. Special attention is given to the relationship between recognition of such disorders and the acquisition of linguistic ability will be considered. Concurrently scheduled with Psychology CM237/Linguistics CM235. Graduate students will be expected to apply more sophisticated knowledge and produce a research paper of greater depth.

Ms. Needelman

140. Linguistics in Relation to Language Teaching. Prerequisites: courses 120A, 120B. Aspects of linguistics in relation to the teaching of language with particular focus on the special problems entailed in the teaching of non-European languages.

Mr. Stockwell

M146. Language in Culture. (Same as Anthropology M140.) Prerequisite: upper division standing or consent of instructor. The study of language as an aspect of culture and as an interaction of cultural and behavioral factors. Some attention to the relationship of habitual thought and behavior in the process of language formation to language and the classification of the experience. The course offers a holistic approach to the study of language and emphasizes the relationship of linguistic analysis to the fields of Biological Anthropology, Psychological Anthropology, Cultural and Social Anthropology, as well as Archaeology.

Mr. Kroskrity

M150. Introduction to Indo-European Linguistics. (Same as Indo-European Studies M150.) Prerequisites: one year of college-level study in Indo-European (course 3 or better, 8 units minimum) of either Greek or Latin and either German or Russian. A survey of the Indo-European languages from ancient to modern times; their relationships and their chief characteristics.

Mr. Anttila

160. History of Linguistics Through the 19th Century. Prerequisites: courses 120A, 120B. Historical survey of the development of linguistics from Panini through the 19th century, including approaches to grammar, phonology, and language universals.

Mr. Anttila, Mr. Bedell

164. Modern Theories of Language. Prerequisites: courses 120A and 120B or 127. A critical and historical survey of some of the central claims and types of support for current generative theory and by at least one other influential school of contemporary linguistics. About one-third of the course deals with phonology, the remainder with syntax and semantics. Students who plan to take courses 165A, 165B should not take 164. The Staff

C165A. Linguistic Theory: Phonology. Prerequisite: course 120A. (Concurrently scheduled with Linguistics C200A) The theory of generative phonology, the form of phonological rules; formal and substantive phonological universals. Recommended for students who plan to do graduate work in linguistics. While the topics of coverage are the same for undergraduate and graduate students, the depth of reading required of graduate students is greater, with more primary sources included. Also, graduate students are expected to produce a substantially deeper and more thorough research paper.

Mr. Anderson, Mr. Bedell

C165B. Linguistic Theory: Grammar. Prerequisite: course 120B or 127. (Concurrently scheduled with Linguistics C200B) The form of grammars; word formation and sentence formation; formal and substantive universals in syntax; relation between syntax and semantics. Recommended for students who plan to do graduate work in linguistics. While the topics of coverage are the same for undergraduate and graduate students, the depth of reading required of graduate students is greater, with more primary sources included. Also, graduate students are expected to produce a substantially deeper and more thorough research paper.

Mr. Schachter
170. Language and Society: Introduction to Sociolinguistics. Prerequisite: course 100 or consent of instructor. Study of the patterned covariation of language and society; social dialects and social styles in language; problems of multilingual societies.

Mr. Bright

175. Linguistic Change in English. Prerequisites: courses 110, 120A, 120B. Principles of linguistic change as exemplified through a detailed study of the history of English pronunciation, lexicon, and syntax.

Mr. Stockwell

180. Mathematical Backgrounds for Linguistics. Prerequisites: courses 120A, 120B. Introduction to selected topics in set theory, logic and formal systems, modern algebra, and automata theory, with elementary applications to linguistics. In any given quarter one or more of these topics may be emphasized. No previous mathematics assumed. Mr. Keenan

195. Senior Essay. Prerequisites: consent of instructor; open only to Linguistics majors in their senior year. An extended piece of writing will be undertaken on a linguistic topic selected by the student to be completed under the supervision of a member of the faculty in Linguistics (either Linguistics Department or, as appropriate, some faculty of other departments). To enroll in this course the student must consult the professor in charge.

The Staff

199. Special Studies in Linguistics (% to 1 course). Prerequisites: courses 120A, 120B and consent of instructor. May be repeated for credit.

The Staff

Graduate Courses

For complete descriptions of graduate-level courses offered by this department, please consult the UCLA Graduate Catalog.

African Languages

Lower Division Courses

1A-1B-1C. Elementary Swahili. (Formerly numbered 101A-101B-101C) Lecture, five hours. The major language of East Africa, particularly Tanzania.

2A-2B-2C. Intermediate Swahili. (Formerly numbered 102A-102B-102C) Lecture, four hours. Prerequisites: courses 1A-1B or consent of instructor.

3A-3B-3C. Elementary Zulu. (Formerly numbered 103A-103B-103C) Lecture, five hours. The most widely spoken of the Nguni languages (formerly numbered 101A-101B-101C). Lecture, five hours.

4A-4B-4C. Intermediate Zulu. (Formerly numbered 104A-104B-104C) Lecture, four hours. Prerequisites: courses 3A-3B or consent of instructor.

5A-5B-5C. Elementary Xhosa. (Formerly numbered 105A-105B-105C) Lecture, five hours. A major language of southern Africa, mutually intelligible with other members of this group.

6A-6B-6C. Intermediate Xhosa. (Formerly numbered 106A-106B-106C) Lecture, four hours. Prerequisites: courses 5A-5B or consent of instructor.

7A-7B-7C. Elementary Yoruba. (Formerly numbered 107A-107B-107C) Lecture, five hours.

8A-8B-8C. Intermediate Yoruba. (Formerly numbered 108A-108B-108C) Lecture, four hours. Prerequisites: courses 7A-7B or consent of instructor.


10A-10B-10C. Intermediate Igbo. (Formerly numbered 110A-110B-110C) Lecture, four hours. Prerequisites: courses 9A-9B or consent of instructor.

11A-11B-11C. Elementary Hausa. (Formerly numbered 111A-111B-111C) Lecture, five hours. Prerequisite: consent of instructor. The major language of northern Nigeria.

12A-12B-12C. Intermediate Yoruba. (Formerly numbered 112A-112B-112C) Lecture, four hours. Prerequisites: courses 11A-11B or consent of instructor.

13A-13B-13C. Elementary Igbo. (Formerly numbered 113A-113B-113C) Lecture, five hours. The major language of eastern Nigeria.

Mr. Welmers

14A-14B-14C. Intermediate Igbo. (Formerly numbered 114A-114B-114C) Lecture, four hours. Prerequisites: courses 13A-13B or consent of instructor.

The Staff


The Staff

17A-17B-17C. Elementary Yoruba. (Formerly numbered 117A-117B-117C) Lecture, four hours. Prerequisites: courses 16A-16B or consent of instructor.

18A-18B-18C. Elementary Quechua. (Formerly numbered 118A-118B-118C) Lecture, five hours. The language of the Incas and its present day dialects, as spoken in Andean South America.

The Staff

Indigenous Languages of the Americas

Lower Division Courses

Related Upper Division Courses

Managers

The Graduate School of Management (GSM) offers a variety of programs leading to graduate degrees at the master's and doctoral levels. The School also offers an executive program, research conferences and seminars for experienced managers; information about these programs may be obtained from the Office of Executive Education, 2361 GSM (825-2001). Although the School does not offer an undergraduate program in management, undergraduate courses in management are open to all University students who have completed the
necessary prerequisites. Enrollments in these courses are very limited, however. Non-GSM students are therefore forewarned not to count on gaining admission to them in order to meet the requirements of other departments or for any other necessity.

Lower Division Courses
1A-1B. Elementary Accounting. Prerequisite: sophomore standing. Course 1A is prerequisite to course 1B. An introduction to accounting theory and practice. The first quarter presents the recording, analyzing, and summarizing procedures used in preparing balance sheets and income statements. The second quarter includes payroll and tax accounting, partnership and corporation accounts, manufacturing and cost accounting, and supplementary statements.

The Staff
13. Computers and Programming. (Formerly numbered 113A.) An introduction to computers and data processing for students with no previous experience with computing. Computer hardware and software concepts are discussed. Batch (P/C) and interactive (APL) programming languages are covered and programming problems are assigned.

Upper Division Courses
108. Legal Analysis for Business Managers. Significance and growth of the law; the law in its relationship to business, with special emphasis on current problems: coverage of the law of contracts, agency sales, property, negotiable instruments, business organizations including the functions of inside and outside counsel and trade regulations. The Staff

111. Introduction to Operations Research. Prerequisites: Mathematics 2, 4A-4B, Management 115 or equivalent. Survey of operations research from an applied rather than a theoretical viewpoint. Emphasis on the formulation of mathematical models and the most basic techniques for obtaining useful results. Problem types discussed: allocation, competition, inventory, networks, project management, waiting lines, replacement, sequencing, transportation.

Mr. Bettman, Mr. Nelson

113B. Computer Programming Methods. Prerequisite: Engineering 10 or Management 13 or 404 or equivalent experience with some general purpose language and programming language use. Use of P/L and PL/1 for programming management applications. Sequential and nonsequential file processing. Data considerations. Report generation. Computational algorithms. Consideration of program structure. Extensive programming assignments.

Mr. Carmichael, Mr. Sprows

113C. Interactive Computing for Management. Prerequisite: Engineering 10 or Management 13 or 404 or equivalent experience with some general purpose language. Conversational, interactive computing for management applications. Problem logic, array processing, file handling, formatting and report generation, graphics and user dialogues covered. Examples are drawn from various aspects of management. Extensive programming assignments (using APL) are required.

Mr. McLean

115. Business Statistics. Prerequisites: Mathematics 2, 4A-4B or equivalent. Elements of probability, probability distributions, estimation and confidence intervals, tests of significance and of hypotheses, linear regression and correlation, time series analysis and principles of indexing. Applications to the analysis of and the decision-making aspects of everyday business problems.

The Staff

116A. Statistical Methods: Decision. Prerequisite: course 115 or equivalent. Statistical decision under uncertainty; statistical decision rules and their evaluation; Bayesian inference; applications to business problems.

Mr. Jones, Mr. Lippman, Mr. Nelson

116B. Statistical Methods: Analysis. Prerequisite: course 115 or equivalent. Analysis of variance; design and analysis of statistical experiments and surveys; multiple regression and correlation, curvilinear regression; analysis of enumeration data; nonparametric methods.

The Staff

120. Intermediate Accounting. Prerequisites: courses 1A-1B or consent of instructor. The preparation of the principal accounting statements. Recording, valuation and presentation of cash, temporary investments, receivables, inventories, investments, plant and equipment, intangibles, current obligations, long-term debt, paid-in capital and retained earnings. Statement analysis. Statement of application of funds.

The Staff

120M. Management Accounting. Prerequisite: course 120 or consent of instructor. Not open to students who have credit for course 403. Management Accounting theory and methods; formulation and analysis of management reports; internal control; planning and budgeting; cost-volume—profit analysis; elements of cost accounting; price-level accounting; learning curves and capital budgeting.

The Staff

122. Cost Accounting. Prerequisite: course 120 or consent of instructor. The nature, objectives and procedures of cost accounting; concepts of cost; cost control and process costing; accounting for manufacturing overhead; cost budgeting; cost reports; joint-product costing; distribution cost; standard costs; differential costs; cost-volume-profit-volume relationships and break-even analysis.

The Staff

124. Advanced Accounting. Prerequisites: courses 120, 122 or consent of instructor. Partnerships and joint ventures; installment sales and consignment sales; home office and branch relationships; corporate combinations; forms of consolidated statements; foreign branches and subsidiaries; receiverships; estates and trusts; governmental units; actuarial science.

Mr. Andersen, Mr. Dominguez, Mr. May

133. Investment Principles and Policies. Principles underlying investment analysis and policy; salient characteristics of governmental and corporate securities; role of investment control in corporate and investment institutions; relation of investment policy to money markets and business fluctuations; security pricing-making forces; construction of personal investment programs.

Mr. Culbert, Ms. Lasko, Mr. Massarik

140. Elements of Production and Operations Research. Prerequisite: course 111 or equivalent. Principles and decision analysis related to the effective utilization of the factors of production in manufacturing and nonmanufacturing activities for both interdependent and continuous systems. The study of production organizations, analytical models and methods, facilities design, and the design of control systems for production operations.

Mr. Fogel, Mr. Hutchinson, Mr. Mitchell

160. Elements of Industrial Relations. Principles and methods of effectively utilizing human resources in organizations. The relationship between social, economic and other environmental factors and current problems in industrial relations.

Mr. Coddington, Mr. Foust

165. Elements of Marketing. A survey of the major marketing methods, institutions and techniques. The subjects of retailing, wholesaling, distribution channels, marketing legislation, advertising, cooperative marketing, pricing, marketing research and marketing costs are treated from the standpoint of consumers, middlemen and manufacturers.

Mr. Massarik

163. Advertising Principles and Policies. Prerequisite: course 160. The preparation, use and administration of advertising and the use of research to direct and measure the effectiveness of each stage in the operation. The economic and social implications of advertising also are evaluated.

Mr. Lippman, Mr. Scott

175. Elements of Real Estate and Urban Land Economics. An examination of business decision making related to logical forces shaping cities and influencing real estate market functions and land uses. Emphasis is placed on decision making as it relates to appraising, building, financing, managing, marketing and using urban property.

Mr. Case, Mr. Clapp, Mr. Mittelbach


Mr. Lasko, Mr. McKelvey

182. Leadership Principles and Practice. Knowledge and skills leading to effectiveness in interpersonal relations. Understanding oneself as a leader, and affecting individuals and job work groups. Understanding of group process, including group leadership. Lectures and "sensitivity training" laboratory.

Mr. Culbert, Ms. Lasko, Mr. Massarik

190. Management Theory and Policy. Prerequisite: course 120. The conceptual and theoretical foundations of the basic concepts of management and theory of management. Emphasis is on an operational analysis of the manager's role in all types of organizations. The course deals with management issues in the areas of planning, organizing, staffing, directing and controlling.

Mr. Carrabino and the Staff

197. Special Topics in Management. Topics of special interest to undergraduate students. Specific subjects to be covered may change each quarter depending on particular interest of instructors or students. May be repeated for credit.

The Staff

199. Special Studies in Management (1/4 to 2 courses). Prerequisites: senior standing and consent of instructor and the Dean by special petition available in the MBA Program Office.

Mr. Coddington

Graduate Courses
For complete descriptions of graduate-level courses offered by this School, please consult the UCLA Graduate Catalog.

Mathematics

(Department Office: 6364 Math Sciences)

Richard F. Arens, Ph.D., Professor of Mathematics.
Donald G. Babbitt, Ph.D., Professor of Mathematics.

Alonzo Church, Ph.D., Professor of Mathematics.

Alonzo Church, Ph.D., Professor of Mathematics.

Earl A. Coddington, Ph.D., Professor of Mathematics.

Richard F. Arens, Ph.D., Professor of Mathematics.

C.C. Chang, Ph.D., Professor of Mathematics.

Alonzo Church, Ph.D., Professor of Mathematics.

Robert J. Blattner, Ph.D., Professor of Mathematics (Chairman of the Department).

Robert J. Blattner, Ph.D., Professor of Mathematics (Chairman of the Department).

David G. Cantor, Ph.D., Professor of Mathematics and Engineering and Applied Science.

Earl A. Coddington, Ph.D., Professor of Mathematics.

Julian D. Cole, Ph.D., Professor of Mathematics and Engineering and Applied Science.

Philip C. Curtis, Jr., Ph.D., Professor of Mathematics.

Richard F. Arens, Ph.D., Professor of Mathematics.

Alonzo Church, Ph.D., Professor of Mathematics.

Alonzo Church, Ph.D., Professor of Mathematics.

Richard F. Arens, Ph.D., Professor of Mathematics.

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Alonzo Church, Ph.D., Professor of Mathematics.

Richard F. Arens, Ph.D., Professor of Mathematics.

Alonzo Church, Ph.D., Professor of Mathematics.

Alonzo Church, Ph.D., Professor of Mathematics.
Preparation for the Major

Mathematics 31A, 31B, 32A-32B, 33A, 33B (this is the revised calculus sequence; students who have completed the former course 31C must complete the old sequence 31A-31B-31C, 32A-32B, 32C) or the corresponding courses in the honors sequence. These courses must be completed with an average grade of "C" or higher. Prospective majors who qualify are strongly urged to take the honors sequence (Mathematics 31AH-31BH, 32AH-32BH, 33AH-33BH). Also required: Engineering 10C (Engineering 10F may be substituted for Engineering 10C) and three courses in physical sciences chosen from Chemistry 11 or 11H sequences (formerly Chemistry 1 or 3), Physics 6, 8 or 8H sequences, Astronomy 101, Atmospheric Sciences 3H (former Atmospheric Sciences courses 10, 40A, 40B are also acceptable) or approved upper division courses in chemistry, atmospheric sciences, earth and space sciences and physics.

Transfer Students

Transfer students and UCLA students wishing to change their major to Mathematics, with 60 or more quarter units of credit, must have completed one year of calculus and have a "C" average or better in all college-level mathematics courses completed. Transfer students should consult with a departmental advisor at their earliest opportunity. Particular areas where evaluation and direction may be necessary are linear algebra and differential equations.

The Major

Mathematics 110A, 115, 120A, 131A-131B and at least five additional courses numbered between 105 and 199. Students who wish to pursue a graduate degree in mathematics are urged to take several more than this minimum of ten courses. Strongly recommended as preparation for graduate study: course 132 and (for pure mathematics) courses 110B-110C and a reading knowledge of French, German or Russian.

Hons Calculus Sequence

The first- and second-year honors sequence, Mathematics 31AH-31BH, 32AH-32BH, 33AH-33BH, is intended for students (not necessarily Mathematics majors) who have a strong interest in mathematics and desire a broader and more comprehensive and demanding introduction to university-level topics. On occasion, the courses may range beyond the stated topics of calculus, linear algebra and differential equations. Admission to the sequence is by permission of instructor. The preliminary examination in mathematics is required. Students who have done unusually well in the standard sequence are welcome to apply for transfer to the honors sequence. (The honors sequence is not connected with the Undergraduate Honors Program described below.)

Undergraduate Honors Program

A student majoring in Mathematics and wishing to graduate with Honors in Mathematics should apply for admission to the Honors Program. This may be done any time after the fourth undergraduate quarter. Minimum entrance requirements for fifth-quarter students are the completion of courses 31A, 31B, 32A-32B with three "A's" and one "B". Applications from students past the fifth quarter and from transfer students will be judged on prospects for successful completion of the program. Honors will be granted to students in the program who in addition to the usual course requirements: (a) complete courses 110B-110C or 110B-110CH or approved graduate substitutes; (b) complete course 190, Honors Mathematics Seminar; (c) earn a grade-point average of at least 3.6 in approved upper division and graduate mathematics courses. Students who demonstrate exceptional achievement will be awarded Highest Honors.

Departmental Scholar Program in Mathematics

This program allows exceptionally promising undergraduates to enroll in graduate courses and begin work towards the master’s degree in Mathematics. See “Departmental Scholar Program” in the section on the “College of Letters and Science.”

The Major in the Teaching of Mathematics

Teaching Credentials

Students interested in teaching mathematics in the schools should inquire at the Undergraduate Mathematics Office, 6356 Math Sciences, about teaching credentials.

The Major in Mathematics/Applied Science

This is a program designed for students with a substantial interest both in mathematics and its applications to related fields.

Preparation for the Major: Mathematics 31A, 31B, 32A-32B, 33A, 33B (this is the revised calculus sequence; students who have completed the former course 31C must complete the old calculus sequence 31A-31B-31C, 32A-32B, 32C) with an average grade of "C" or better.

The Major: Seven courses in mathematics in the 100 series chosen from those numbered 110 and above with an average grade of "C" or better. Seven upper division courses chosen from not more than two related departments approved by the Mathematics/Applied Science Curriculum Committee of the Mathematics Department.

Students contemplating this major normally apply during their sophomore year, at which time a proposed program of study is drawn up in consultation with a committee member. At least five of the courses from the related discipline must be taken after the program has been approved. Students who will have 135 or more units by the end of the quarter in which entrance to the program is sought will not be admitted.

Actuarial Plan (Under the Mathematics/Applied Science Major)

The following package of courses is designed especially for students interested in actuarial science. Anyone may use it as a plan under the Mathematics/Applied Science major. To change to this plan, just apply at the Undergraduate Mathematics Office, 6356 Math Sciences.

Preparation for the Major: Mathematics 31A, 31B, 32A-32B, 33A, 33B (this is the revised calculus sequence; students who have completed the former course 31C must complete the old calculus sequence 31A-31B-31C, 32A-32B, 32C), Engineering 10C, Economics 1; 2 or 100 are required. Economics 100 may not be counted as one of the upper division courses of the major. The lower division seminars in economics, Economics 3 and 4, are not required but are highly recommended.

The Major: Seven courses in mathematics, five in economics and two in management.

Five of the seven mathematics courses are specifically required. These are: Mathematics 115, 152A, 152B, 140A, 144. The student is to choose two other courses from the following list: Mathematics 113, 142, 151, M153.

The five required courses in economics are: Economics 101A, 101B, 102, 147, 160. One of the management courses, Management 111, is required. The remaining course is to be chosen from: Management 133, 136, 190.

Variations of this program are possible with the consent of the Mathematics/Applied Science Curriculum Committee.

The Major in Mathematics/Computer Science

The major, the Pre-Mathematics/Computer Science major, the minimum standards for progress and the Honors Program in the major are described later in this section of the catalog.

The Major in Mathematics/System Science

The major is described later in this section of the catalog.

Changes in the 31-32 Calculus Sequence

The calculus sequence (courses 31A-31B-31C, 32A-32B, 32C) has been revised. The new sequence (courses 31A, 31B, 32A-32B, 33A, 33B) is now phased in.

For any special problems, contact the Undergraduate Mathematics Office, 6356 Math Sciences (825-4701).

Preliminary Examination in Mathematics

All students planning to enroll in Mathematics 3A or 31A are required to take and pass the mathematics section of the Chemistry/Mathematics Preliminary Examination during the enrollment period for the quarter in which they intend to enroll in these courses. This examination is designed to test the student's mastery of algebra and precalculus mathematics. During 1981-82 this preliminary examination is scheduled on September 21, 1981, for Fall Quarter; January 6, 1982, for Winter Quarter; and March 31, 1982, for Spring Quarter. These dates may be changed. The time and location of the examination will be posted outside the Undergraduate Mathematics Office, 6356 Math Sciences.

Advanced Placement in Calculus

Students with transfer credit in calculus or Advanced Placement Test credit in calculus are exempt from the preliminary examination in mathematics. These students must consult the mathematics department counselor in 6356 Math Sciences for appropriate advanced placement in the calculus sequences. (A departmental placement examination may be recommended.) Students who have had a calculus course in high school but who do not have Advanced Placement Test credit have a choice: they may take calculus beginning again with a first calculus course (for 3A and 31A the preliminary examination is still required), or they may seek advanced placement, in which case they must consult the mathematics department counselor. (A departmental placement examination may be recommended.)

Students wishing placement in the 31AH honors calculus sequence must likewise take the preliminary examination in mathematics. Students wishing placement in the 32BH honors calculus sequence may need to pass a placement examination in mathematics. Enrollment in 31AH and 32BH is by consent of instructor. Before consent is obtained, students are advised to enroll in the corresponding non-honors course.

Advanced Placement Calculus AB and BC Tests: students who pass the AB Examination with a score of 3, 4 or 5 receive 5 units of credit and Mathematics 31A equivalency. Students who score 3, 4 or 5 on the BC Examination receive 10 units of credit and Mathematics 31A, 31B equivalency. Students who take both examinations will receive at most 10 units of credit.

Conflicts or Duplication of Calculus Sequences

Since each of the sequences (3A, 3B, 3C; 4A-4B; 31A, 31B, 32A-32B, 33A, 33B—and the former 31A-31B-31C, 32A-32B, 32C) has been designed in accordance with the requirements of majors in a particular group of departments, it will be difficult for students to transfer from one sequence to another. Good students who wish to pursue advanced mathematics should be able to enter 32A after completing 3B. Credit will be given for at most one course in each of the following groups: (1) 31A, 31AH, 3A, 4A, 2B; (2) 3B, 3E, 4B; (3) 3C, 3E; (4) 31B, 31BH, 3B, 4B, 2C; (5) 32A, 32AH; (6) 32B, 32BH; (7) 33A, 33AH, 31C, 31CH; (8) 33A, 33AH, 32C, 32CH; (9) 33B, 33BH, 31C, 31CH.

Other changes should be made only with the concurrence of a departmental advisor who will determine the total allowable credit. Similar caution applies to transfer students entering with incomplete calculus sequences. Such students should be prepared to supply complete information as to texts used and chapters covered in their previous work. If necessary, a placement examination may be required.

Courses Taken Out of Order

A student may not take a mathematics course for credit if he has credit for a more advanced course which has the first course as a prerequisite.

Upper Division Mathematics Course Offerings

Mathematics 110A, 115, 120A, 131A-131B and 152A are offered each quarter. However, the full 110A-110B-110C and other three-course sequences are usually offered only on a Fall-Winter-Spring schedule.
Lower Division Courses

1A. Intermediate Algebra (½ course). Mathematics 1A displaces 4 units on the student's Study List but yields 2 units credit towards the degree. Restrictions: Mathematics 1A may not be used to satisfy College prerequisite breadth requirements. Not open for credit to students who have credit for other mathematics courses. Arithmetical operations on the real numbers, algebraic notation, properties of, linear and quadratic equations and inequalities, coordinate geometry. Intended for students requiring a review of elementary and intermediate algebra.

1B. Precalculus. Prerequisites: course 1A with a grade of "C" or better or two and one half years of high school mathematics and satisfactory performance on a placement examination given the first class meeting. Not open for credit to students who have credit for other mathematics courses except 3A-3B and 100. The function concept. Linear and polynomial functions and their graphs, zeros of polynomials. Inverse, exponential and logarithmic functions. Trigonometric functions.

2. Finite Mathematics for Social Science Students. Prerequisites: three years of high school mathematics or course 1B. Finite mathematics consisting of elementary logic, sets, combinatorics, probability, vectors and matrices.

3A. Calculus for Life Science Students. Prerequisites: three years of high school mathematics (including trigonometry) and passing of the mathematics section of the Chemistry/Mathematics Preliminary Examination or completion of Mathematics 1B with a grade of "C" or higher. Course 3A is not open for credit to students with credit in another calculus course. Techniques and applications of the differential calculus.

3B. Calculus for Life Science Students. Prerequisite: course 3A with a grade of "C" or higher. Techniques and applications of the integral calculus.

3C. Calculus for Life Science Students. Prerequisite: course 3B with a grade of "C" or higher. Functions of several variables, vectors, partial differentiation, and multiple integration.

3E. Calculus for Economics Students. Prerequisite: course 3A or 31A with a grade of "C" or higher. Not open for credit to students with credit in 3B, 31B, 3C, 4B. Functions of several variables; techniques of graphing, partial derivatives, maxima and minima, Lagrange multipliers. Exponential functions.

4A-4B. Calculus for Social Science Students. Prerequisite: three years of high school mathematics (including trigonometry) or course 1B. 4A: Functions, graphs, differentiation and integration with applications. 4B: Further applications of the calculus, differential equations, and functions of several variables.

15. Lower Division Seminars. Prerequisite: consent of instructor. Each quarter the department will offer a limited number of seminars in various branches of mathematics. The method of teaching will involve substantial student participation and enrollment will be limited to 15 students. Course may be repeated for credit.

31A. Calculus and Analytic Geometry. Prerequisites: at least three and one-half years of high school mathematics, including some coordinate geometry and trigonometry and a year of the mathematics section of the Chemistry/Mathematics Preliminary Examination or completion of Mathematics 1B with a grade of "C" or higher. Differential calculus and applications; introduction to integration.

31B. Calculus and Analytic Geometry. Prerequisite: course 31A with a grade of "C" or higher or course 31AH. Transcendental functions; methods and applications of integration.

31AH-31BH. Calculus and Analytic Geometry, Honors Sequence. Honors students of the rational number systems, sequences, properties of the real number system, limits, continuity, derivatives, antiderivatives, definite integrals, applications. See faculty of the performance on the preliminary examination in mathematics or an additional Honors placement examination and consent of instructor. An honors course parallel to 31A, 31B.

32A-32B. Calculus of Several Variables. Prerequisite: course 31B or 31BH. 32A: Introduction to differential calculus of several variables. 32B: Introduction to integral calculus of several variables.

32A-32BH. Calculus of Several Variables, Honors Sequence. Prerequisites: course 31BH or 31B with a grade of "A" and consent of instructor. An honors sequence parallel to 32A-32B.

33A. Matrices and Differential Equations. Prerequisite: course 32A or 32B or 32BH or 32A with a grade of "A" and consent of instructor. An honors sequence parallel to 33A, 33B.

33A-33B. Fundamentals of Arithmetic. Lecture, three hours; laboratory, two hours. Prerequisites: sophomore standing, two years of high school mathematics. Designed for prospective elementary teachers (see also Mathematics 104). The real number system, its origins, development, structure, and use. Emphasis is on understanding of arithmetic procedures. The laboratory includes experience with aids and models. 33A: May not be used to fulfill Letters and Science breadth requirement. Counting numbers and their subsets, sets; operations; relations; algorithms; measurement and approximation; applications. 33B: Prerequisite: course 33A. May not be used to fulfill Letters and Science breadth requirement. The real numbers, functions, elementary ideas of number theory, probability, and statistics. Other topics appropriate for the elementary classroom.

50A-50B. Elementary Statistics. Mathematics 50A is not open to students with credit for Economics 40. Prerequisite: course 31B or 31BH. Elementary statistics, elementary probability, random variables, binomial and normal distributions. Large and small sample inference concerning means. 50B: Linear regression and correlation, chi-square tests, design of experiments, analysis of variance, nonparametric statistics, computerized statistical analysis via prepackaged routines.

99. Individual Projects in Programming (½ course). Prerequisites: course 32A (or former course 31C), Engineering 10C. Prerequisites: course 31B or 31BH. Introduction to computer programming. Students submit proposals for their own programing projects and, after approval, proceed to carry them out, either independently or in small groups. To pass this course students must submit a final report indicating what they have actually done and evidence that they have successfully run computer programs.

Upper Division Courses

GENERAL AND TEACHER TRAINING

100. The Nature of Mathematics. Prerequisite: junior standing. Not open to students majoring in Mathematics, Engineering or physical science. A course designed to acquaint students in the arts, humanities, and social sciences with the nature of modern mathematics and the mathematical method.

101A-101B-101C. Topics in Algebra. Prerequisite: course 32A (or former course 31Q). 101A is not open to students having credit for either course 110A or 117. A sequence intended primarily for prospective secondary teachers. Group theory, numbers and number systems, relations and equivalence, topics from elementary number theory, the rational numbers, integral domains, rings and fields, the real numbers, cardinals, complex numbers, polynomials, vectors for spaces, nonconstructivity, nonsolvability. (This course sequence may not be offered every year.)

102A-102B. Topics in Geometry. Prerequisite: course 32A (or former course 31C). A sequence intended primarily for prospective secondary teachers. Axiomatic methods, advanced topics in Euclidean geometry, hyperbolic and other geometries, constructions, symmetries, isometry and related topics, projective geometry, map coloring, Jordan curve theorem. (This course sequence may not be offered every year.)

104. Fundamental Concepts of Geometry. Lecture, three hours; laboratory, two hours. Prerequisite: two years of high school mathematics including geometry. Designed for prospective elementary teachers (see also Mathematics 38A-38B). Plane and solid Euclidean geometry; axioms, parallels, congruence, similarity, area and volume, geometric constructions; non-Euclidean geometries.

106. History of Mathematics. Prerequisite: course 32A (or former course 31C). Topics in the history of mathematics with emphasis on the development of modern mathematics.

ALGEBRA, NUMBER THEORY AND LOGIC

110A-110B-110C. Algebra. Prerequisite: course 115 or consent of instructor. Course 110A is not open to credit to students with credit for Mathematics 101A or 110B or 117. 110A: The ring of integers, integral domains, fields, polynomial domains, unique factorization. 110B: Groups, structure of finite groups. 110C: Further topics in rings and modules; field extensions. Galois Theory, applications to geometric constructions and solvability by radicals.

110AH-110BH-110CH. Algebra, Honors Sequence. Prerequisite: consent of instructor. An honors sequence parallel to 110A-110B-110C.

111A-111B-111C. Theory of Numbers. Prerequisite: course 115 or consent of instructor. Divisibility, congruences, Diophantine analysis, selected topics in the theory of primes, algebraic number theory, Diophantine equations.


113. Combinatorics. Prerequisites: courses 32A, 32B, 33A, 33B (or former courses 32A-32B, 32C). Permutations and combinations, counting principles, recurrence relations and generating functions, combinatorial designs, graphs and trees, with applications including course 32A or 32AH. Introduction to combinatorial existence theorems, Ramsey's theorem.


115. Linear Algebra. Prerequisite: course 33A (or former course 31C). Abstract vector spaces; linear transformations and matrices; determinants; similarity; eigenvalues and eigenvectors; inner product spaces; quadratic forms.
117. Algebra for Applications. Prerequisite: course 115. At most one of the courses 101A, 110A and 117 may be taken for credit. Integers, congruences, fields, applications of finite fields; polynomials; permutations, introduction to groups.

118. Combinatorial Algorithms. Prerequisites: courses 32A-32B, 33A, 33B (or former courses 32A-32B, 32C), Computer Science 141 (formerly Engineering 123A). Applied aspects of combinatorial mathematics including counting and enumeration; searching and sorting techniques; recurrence relations; graph algorithms; computational complexity.

GEOMETRY AND TOPOLOGY
120A-120B. Differential Geometry. Prerequisites: course 32B and either course 32A or former course 31C. Curves in 3-space. Frenet formulas, surfaces in 3-space, normal curvature. Gaussian curvature. Convergence of curves and of surfaces. Intrinsic geometry of surfaces, isometries, geodesics, Gauss-Bonnet theorem.

121. Introduction to Topology. Prerequisite: course 131A. Metric and topological spaces, topological properties, completeness, mappings and homeomorphisms, the metrization theorem.

122. Projective Geometry. Prerequisite: course 115. Projective spaces, especially lines and planes in homogeneous coordinates; the principles of duality; projectivities, the fundamental theorem, and the theorems of Desargues, Pappus, Steiner and Pascal.

ANALYSIS

131AH-131BH. Analysis, Honors Sequence. Prerequisite: consent of instructor. An honors sequence parallel to 131A-131B. The courses 131AH-131BH, 132H form a full honors sequence in analysis.


132H. Introduction to Complex Analysis, Honors Course. Prerequisites: course 131BH and consent of instructor. An honors course parallel to 132. The courses 131AH-131BH, 132H form a full honors sequence in analysis.

133. Integration on Manifolds. Prerequisite: course 131B. Integration theory for functions of several variables, multilinear algebra, differential forms, Stokes' Theorem on manifolds.


APPLIED MATHEMATICS
140A-140B-140C. Numerical Analysis. Prerequisites: courses 32A-32B, 32C, 33A, 33B (or former courses 32A-32B, 32C). Introduction to methods for linear algebra; solving systems of linear equations; computing eigenvalues and eigenvectors; nonlinear equations; interpolation and approximation; numerical differentiation and integration; elements of numerical solutions for scalar ordinary differential equations. These courses emphasize both theory, with error analysis, and applications.


142. Introduction to Applied Mathematics. Prerequisites: courses 32A-32B, 33A, 33B (or former courses 32A-32B, 32C) or consent of instructor. An introduction to the fundamental principles and the spirit of applied mathematics. Course M124A constructs the manner in which mathematical models are constructed for physical problems. Illustrations are drawn from many fields of endeavor (e.g., physical science, biology, economics, traffic dynamics, etc.).


144. Theory of Games and Linear Programming. Prerequisite: course 115 or consent of instructor. The basic theorems of two person zero-sum matrix games including the minimax theorem; applications to games of chance and strategy; principles of linear programming, the duality theorem, and simplex methods; applications to industrial and business problems.

145A-145B. Methods of Applied Mathematics. Prerequisites: courses 32A-32B, 33A, 33B (or former courses 32A-32B, 32C). Calculus of variations, linear integral equations (Volterra and Fredholm) and applications to differential equations, Fourier series and integrals, elements of tensor calculus, special topics as time permits.

PROBABILITY AND STATISTICS
The 150 and 152 sequences are parallel courses and transferring between them is not permitted.
150A-150B-150C. Probability and Statistics. Prerequisites: courses 32A-32B, 33A, 33B (or former courses 31C and 32A-32B). 150A and the first half of 150B constitute an introduction to probability theory. The second half of 150B and 150C constitute an introduction to statistics. These courses emphasize both theory and applications.

151. Stochastic Processes. Prerequisites: courses 150A-150B or 152A and consent of instructor. An introduction to the theory and application of stochastic models, emphasizing Markov chains and pure jump processes; illustrations from queueing systems, point processes, birth and death processes, renewal theory; Poisson processes, Brownian motion.

152A-152B. Applied Mathematical Statistics. Prerequisite: course 32B or consent of instructor. A basic introductory course in the theory and application of statistical methods. This course condenses 150A-150B-150C into two quarters mainly by devoting less time to the underlying theory.

153. Introduction to Computational Statistics. (Same as Biomathematics M153.) Prerequisite: course 150C or 152B or equivalent. Statistical analysis of data by means of packages programs. Regression, analysis of variance, discriminant analysis, and analysis of categorical data. Emphasis will be on understanding the connection between statistical theory, numerical results, and analysis of real data.

169. Mathematics of Computer Graphics. Prerequisites: course 115, Engineering 10C and consent of instructor. Enrollment will be limited to 15 students. Study of curves, projective transformations, approximation theory, and other mathematical topics related to computer graphics. "Hands-on" use of computer-driven curve plotting facility. Seminar format; student presentation required.

190. Honors Mathematics Seminar. Prerequisites: admission to Mathematics Honors Program and consent of instructor. A participating seminar on advanced topics in mathematics.

191. Upper Division Seminars (1/2 to 1 course). Prerequisites: courses 32A-32B, 33A, 33B (or former courses 32A-32B, 32C) and consent of instructor. Each quarter the department will offer a limited number of seminars in various branches of mathematics. The method of teaching will involve substantial student participation and enrollment will be limited to 15 students. Course may be repeated for credit.

199. Special Studies in Mathematics (1/4 to 1 course). Prerequisites: approval of chairman and consent of instructor. At the discretion of the chairman and subject to the availability of staff, individuals or groups may study topics suitable for undergraduate course credit but not specifically offered as separate courses. Course may be repeated for credit, but no more than one 199 course may be counted towards the ten upper division courses required for the major.

Graduate Courses
For complete descriptions of graduate-level courses offered by this department, please consult the UCLA Graduate Catalog.

Mathematics/Computer Science (Interdepartmental)

Program Office: 6356 Math Sciences

Major in Mathematics/Computer Science

The Mathematics/Computer Science major, an alternate to the regular departmental major in Mathematics, consists of an integrated program of courses offered by the Department of Mathematics and the Computer Science Department (School of Engineering and Applied Science). In addition to the appropriate studies in mathematics, the interdepartmental major permits study in the principal disciplines of computer science, including theoretical foundations of computer science, methodology of computing, computer system design, programming languages and systems, and computer applications. The Mathematics Department
can arrange advising appointments and can provide current information on changes in requirements. The major leads to the Bachelor of Science degree.

Pre-Mathematics/Computer Science Major

Students who intend to enter the Mathematics/Computer Science major but have not completed the courses required as preparation for the major must enroll in the Pre-Mathematics/Computer Science major. Upon completion of these courses with (1) a minimum grade of "C" in each course and (2) a 2.5 average or better in the courses required as preparation for the major, students may petition to enter the Mathematics/Computer Science major in the Undergraduate Mathematics Office. NOTE: These grade requirements are only minimal. Students should recognize that petitioning does not guarantee admission to the major (transcripts are required with the petition).

Students with 60 or more quarter units of college credit will not be admitted to the premajor unless they have completed one year of calculus and one computer programming course with grades of "C" or better.

Preparation for the Major

Mathematics 31A, 31B, 32A-32B, 33A, 33B (this is the revised calculus sequence; students who have completed 31C must complete the old sequence—31A-31B-31C, 32A-32B-32C), Physics 8A, 8C or 8A, 6B, Engineering 10C, Computer Science 20, 30. Students who take Physics 8A and 8C are urged to take Physics 9B.

Students with substantial knowledge of programming in the PL/1 language may be exempted from Engineering 10C by passing a special placement examination. This examination is given during registration week each quarter by the Computer Science Department. Students seeking exemption from other courses should consult a mathematics/computer science advisor.

The Major

Fourteen courses as follows: (1) Mathematics 110A, 115, 150B or 152A (normal order: 115, 110A, 152A or 150B; students may petition to substitute course 117 for course 110A); (2) four additional courses in mathematics chosen from courses numbered 110 or above (suggested: 118, 141A, 141B, 142, 144, 152B or 150A, 153, 113, 114, 132, 140A, 140B, 140C); (3) Computer Science 181 (formerly Computer Science M123B), 131, 141, 151A and 152A, 151B and 152B (recommended order for Hardware: 151A with 152A, 151B with 152B; recommended order for Software: 131, 141, 181; 152A and 152B are laboratories counting 1/2 course each); (4) one additional course chosen from Engineering 121A, 121C, M124A, 127B and computer science courses numbered 100-199. Credit will not be allowed toward the major for more than one of Mathematics 140A, 141A, Computer Science M124A (Engineering M124A). Management 210A is an approved substitute for Mathematics 144.

Minimum Standards

Each course taken in the Mathematics/Computer Science major must be completed with a grade of "C-" or higher. (Students who do receive a "D" or "F" the first time they take a course must repeat the course. If a "D" or "F" is received the second time, they may not remain in the major unless they petition to do so and the petition is approved.) Furthermore, each student in the major must maintain an average of 2.0 or better in upper division mathematics courses in the major and a 2.0 or better in the upper division computer science and engineering courses in the major. Current UCLA students accepted into the Mathematics/Computer Science major before Fall 1980 must also meet these standards for the preparation for the major: (1) a minimum grade of "C-" in each course required as preparation and (2) a 2.0 average or better in all courses required as preparation.

Transfer Students

Eligible transfer students will normally be admitted only to the premajor. They should consult an advisor for the major at the earliest opportunity.

Honors Opportunities

Department Honors in Mathematics/Computer Science will be awarded at graduation to those students who (a) have been admitted to the Mathematics/Computer Science Honors Program, (b) have completed a suitable special project or participating seminar as part of the program and (c) at graduation, have a GPA of at least 3.6 in upper division mathematics courses in the major and 3.6 in upper division computer science and engineering courses in the major. Students may apply for admission to the program after having completed at least two upper division courses in mathematics and eight upper division units in computer science and engineering courses in the major. Application forms and further information can be obtained at the Undergraduate Mathematics Office, 6356 Math Sciences.

Departmental Scholar Program in Mathematics/Computer Science

This program allows exceptionally promising mathematics/computer science undergraduates to enroll in graduate courses and begin work towards the master's degree in Computer Science or the master's degree in Mathematics. See "Departmental Scholar Program" in the section on the "College of Letters and Science." For further information, contact Sally Yamashita, Counselor, 6356 Math Sciences (825-4701).

Mathematics/ System Science

(Interdepartmental)

(Program Office: 6356 Math Sciences)

Major in Mathematics/System Science

This major is an alternate to the regular departmental major in Mathematics and combines work in the Department of System Science (School of Engineering and Applied Science) with thorough preparation in mathematics, including those aspects significant in the theory of systems, information and control. The major is appropriate for students who plan graduate study in mathematics, applied mathematics or engineering, with emphasis on mathematically based research relevant to such fields as communication, computation, control, operations research, optimization, stochastic processes, system analysis. The major leads to the Bachelor of Science degree.

Preparation for the Major

Mathematics 31A, 31B, 32A-32B, 33A, 33B (this is the revised calculus sequence; students who have completed 31C must complete the old calculus sequence—31A-31B-31C, 32A-32B-32C), Engineering 121A, 121C, M124A). Engineering 10C, Physics 8A or 6A, 8C or 6B.

The Major

Fourteen upper division courses as follows: (1) Mathematics 115 and five additional mathematics courses numbered between 110 and 199; (2) Engineering 121A and five courses in system science selected from Engineering 120 through 129 and 199G; (3) one course, either in system science selected from the list in (2) or in computer science; (4) one additional upper division course in biology, chemistry, economics (numbered 101 or above), mathematics (numbered between 110 and 199), physics or psychology. Due to the similarity of Mathematics 144 and Engineering 129L (formerly 172A) credit will not be allowed towards the major for both courses. One of the fourteen courses must be either Mathematics 150A or Engineering 120A (credit will not be allowed towards the major for both). Students who have taken the former Mathematics 80 (or an approved substitute by petition) are exempt from the requirement of Engineering 121A (such students need complete only thirteen other courses in groups (1) through (4)).

For further information, contact Sally Yamashita, Counselor, 6356 Math Sciences (825-4701).
Medicine

(School Office: 12-138 Center for Health Sciences)

The School of Medicine does not offer an undergraduate degree. For detailed information on graduate degrees offered by this School, please consult the Announcement of the School of Medicine.

Meteorology

See the Department of Atmospheric Sciences

Microbiology

(Department Office: 5304 Life Sciences)

R. John Collier, Ph.D., Professor of Microbiology.
Frederick A. Eiswirth, Ph.D., Professor of Microbiology (Chairman of the Department).
C. Fred Fox, Ph.D., Professor of Molecular Biology in Microbiology.
June Lascelles, Ph.D., Professor of Microbiology.
Rafael J. Martinez, Ph.D., Professor of Microbiology.
Donald P. Nierlich, Ph.D., Professor of Microbiology.
M. J. Pickett, Ph.D., Professor of Microbiology.
Sydney C. Rittenberg, Ph.D., Professor of Microbiology.
William R. Romig, Ph.D., Professor of Bacteriology.
Eliz Sercarz, Ph.D., Professor of Microbiology.
*John H. Stilliker, Ph.D., Adjunct Professor of Microbiology.
Meridian Ruth Ball, Sc.D., Emeritus Professor of Bacteriology.
Gregory J. Jann, Ph.D., Emeritus Professor of Bacteriology.
David R. Krieg, Ph.D., Emeritus Professor of Bacteriology.
Anthony J. Salle, Ph.D., Emeritus Professor of Bacteriology.
Gary L. Wilcox, Ph.D., Associate Professor of Microbiology.
Brenda Elsevier, Ph.D., Associate Professor of Microbiology.
Arnold J. Berk, M.D., Assistant Professor of Microbiology.
Robert P. Gunsalus, Ph.D., Assistant Professor of Microbiology.
Laurel G. Heffernan, Ph.D., Adjunct Assistant Professor of Microbiology.
David A. Sadewasser, Ph.D., Adjunct Assistant Professor of Microbiology.
Owen N. Witte, M.D., Assistant Professor of Microbiology.

Mary Ann K. Markwell, Ph.D., Assistant Research in Microbiology.
Alexander Miller, Ph.D., Research Microbiologist.
Evelyn S. Tecoma, Ph.D., Lecturer in Microbiology.
Robert E. Williams, M.S., Assistant Research Microbiologist.

Preparation for the Major

Biology 5, 7, 8; Chemistry 11A, 11B, 11BL, 11C, 11CL, 21, 23, 25; Mathematics 3A, 3B, 3C (or 31A, 31B, 32A); Physics 6A, 6B, 6C (or 8A, 8B, 8C, 8D).

Pre-Microbiology Major

Students (new, transfer or change of major) desiring to major in Microbiology will first register as Pre-Microbiology students. After a minimum of two quarters in this status, Pre-Microbiology students may petition to change to the Microbiology major on completion of the following: ten of the 15 courses required in preparation for the major and completion of Microbiology 101 with a grade of "C" or better. Students entering with 80 or more units credit, in order to specify pre-microbiology as their major, must have completed one year of general chemistry; Biology 5, 7 or equivalent; one of the following: organic chemistry with laboratory (two courses), physics (one year), calculus (one year).

The Major

The degree program in microbiology has as its goals not only the introduction of the student to general and medical microbiology, but also to the inseparably associated subdisciplines of biochemistry, genetics, cellular physiology, immunology and molecular biology. To qualify a student for study in such broadly related subjects, a heavy concentration of courses in the basic sciences (chemistry, mathematics and physics) is required. The student is then prepared for the advanced discussion of specialized topics required of him or her in the upper division courses. These include, in addition to the broad survey of general and medical microbiology presented in Microbiology 101, 102 and 103 or 110, courses in the subcellular structure and physiology of bacteria, genetics and specialized courses in microbiology which include advanced laboratory training. In addition to the core program, the student may choose elective courses from a diversity of microbiology-related topics to complete the program. It is this combination of rigor in the study of fundamentals and the diversity and flexibility in making up the actual Microbiology major that makes this program appropriate preparation for those planning careers in a laboratory of microbiology or biochemistry, or for further studies leading to higher academic or professional degrees in such fields as microbiology, medicine, dentistry, biochemistry, pharmacology, immunology, genetics, cellular physiology and molecular biology.

Core Requirements: Microbiology 101, 102, 103 or 110, 119, M185; Chemistry 152; four additional upper division courses from the departmental list or from related departments, chosen with approval of the faculty advisor. In addition to requirements for graduation prescribed by the College of Letters and Science, the student is required to maintain a minimal grade-point average of 2.0 ("C") in the Department of Microbiology major. Additionally, a student must obtain a "C" or better in Microbiology 101 and 102 before continuing with further departmental upper division courses. A student repeating one of these courses must obtain a grade of "B" or better to remain in the major.

Lower Division Courses

6. Introduction to Microbiology. Lecture, three hours. Not open for credit to students having credit for Microbiology 101, Biology 5, 6, 7, 8 (or former courses 4A-4B) or equivalent courses taken elsewhere. For the nontechnical student; an introduction to the biology of microorganisms (bacteria, viruses, protozoa, algae, fungi), their significance as model systems for understanding fundamental cellular processes, and their role in human affairs.

The Staff (F, W, Sp)

10. General Microbiology. Lecture, three hours: laboratory-discussion, six hours. Prerequisites: Biology 5, 7 (or former courses 4A-4B); Chemistry 11A, 15. For health sciences students; not open for credit to students with credit in Microbiology 101; does not substitute for Microbiology 101 in the major. An introduction to the biology of bacteria and their role in diseases of man.

The Staff (Sp)

*Upper Division Courses

101. Fundamentals of Bacteriology. Lecture, three hours: laboratory-discussion, six hours. Prerequisites: Biology 5, 7 (or former courses 4A-4B); Chemistry 11A, 15. The historical foundations of the sciences; the structure, physiology, ecology and applications of bacteria.

Ms. Lascelles (Sp), Mr. Rittenberg (F)

102. Introductory Virology. Lecture, three hours; laboratory, four hours. Prerequisites: course 101. Biological properties of bacterial and animal viruses; replication; methods of detection; interactions with host cells and multicellular hosts.

Mr. Berk, Mr. Romig (W)

103. Host-Parasite Interactions. Lecture, four hours; discussion, one hour. Prerequisites: course 101, Chemistry 152. Biochemistry and biology of host-parasite interactions; host responses to invasion; mechanisms of virulence, bacterial mechanisms; discussion on the immunity to infection by bacteria.

Mr. Martinez (W)

C104A. Molecular Biology of Bacterial Growth (4 course). Lecture, three hours. Prerequisites: Biology 8, Chemistry 25, Microbiology 101 or equivalent or consent of instructor. (May be concurrently scheduled with course C204A.) Introduction to bacterial physiology with lectures stressing its experimental foundation. Topics include chromosome replication, gene expression; control of growth rate and cell division; role of cyclic AMP and other regulatory factors, cloning and genetic engineering. Mr. Nierlich (First five weeks in Spring)

*For concurrently scheduled courses ("C" prefix), activities and/or standards for performance and evaluation are applied separately for undergraduates and graduates.
113. Bacterial Metabolism. Lecture, three hours; discussion, one hour. Prerequisite: Chemistry 152 or consent of instructor. The major patterns of energy generation and biosynthesis, and their regulation. Discussion sections on selected topics will be centered around readings from the current literature.

Ms. Lascelles (W)

119. Microbial Genetics and Genetic Engineering. Lecture, three hours. Prerequisites: course 102, Biology 8 or consent of instructor. Genetics of bacteria and bacteriophages with emphasis on S. cerevisiae DNA technology and use of microbial systems in genetic engineering.

Mr. Wilcox (Sp)

151. Principles of Food Microbiology. Lecture, three hours. Prerequisite: course 101 (or equivalent with consent of instructor) and biocalculus or consent of instructor. The fundamental principles of food microbiology. Emphasis is on basic microbiological principles as they apply to food products and processing. The approach is science-oriented rather than technology-oriented.

C104B. Biochemical Genetics of Eucaryotic Cells (.5 course). Lecture, three hours. Prerequisites: some background in microbiology, biochemistry and genetics and consent of instructor. (May be concurrently scheduled with course C204B.) Basic mechanisms of heredity and human genetic disorders, genetic analysis of cancer and human genetic disorders, genetic analysis of cancer.

Mr. Lusis

C104C. Microbiology and Pathophysiology of Cultures. Lecture, three hours; discussion, three hours. Prerequisites: Chemistry 152 and consent of instructor. (May be concurrently scheduled with course C204C.) The cultured mammalian cell as an experimental system for the study of normal regulation and systems and disease. Ms. Collier

C104D. Protein Metabolism (.5 course). Lecture, three hours. Prerequisites: Chemistry 152 and consent of instructor. (May be concurrently scheduled with course C204D.) Aspects of protein metabolism in both prokaryotes and eucaryotes will be covered. Course will include a brief review of synthesis but will concentrate on other aspects of protein metabolism not normally covered in biochemistry or cell physiology courses. These include: breakdown and turnover of enzymes and implications for metabolic control; protein secretion, and processing; factors affecting protein localization in cells; uptake and degradation of proteins.

Mr. Collier

C105E. DNA and Viruses (1/2 course). Lecture, three hours; laboratory, six hours. Prerequisite: course 101. The biology of a variety of viral groups of bacteria, and the application of selective culturing procedures.

Mr. Rittenberg (Sp)

106. Principles of Microbial Ecology. Lecture, three hours. Prerequisites: Biology 5, 7 (or former courses 1A, 1B, 1C) and consent of instructor. Students who have completed Microbiology 101 as an introduction to the interactions of microbes and their environment, stressing the basic biological, biochemical, and physiological elements controlling growth in selected habitats and ecosystems.

Ms. Lascelles (W)

108. Histology (.5 course). Prerequisites: senior standing and consent of instructor, Diagnostic procedures used for the study of normal and pathological blood cells.

Ms. D.K. Wong (W)

110. The Microbiology of Infection. Lecture, three hours; laboratory, two hours. Prerequisites: Microbiology 101 or consent of instructor 101, 102, Chemistry 152 or consent of instructor. The salient characteristics of bacteria, rickettsias, and vi- ruses, both pathogenic and adventitious, associated with disease and death.

Mr. Pickett (E)

110C. The Laboratory Diagnosis of Infection. Lecture, two hours; laboratory, nine hours. Prerequisite: course 110. Techniques in the laboratory examination of clinical material.

Mr. Pickett (W)

111. Biology of the Procaroytic Cell. Lecture, three hours; discussion, one hour. Prerequisites: course 101, Chemistry 152 or consent of instructor. A review of current knowledge of the structural organization of procaroytic cells. Emphasis on isolation methods, chemical composition, structure and assembly of subcellular components, including membranes, walls, flagella, ribosomes and viruses.

Mr. Collier, Mr. Eierling, Ms. Wisnieski (W)

Microbiology and Immunology

(Graduate Office: 43-239 Center for Health Sciences)

Although the Department of Microbiology and Immunology does not present courses in microbiology in the undergraduate series, there are a number of the graduate courses in which undergraduates may enroll with consent of instructor. Among such offerings is M110 (Virology), M120 (Mycology), M121 (Bacterial Pathogenesis) and M125 (Topics in New Biology). Undergraduates should consult the UCLA Graduate Catalog for other opportunities of this sort.

The following upper division courses are offered with enrollment restrictions as indicated:

Upper Division Courses

M185. Immunology. (Same as Microbiology M185 and Biology M185.) Lecture, three hours; discussion, one hour. Prerequisites: Biology 8, Chemistry 23, 25. Concurrent enrollment in Chemistry 152 or 156 is recommended. Introduction to experimental immunology and immunohematology; cellular and molecular aspects of humoral and cell immune reactions.

The Staff (F)

M186. Experimental Design in Immunology. (Same as Biology M186 and Microbiology and Immunology M186.) Laboratory, twelve hours. Prerequisites: course M185 and consent of instructor. This course will focus on a limited number of situations designed to train the student in organizing and evaluating immunological laboratory experiments. Must be taken concurrently with Microbiology M187.

Mr. Clark, Mr. Sercarz (W)

M187. Immunology Seminar (.5 course). (Same as Biology M187 and Microbiology and Immunology M187.) Discussion, two hours. Prerequisites: course M185 and consent of instructor. Student presentation of selected papers from the immunology literature. Designed to serve as a forum for the critical analysis of research papers. Must be taken concurrently with Microbiology M186.

Mr. Clark, Mr. Sercarz (W)

M188. Immunological Techniques (.5 course). (Same as Microbiology and Immunology M188.) Prerequisites: course M185 with an "A" grade and consent of instructor. Techniques in immunohematology and immunology: State of the art advanced technology for performance of experiments in modern immunology in a workshop format. Each workshop is of approximately two full days duration.

Mr. Sercarz (W)

195. Special Studies in Microbiology (1/2 to 4 courses). Prerequisites: open only to students with superior academic standing and consent of instructor and department chairman, based on written research proposal. Maximum enrollment for four quarters.

The Staff (F, W, Sp)

Graduates Courses

For complete descriptions of graduate-level courses offered by this department, please consult the UCLA Graduate Catalog.
Military Science

(Department Office: 131 Men's Gym)
Peter A. Gray, M.A., Colonel, Military Police Corps, Professor of Military Science.
Michael B. Callahan, M.S., Captain, Finance, Adjunct Assistant Professor of Military Science.
Lawrence C. Hinkle, M.S., Major, Signal Corps, Assistant Professor of Military Science.
Phillip S. Taylor, M.S., Captain, Field Artillery, Adjunct Assistant Professor of Military Science.
Barrie A. Town, M.S., Captain, Infantry, Assistant Professor of Military Science.

Army Reserve Officers' Training Corps

The department offers a general military science curriculum which conforms to the academic pattern of the UCLA campus. Military science classes are open to all students; enrollment as an ROTC cadet is not required. Cross-enrollment is available through the UCLA Extension for students attending other colleges that do not offer Army ROTC.

The military science curriculum is a part of the Army Reserve Officers' Training Corps (ROTC) program. Enrollment in the ROTC program is on a voluntary basis and is limited to qualified full-time male and female students.

The military science curriculum is divided into two parts: (1) the Basic Course, two years of lower division study to prepare the student for advanced instruction and (2) the Advanced Course, two years of upper division study. Satisfactory completion of the Advanced Course and attainment of a bachelor's degree leads to a commission as a second lieutenant in the Army Reserve, National Guard or Active Army. Distinguished students may qualify for a commission in the Regular Army.

Transfer students and others who were unable to enroll in the Basic Course can receive equivalent credit by attending a six-week camp during the summer between their sophomore and junior years. Successful completion of this camp will qualify the student for direct entry into the Advanced Course. Attendees are given an allowance for travel expenses and are paid for attendance. Equivalent ROTC credit is granted to those students who have participated in the Junior ROTC program for a minimum of two years.

Eligible veterans and members of the Reserve or National Guard can enroll directly into the Advanced Course. Veterans may receive VA benefits concurrently with Advanced Course subsistence allowances.

Admission to the Advanced Course is limited to selected students who meet all academic and physical requirements. Enrollees in this course receive a subsistence allowance of $100 for each of the twenty academic months. Upon completion of the Advanced Course and fulfillment of degree requirements, the student is commissioned as a second lieutenant in one of the Army's speciality areas. Insofar as possible, the student's desires and academic major will be considered.

Students selected for Advanced ROTC must attend a six-week Advanced Camp between their junior and senior years. Attendees will receive an allowance for travel expenses and are paid for attendance.

Army ROTC scholarships are available for various terms to selected applicants. Scholarships pay all costs associated with tuition, books and other student fees. In addition, scholarship recipients receive a subsistence allowance of $100 per month for the academic year. Full four-year scholarships are offered to high school seniors selected by national competition. Three-, two- and one-year scholarships are also available.

The active duty obligation for those students electing to enter the Reserves or National Guard is only three months. Students accepting ROTC scholarships, a commission in the Regular Army, or who choose to enter the Active Army will serve longer terms. ROTC students desiring to obtain advanced degrees may be granted a delay in reporting to their initial assignment. For further information, contact the Department of Military Science located in the Men's Gym (825-7384 or 825-7381).

Four-Year Program: Students are enrolled in the Basic Course (freshman and sophomore years) on a voluntary basis. Upon completion of the Basic Course and 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, enlist in the United States Army Reserve and accept a commission if offered. Advanced Course students receive $100 subsistence allowance per academic month, military science books and uniforms.

Two-Year Program: This program is primarily designed for students with prior military service or three years of Junior ROTC in high school. In addition, students that do not have any prior military experience and have less than four years of schooling remaining may qualify for this program by attending an ROTC basic camp offered in the summer. Students receive allowances for travel expenses and are paid for camp attendance. Upon successful completion of this basic camp, the student will enter the Advanced Course under the same requirements as stated for the four-year program.

Lower Division Courses


13. Theory of Warfare (½ course). Inquiry into the theory, nature, causes, and elements of warfare, with attention also directed to the evolution of weapons and warfare. Capt. Taylor

14. Decision-making (½ course). Prerequisites: CADET: completion of courses 11, 12, 13 or equivalent; NON-CADET: college student. In-depth study of the decision-making process, optimizing decisions, information systems, operations research, systems management.

15. Military Societal Relations (½ course). Prerequisites: CADET: completion of courses 11, 12, 13 or equivalent; NON-CADET: college student. An introductory course in probability and statistics, course in computer science, Management 190; NON-CADET: same as for course consent of instructor. Theory of decision making, functions of the decision-making process, optimizing decisions, information systems, operations research, systems management.

16. Military Sociology (½ course). Prerequisites: CADET: completion of courses 11, 12, 13 or equivalent; NON-CADET: college student. An introductory course in psychology and the history of psychology, course in computer science, Management 190; NON-CADET: same as for course consent of instructor. Theory of decision making, functions of the decision-making process, optimizing decisions, information systems, operations research, systems management.

17. Military Sociology (½ course). Prerequisites: CADET: completion of courses 11, 12, 13 or equivalent; NON-CADET: college student. An introductory course in psychology and the history of psychology, course in computer science, Management 190; NON-CADET: same as for course consent of instructor. Theory of decision making, functions of the decision-making process, optimizing decisions, information systems, operations research, systems management.

Upper Division Courses

111. Psychology of Leadership (½ course). Prerequisites: CADET: completion of Basic Course or equivalent; NON-CADET: upper division standing. An examination of learning theories to support development of knowledge, skills and attitudes necessary for instructing or teaching application. Emphasis is placed on the educational/instructional processes.

112. Theory of Learning Applied to Teaching (½ course). Prerequisites: CADET: completion of Basic Course or equivalent; NON-CADET: upper division standing. An examination of learning theories to support development of knowledge, skills and attitudes necessary for instructing or teaching application. Emphasis is placed on the educational/instructional processes.

113. Theory of Learning Applied to Teaching (⅛ course). Prerequisites: CADET: completion of Basic Course or equivalent; NON-CADET: upper division standing; completion of course 112 or equivalent (both). A study of instructional processes, lesson content, planning procedures, techniques for appraising education, role of testing including evaluation and analysis. Emphasis is placed on improvement of teaching and group process.

122. United States Military History (½ course). Prerequisites: CADET: completion of courses 11, 12, 13 or equivalent; NON-CADET: college student. In-depth study of the U.S. Army from 1755-1865, with emphasis on leaders and combat actions. An introductory survey of opposing strategies and relationships to the men leading and serving in the U.S. Army.

123. United States Military History (½ course). Prerequisites: CADET: completion of courses 11, 12, 13 or equivalent; NON-CADET: college student. In-depth study of the U.S. Army from the beginning of the Civil War to World War II (1860-1939) with emphasis on leadership at all levels and campaigns involving the U.S. Army. Emphasis on the development of strategy and combat operations of both sides.

124. United States Military History (½ course). Prerequisites: CADET: completion of courses 11, 12, 13 or equivalent; NON-CADET: college student. In-depth study of the U.S. Army from World War II to present, with emphasis on strategies and leadership on both sides.

125. Decision-making (⅛ course). Prerequisites: CADET: completion of courses 11, 12, 13 or equivalent; NON-CADET: college student. An introductory course in probability and statistics, course in computer science, Management 190; NON-CADET: same as for course consent of instructor. Theory of decision making, functions of the decision-making process, optimizing decisions, information systems, operations research, systems management.
Molecular Biology

(Interdepartmental)

(Program Office: 168 Molecular Biology Institute)

Undergraduate Study

Undergraduate studies which readily lead to advanced work or employment in the molecular biology area include undergraduate majors in Biochemistry, Biology or Physics. Students may wish to supplement their course programs in consultation with the appropriate undergraduate advisors.

For detailed information on graduate degrees offered by this program, please consult the UCLA Graduate Catalog.

Music

(Department Office: 2449 Schoenberg Hall)

Elaine R. Barkin, Ph.D., Professor of Music.
Murray C. Bradshaw, Ph.D., Professor of Music.
Peter C. Crossley-Holland, M.A., Professor of Music.
Frank A. D’Accone, Ph.D., Professor of Music.
Paul E. Des Maraiss, M.A., Professor of Music.
Maurice Gerow, Ph.D., Professor of Music.
Marie Louise Götlinger, Ph.D., Professor of Music.
Frederick F. Hammond, Ph.D., Professor of Music.
Richard A. Hudson, Ph.D., Professor of Music.
William R. Hutchinson, Ph.D., Professor of Music.
Nazia A. Jairazbhoy, Ph.D., Professor of Music.
Henri Lazaro, M.F.A., Professor of Music.
David Morton, Ph.D., Professor of Music.
J. H. K. Niketia, B.A., Professor of Music.
Gilbert Reaney, M.A., Professor of Music.
Abraham K. Schwadron, Mus. A.D., Professor of Music (Chairman of the Department).
Robert M. Stevenson, Ph.D., Professor of Music.
Roy E. Travis, M.A., Professor of Music.
Robert L. Tusler, Ph.D., Professor of Music.
D. K. Wilgus, Ph.D., Professor of English and Anglo-American Folk Song.
Edwin H. Hanley, Ph.D., Emeritus Professor of Music.
Mantle L. Hood, Ph.D., Emeritus Professor of Music.
Boris A. Kremenlev, Ph.D., Emeritus Professor of Music.
W. Thomas Marrocco, Ph.D., Emeritus Professor of Music.
Robert U. Nelson, Ph.D., Emeritus Professor of Music.
H. Jan Popper, Ph.D., Emeritus Professor of Music.
Clarence E. Sawhill, Mus. D., Emeritus Professor of Music.
Alden B. Ashforth, Ph.D., Associate Professor of Music.
Malcolm S. Cole, Ph.D., Associate Professor of Music.
James W. Porter, M.A., Associate Professor of Music.
Paul V. Reale, Ph.D., Associate Professor of Music.
Robert S. Winter, Ph.D., Associate Professor of Music.
David E. Draper, Ph.D., Assistant Professor of Music.
Max L. Harrell, Ph.D., Assistant Professor of Music.
Charlotte A. Heith, Ph.D., Assistant Professor of Music.

Kathleen R. Murray, Ph.D., Assistant Professor of Music.
A. Jihad Racy, Ph.D., Assistant Professor of Music.
James E. Westbrook, D.M.A., Assistant Professor of Music.

Gerald E. Anderson, M.S., Lecturer in Music.
Salome R. Arkatov, M.A., Lecturer in Music.
Edward Auer, B.M., Lecturer in Music.
Aubrey J. Bouch, B.M., Lecturer in Music.
Marjorie Call, B.M., Lecturer in Music.
Mario Carta, Adjunct Assistant Professor of Music.
Jacqueline C. Dje Dje, Ph.D., Acting Assistant Professor of Music.
Jeffrey Goodman, M.A., Lecturer in Music.
John A. Guarnieri, Lecturer in Music.
Thomas F. Harmon, Ph.D., Lecturer in Music and University Organist.
Johanna Harris, Lecturer in Music.
Maureen D. Hooper, Ed.D., Lecturer in Music.
Freeman K. James, M.A., Senior Lecturer in Music.
John T. Johnson, B.M., Lecturer in Music.
Bess Karp, M.A., Lecturer in Music.
Leon Knoppoff, Ph.D., Professor of Geophysics and Physics.
Samuel Krachmalnick, Senior Lecturer in Music.
Kobla Lutzko, Ph.D., Lecturer in Music.
Sidney M. Lazard, M.A., Lecturer in Music.
Danny Lee, Lecturer in Music.
James R. Low, B.M., Lecturer in Music.
Tsun Y. Lui, Lecturer in Music.
Shirley L. Marcus, B.M., Lecturer in Music.
Theodore Norman, Lecturer in Music.
Michael R. O’Donovan, Lecturer in Music.
Nils Oliver, M.M., Lecturer in Music.
Barbara R. Patton, B.A., Lecturer in Music.
Stanley E. Plummer, Lecturer in Music.
David Raksin, B.M., Lecturer in Music.
Sven H. Rehar, M.A., Lecturer in Music.
Donald J. Staples, B.A., Lecturer in Music.
Sheridon W. Stokes, Lecturer in Music.
Paul O. W. Tanner, M.A., Lecturer in Music.
Satoshi Togi, Lecturer in Music.
Alexander Trier, Lecturer in Music.
Aube Tzervo, B.M., Senior Lecturer in Music.
Allan Vogel, M.M.A., Lecturer in Music.
Donn E. Weiss, M.M., Senior Lecturer in Music.
Erwin Windward, B.A., Lecturer in Music.
Ikuko Yuge, Lecturer in Music.
Paul Zibitz, M.M., Lecturer in Music.

Requirements for Entering Music Students

All applicants for admission are required to pass an audition in their principal performing medium.

Students planning to complete a major in Music, whether or not they have taken courses elsewhere, are required to pass a piano skills test. Aptitude and achievement tests are required for enrollment in Music 17A, Theory of Music. These examinations are administered during registration week only; dates are published in the Schedule of Classes. Students with exceptional ability and achievement are placed into the sequence Music 17A-17F by examination. Further information may be obtained from the Counselors’ Office in the Department of Music.

General Requirements

All Music majors must enroll in one performance organization (90A-90N, 91A-912) each quarter in residence and must participate in a minimum of two different organizations, one of which must be from Music 90A-90H or 91A-912, over the course of their stay at UCLA.

Preparation for the Major

Music 17A-17F, 26A-26B-26C, two courses from 60A-65. Music majors must take French, German, Italian or Spanish to fulfill the College of Fine Arts language requirement. Students who plan to specialize in historical or systematic musicology are urged to take six quarters, or the equivalent, of German.

The Major

A minimum of 10 courses in upper division, including 105 or 107A, 126A-126B-126C; five courses selected from one of the specializations listed below and one course free elective for all areas except music education.


(6) Systematic Musicology: Five courses from the following list, taken on the advice and with the approval of the undergraduate advisor in systematic musicology: courses 103A, 103B, 108, 139, one course from 140A, 140B, 140C, 149, 184, 187, 199 and Anthropology 133R.
Lower Division Courses

1A-1B. Fundamentals of Music. (Formerly numbered 1.) Lecture, three hours; laboratory, two hours. Prerequisite: Music 1B. 1A or consent of instructor.

Music 1A: General introduction to music, with emphasis on vocal music, and harmonization of simple melodies. Music 1B: diatonic harmony; four-part writing, including inversions, 7ths, secondary dominants and modulation; orientation toward composition of simple analysis; advanced sight-singing and ear training.

Ms. Karp, Mrs. Patton

2A-2B. Introduction to the Literature of Music. (Formerly numbered 2A-2B-2C.) Lecture, four hours; laboratory, one hour. Prerequisite: designated for the non-Music major; 2A surveys the technical and formal principles of music literature through the mid-eighteenth century; 2B surveys music literature from the mid-eighteenth century to the present. The Staff

4A-F. Basic Musicianship (1/4 course each). Laboratory, three hours. Class instruction in elementary ear training and keyboard skills. Ms. Sheffield

5A-5B-SC. Fundamentals of Sound and Music of the World (1/4 course each). Prerequisite: consent of instructor. The course is designed to help entering students gain entrée into the modern study of source (pitch, tone quality); tuning systems; modes and scales; harmony and polyphony, rhythm and meter; notational systems; relationships of music to culture. Laboratory: ear training and keyboard. Mr. Draper, Mr. Hutchinson

6GA-6GB. Graduate Review of Music History and Analysis (No credit). Lecture, two hours. Prerequisite: graduate status. This course is designed to help entering graduate students remedy entrance deficiencies. Clearance of deficiencies will be by examination. The course may be repeated and will displace 2 units on the Study List. Mr. Cole

6G. Graduate Piano Sight-Reading (No credit). Laboratory, two hours. Prerequisite: graduate status. This course is designed to help entering graduate students remedy entrance deficiencies. Clearance of deficiencies will be by examination. The course may be repeated and will displace 1 unit on the Study List. Ms. Sheffield

10. Computer Assisted Sight-Singing Laboratory (1/4 course). Three hours weekly, including one laboratory hour. Prerequisites: aptitude achievement and the piano skills tests. Series must be taken concurrently with 17D. Introduction to two- and three-part species counterpoint; will include written exercises and analysis. The Staff

17A-17F. Theory of Music. Eight hours weekly, including four laboratory hours. Prerequisites: aptitude achievement and the piano skills tests. Series must be taken in order (A, B, C, D, E, F). An integrated study of theoretical and practical techniques. First year: harmony through modulation and total chromaticism; stylistic counterpoint including imitation and invention; basic instrumentation; advanced keyboard skills; dictation and sight-singing of modulating melodies. The Staff

18A-18B-18C. Keyboard Techniques (1/4 course each). Two hours weekly. Prerequisites: courses 17A-17B-17C; 18A is prerequisite to 18B; 18B is prerequisite to 18C. This course is an intensive workshop in the development of individual keyboard skills and is designed to supplement the development of keyboard facility beyond 17C. Techniques of figured bass, score reading, transposition, and keyboard harmony will be stressed. Ms. Karp

19. Instrumentation (1/4 course). Two hours weekly. Prerequisite: two years of music theory. Not open to students who have received credit for courses 17A-17F. The study of ranges and transpositions of all orchestral instruments; instrumental characteristics, exercises in orchestration, and orchestral analysis.

The Staff

26A-26B-26C. History and Literature of Music I. Three hours weekly, including one laboratory hour. Prerequisite: designated for the non-Music major; 26A is prerequisite to 26B; 26B is prerequisite to 26C. The history and literature of music from the beginning to the Christian era to 1750, with emphasis upon analysis of representative works of each style period. Materials selected will illustrate the history of style and changing techniques of composition.

The Staff

60-65. Applied Study of Music Literature. For Music majors only (all lower division majors and minors not in the applied specialization). May be repeated for credit. Units will be distributed in the basis of one unit each for Fall and Winter Quarters and 2 units for Spring Quarter. Grades will be assigned by the applied instructor in Fall and Winter and by jury examination in Spring. Private instruction of one hour per week. All students must perform in a practicum once during the academic year.

Strings: 60AF-60AW-60AS. Violin; 60BF-60BW-60BS. Viola; 60CF-60CW-60CS. Cello; 60DF-60DW-60DS. Double Bass. Four: 60FF-60FW-60FS. Classical Guitar; 60GF-60GW-60GS. Viola da gamba; 60KF-60KW-60KS. Lute.


Percussion: 63F-63S-63S. Percussion.

Keyboard: 64FA-64FW-64AS. Piano; 64GFA-64GFW-64GS. Organ; 64HF-64HFW-64HS. Harpsichord.


80A-80N. Performance Organizations (1/4 course each). For non-Music majors only (courses 90A-90N are for the Music major). Three hours weekly. Prerequisite: audition. May be repeated for credit.

80A. A Cappella Choir; 80B. University Chorus; 80C. Men’s Chorus; 80D. Women’s Chorus; 80E. Symphony Workshop; 80F. Symphony Orchestra; 80G. Concert Band; 80H. College Band; 80J. Men’s Glee Club; 80K. Women’s Glee Club; 80L. Musical Comedy Workshop; 80M. Marching and Vari-}

Upper Division Courses

100A-100B-100C. Music in American Education (1 course each). Lecture, three hours; laboratory, one hour. Prerequisite: Music 100A or equivalent. May be repeated for credit. For non-Music majors only (courses 26C, 193, 195. 110A is prerequisite to 100B; 111A is prerequisite to 100C. 100A is not prerequisite to 100B; 100B is not prerequisite to 100C. A critical study of principles and practices in music education, historical and current, at elementary and secondary levels. 100A. General Music; 100B. Choral Music; 100C. Instrumental Music. 100A-100B-100C may be taken in any order.

101. Keyboard Harmony and Score Reading. Four hours weekly. Prerequisites: courses 17A-17F. Emphasizes the reading of figured bass, sequences, modulations in the harmonic vocabulary of the 18th and 19th centuries. Reading at the piano of multistaff notation, the various C clefs, and parts for transposing instruments; chamber music and simple orchestral scores.

Mr. Des Marais

103A-103B. Advanced Theory. Three hours weekly. Prerequisites: courses 17A-17F. 103A or consent of instructor is prerequisite to 103B. Techniques of tonal coherence studied through analysis and compositional exercises in the styles of given periods.

104A-104B. Advanced Counterpoint. Three hours weekly. Prerequisites: courses 17A-17F. 104A or consent of instructor is prerequisite to 104B. Comparative contrapuntal practices and forms from all periods studied through analysis and compositional exercises in the styles of the given periods.

Mr. Reale

105. Introduction to Composition. Three hours weekly. Prerequisites: courses 17A-17F. This course is intended for Music majors whose specializations are in areas other than composition. The nature of the course 105 will be decided by the Composition organization per quarter. Music majors may enroll in only one perfor-}

106A-106B. Advanced Orchestration. Three hours weekly. Prerequisites: courses 17A-17F. Course 106A is prerequisite to 106B. 106A is for the Music major; 106B is for students in the smaller forms, including style composition and literature of music and practice in orchestration and orchestral analysis. The Staff

91A-91Z. Ethnomusicology Performance Organizations (No credit). For Music majors only (courses 91A-91Z are for the non-Music major). Three hours weekly. Prerequisite: consent of instructor. May be repeated for credit. For non-Music majors only (courses 91A-91Z are for the non-Music major). Three hours weekly. Prerequisite: consent of instructor. May be repeated for credit. For non-Music majors only (courses 91A-91Z are for the non-Music major).


109A-109B-109C. Composition for Motion Pictures and Television (1 course each). Two hours weekly. Prerequisites: courses 17A-17F or consent of instructor. 109A is prerequisite to 109B; 109B is prerequisite to 109C. Composition of music for the dramatic and documentary film in cinema and television. Techniques used in recording and editing.
110A-110B. Study and Conducting of Choral Literature (1/2 course each). Three hours weekly. Prerequisites: courses 17A-17F, 26A-26B-26C. 110A is prerequisite to 110B. The theory and practice of conducting as related to the study of choral works from the Renaissance to the present day. 111B: Conducting fundamentals including basic skills, techniques, analysis and repertoire. 110B: Stylistic interpretation of music literature. Mr. Weiss

111A-111B. Study and Conducting of Instrumental Literature (1/2 course each). Three hours weekly. Prerequisites: courses 17A-17F, 26A-26B-26C. 111A is prerequisite to 111B. The theory and practice of conducting as related to the study of instrumental works from the Renaissance to the present day. 111B: Conducting fundamentals including basic skills, techniques, analysis and repertoire. 111B: Stylistic interpretation of music literature. Mr. James; Mr. Westbrook

112A-112B. Practical Scoring. Four hours weekly. Prerequisites: courses 17A-17F, 26A-26B-26C and consent of instructor. A study in practical scoring in scoring for small and large ensembles at various educational levels. 112A: Band Scoring; 112B: Choral Scoring. Mr. James; Mr. Weiss

113A-113B. Music Literature for Children. Four hours weekly, including one laboratory hour. Prerequisites: courses 1, 2A or consent of instructor. 113A is not prerequisite to 113B. Designed for the non-Music major, particularly the elementary education student. A study of music literature as related to the public school programs. 113A: Emphasis on listening analysis, movement, and improvisation. 113B: Emphasis on performance, music reading, and folk instruments. Mr. Gerow; Ms. Hooper

115A-115E. Study of Instrumental and Vocal Techniques per course. Three hours weekly, including one laboratory hour. Prerequisites: courses 17A-17F and 26A-26B-26C. 115A is prerequisite to 115B. Emphasis on practical problems in performance in performance. 115B-115E. Technique and literature. Three hours weekly, including two laboratory hours. Prerequisites: course 115A or consent of instructor. A study of representative styles. 115B is not open for credit to those who have had former course 115A.

116. Advanced Study and Conducting of Orchestral Literature (1/2 course). Three hours weekly. Prerequisites: courses 111A-111B or consent of instructor. Detailed investigation of musical styles of orchestral literature, performance practices and rehearsal techniques. Preparation by student to conduct an established student chamber ensemble.

119A-119B-119C. Advanced Study and Conducting of Choral Literature (1/2 course each). Three hours weekly. Prerequisites: courses 110A-110B. 119A is prerequisite to 119B. Advanced theory and practice of conducting; the study of representative choral works from the conductor’s viewpoint.

119D. Music of America. Four hours weekly, including one laboratory hour. Prerequisite: course 119A or consent of instructor. A survey of American music from colonial times to the present. Mr. Stevenson

131A-131B. Music of Hispanic America. Four hours weekly. Prerequisite: consent of instructor. 131A is not prerequisite to 131B. Survey of art music including attention to ethnic developments and Peninsular background. 131A. Mexico; Central America and the Caribbean islands; 131B. Hispanic South America. Mr. Stevenson

132A-132B. Development of Jazz. Four hours weekly, including one laboratory hour. Prerequisite: course 2A or consent of instructor. Course 132A is prerequisite to 132B. An introduction to the historical background and its development in the United States. The Staff

133. Bach. Four hours weekly, including two laboratory hours. The life and works of Johann Sebastian Bach. Mr. Harlow; Staff

134. Beethoven. Four hours weekly, including two laboratory hours. The life and works of Ludwig van Beethoven. Mr. Reaney; Mr. Winter

135A-135B-135C. History of the Opera. Five hours weekly, including one laboratory hour. 135A. Opera of the Baroque and Classic Periods; 135B. Opera of the Romantic Period; 135C. Opera of the Twentieth Century. Mr. Bradshaw; Mr. Cole

137A-137B. Psychology of Music. Four hours weekly. 137A. An introduction to the psychology of music; historical background and the broad field of study to include musical appreciation, perception, tests and measurements, and modes of musical behavior. 137B. Prerequisites: courses 17A-17B-17C, 26A-26B-26C or consent of instructor. A study of the psychological factors and problems which flow from the points of view of the listener, performer, and composer. Ms. Schradon

138. Aesthetics of Music. Three hours weekly. Recommended for the non-Music major. An historical survey of musical aesthetics thought and practice; selected readings and musical examples. Mr. Schradon

139. History and Literature of Church Music. Four hours weekly. Prerequisite: course 2A or consent of instructor. A study of the forms and liturgies of western church music. Mr. Harrell

140A-140B-140C. Musical Cultures of the World. Four hours weekly. Prerequisite: consent of instructor. 140A is not prerequisite to 140B, 140B is not prerequisite to 140C. A survey of the musical cultures of the world (excluding western art music), the role of music in national and social life and its relation to other arts; consideration will also be given to scale structure, instruments, musical forms and performance standards. The Staff

141. Survey of Music in Japan. Three hours weekly. A survey of the main genres of Japanese traditional music, including Gagaku, Buddhist chant, Biwa music, Koto music, Shamisen music, and the music used in various theatrical forms. Mr. Harrell

142A-142B. Music of the Balkans. Five hours weekly, including two laboratory hours. Prerequisites: courses 140A-140B-140C or consent of instructor. 142A is prerequisite to 142B. 142A surveys the folk music of Bulgaria, including a study of eastern and western elements; performance on representative instruments and in traditional and instrumental styles of other Balkan countries, with emphasis on Yugoslavia. (Courses 142A-142B are not open to those students who have had former course 142.)

143A-143B. Music of Africa. Five hours weekly, including two laboratory hours. Prerequisites: courses 140A-140B-140C or consent of instructor. Course 143A is prerequisite to 143B. An investigation of the historical aspects, social functions and relationships of music to other arts in selected areas of Africa. Ms. Dje Dje, Mr. Nketa

144. American Popular Music. Five hours weekly, including two laboratory hours. Prerequisite: course 1 or its equivalent is recommended. A survey of the history and characteristics of American popular music and its relationship to other arts. Mr. Morton

145. History of Chinese Opera. Five hours weekly. Prerequisite: consent of instructor. A survey of dramatic elements in Chinese operas, incorporating singing, dance, and acrobatics. Emphasis on traditional and modern Peking opera and its relation to Cantonese and other regional styles. Mr. Lui

146A-146B-146C. Studies in Chinese Instrumental Music. Four hours weekly, including one laboratory hour. Prerequisite: consent of instructor. 146A is not prerequisite to 146B; 146B is not prerequisite to 146C. Course 146A is prerequisite to 146B. A comprehensive study of Chinese musical instruments; their construction, classification, and use in the context of Chinese society. 146C. A study of the rules of improvisation, particularly as related to the Shanghai style, as realized on the Pi Pa, Ti, Er Hu, Su Shien, Shao, and related instruments. Mr. Lui

147A-147B. Music of China. Five hours weekly, including two laboratory hours. Prerequisites: courses 140A-140B-140C or consent of instructor. 147A is prerequisite to 147B. 147A. History and theory of the music of China, including a survey of various provinces. Instrumental techniques. 147B. Introduction to various notational systems. Analysis of representative styles. 147A is not open for credit to students who have credit for former course 147.

148. Folk Music of South Asia. Prerequisite: consent of instructor. An illustrated survey of some of the regional genres, styles, and musical instruments found in India and Pakistan, with special reference to the religious, social, economic, and cultural context of their occurrence. Mr. Jairazbey

149. The Anthropology of Music. A cross-cultural examination of music in the context of social behavior, and how musical patterns reflect patterns exhibited in other social systems, including economy, family, religious and social structure. Mr. Draper

151A-151B. History of Musical Performance Practices. Four hours weekly. Prerequisites: courses 17A-17F, 26A-26B-26C. A general survey of musical interpretation and re-creation from the pre-classical period to the present date of stylistic authenticity. 151A. Medieval through Baroque. 151B. Classical through 20th Century. Not open for credit to those who have had former course 151.

152. Survey of Music in India. Four hours weekly. A consideration of the main music genres in India, with particular reference to the religious, sociocultural and historical background of the country. Mr. Jairazbey

153A-153B-153C. Music of the American Indians. Four hours weekly. American Indian music will be studied within the broader context of styles, cultural values, and sources. Films, recordings, lectures, and limited group singing and dancing will relate the music to the culture producing it. 153A. Central and Eastern, California-Yuman, Great Basin, and Northwest Coast areas; 153B. Music of the Albasanbas, Pueblo, Plains, and modern Pan-Indian trends; 153C. Sociology of American Indian music with special reference to music in modern environments. Oral traditions, language and technological advances have affected music of various tribes. Mr. Draper, Miss Heth

154A-154B-154C. The Afro-American Musical Heritage. (Same as Folklore M154A-M154B.) Four hours weekly. Prerequisite: course 1 or consent of instructor. M154A is prerequisite to M154B. A study of Afro-American rhythm, dance, music, field hollers, work songs, spirituals, and jazz; the relationship of music between African and Afro-Brazilian musical traditions. Ms. Dje Dje

156A-156B. Techniques of Electronic Music. (Formerly numbered 156.) Prerequisites: course 107A or equivalent and consent of instructor. 156A is not open for credit to students who have credit for former course 156. 156A is prerequisite to 156B. Manipulation of analog synthesizers and auxiliary equipment, tape techniques, and realization of original compositional materials. Mr. Ashforth

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157. Music of Brazil. Four hours weekly. Prerequisite: consent of instructor and some knowledge of Portuguese. Historical and artistic music of Brazil with some reference to Portuguese antecedents.

Mr. Stevenson

158. New Orleans Jazz. Three hours weekly. Major black and creole figures in the origin and development of jazz in New Orleans from 1769 to the mid-1970s. An in-depth survey of familiar and unfamiliar styles through recorded music, local oral traditions, and contemporary jazz interpretation.

Mr. Ashforth

159. The Development of Rock. Four hours weekly. Prerequisite: consent of instructor. The history of rock from 1890 to today with emphasis on the 1960s. An in-depth survey of stylistic trends illustrated by pertinent examples and accompanied by extensive musical analysis.

Mr. Stevenson

160-165. Applied Study of Music Literature for the Performance Specialist. Limited to upper division Music majors who have been accepted by audition into the applied specialization. May be repeated for credit. Each will be offered once during their junior year and will be required to present a full recital in their senior year.

Weeks:

- 161BF-161BW-161BS: Flute; 161CF-161CW-161CS: Clarinet; 161DF-161DW-161DS: Bassoon; 161EF-161EW-161ES: Saxophone.
- 165BF-165BW-165CS: Voice.

175. Chamber Ensembles (2) course. Two hours weekly. Prerequisite: audition. Students must be at the advanced level of their instrument to participate in the course. May be repeated for credit. Students may not enroll in more than two ensembles per quarter and may receive credit for a maximum of 12 units toward the degree. Applied study of the performance practices of literature appropriate to the ensemble.

The Staff

M180. Analytical Approaches to Folk Music. (Same as Folklore M180.) Four hours weekly. Prerequisite: courses 5A-5BC or consent of instructor. An intensive study of the methods and techniques necessary to the understanding of Western folk music.

Mr. Porter

M181. Folk Music of Central and Western Europe. (Same as Folklore M181.) Four hours weekly. Prerequisite: courses 5A-5BC or 140A or 140B or 140C or consent of instructor. An analysis of the musical styles of Europe, excluding the Balkans and Soviet Russia. Particular attention will be paid to the comparative study of European folk music.

Mr. Porter

184. Experimental Research in Music. Three hours weekly. Prerequisite: courses 17A-17F, 26A-26B-26C or consent of instructor. Theories and processes in various modes of musical experiment: physical, perceptual, psychological, pedagogical, quantitatively, and sociological. Procedures recommended for Music majors in all specializations.

Ms. Murray

185. Historical and Philosophical Foundations of Music Education. Three hours weekly. Prerequisite: completion of the undergraduate specialization in music education. The development of music education in the United States according to established schools of thought.

Mr. Schwadron

187. Problems in Musical Aesthetics. Three hours weekly. Prerequisite: courses 17A-17F, 26A-26B-26C. Critical approach to musical problems of aesthetic analysis, description, values, theories; including both Western and non-Western considerations. Recommended for students in all specializations of music.

Mr. Schwadron


The Staff

Prosemocrats

190A-190B. Proseminar in Ethnomusicology. Three hours weekly. Prerequisites: courses 140A-140B. Three hours weekly. Prerequisite: course 17A. A detailed study of music education in the United States according to established schools of thought.

Mr. Nekia, Mr. Racy

193. Proseminar in Music Education (3 course). Two hours weekly. Prerequisites: course 140A and phonology. Course 17A must be taken concurrently with 193. A historical and philosophical introduction to the field.

Mr. Schwadron

195. Field Studies in Music Education (3 course). Four hours weekly, including two laboratory hours. Prerequisite: course 193. Discussion and observation of current practices.

Ms. Hooper

199. Special Studies in Music. Prerequisites: senior standing, consent of instructor and advisor and a 3.0 grade-point average. Individual studies in music resulting in a research project. May be repeated to a maximum of eight units.

The Staff

Graduate Courses

For complete descriptions of graduate-level courses offered by this department, please consult the UCLA Graduate Catalog.

Related Upper Division Courses in Other Departments

Dance 154. Music as Dance Accompaniment.
Folklore M106. Anglo-American Folk Song.
M123B. Finnish Folksong and Ballad.
M188. African Folksongs and Dance.
M189. The Symphony. Four hours weekly, including one laboratory hour. A survey of symphonic literature from Haydn through 20th century with special emphasis upon the current symphonic programs of the Los Angeles Philharmonic Orchestra and other performing groups in the Los Angeles area.

Prosemocrats

190A-190B. Proseminar in Ethnomusicology. Three hours weekly. Prerequisite: courses 140A-140B. Three hours weekly. Prerequisite: course 17A. A detailed study of music education in the United States according to established schools of thought.

Mr. Nekia, Mr. Racy

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Naval Science

(Department Office: 123 Men's Gym)

George I. Thompson, M.S., Professor of Naval Science (Chairman of the Department).
Dale E. Baugh, M.S., Lieutenant Commander, U.S. Navy, Assistant Professor of Naval Science.
Ronald F. Melampy, M.S., Associate Professor of Naval Science.
Edward P. Messmer, M.A., Lieutenant, U.S. Navy, Assistant Professor of Naval Science.
Kathryn L. Kane, M.A., Lieutenant, U.S. Navy, Adjunct Professor of Naval Science.

In June 1936, by action of the Secretary of the Navy and the Regents of the University of California, a Naval Reserve Officers' Training Corps (NROTC) was established on the Los Angeles campus. The primary objective of the NROTC is to provide an education at civil institutions which will qualify selected students for regular or reserve commissions in the U.S. Navy or Marine Corps as elected by the student.

The Department of Naval Science offers several programs:

1. Naval ROTC College Program: This is a four-year, nonscholarship program open to physically qualified men and women between the ages of 17 and 21 who are U.S. citizens. Students receive a $100 per month stipend in their junior and senior years and complete one summer training cruise after their third year. Upon graduation, the student will be commissioned as Ensign, U.S. Naval Reserve or Second Lieutenant, U.S. Marine Corps Reserve. A three-year active duty obligation is incurred. This program offers a great deal of flexibility to suit individual needs. Scholarships may be offered to highly qualified College Program students.

2. NROTC Two-Year Program: This program is open to men and women who will be entering their junior year of undergraduate study. Applications are sought from UCLA students as well as incoming junior college transferees. After a six-week summer training period at the Naval Science Institute, students enroll in the NROTC Unit as juniors, with the same obligations and privileges as in the College Program described above. U.S. citizenship is required and the age limit is 27 1/2 years at the time of graduation. Applicants should contact the Department of Naval Science no later than April 1st of their sophomore year of study.

3. Two-Year Scholarships: This program is open to academically and physically qualified students in their second year of undergraduate study, who have had some background in college physics and calculus. U.S. citizenship is required. As with the Two-Year Program described above, candidates will attend a summer Naval Science Institute before their junior year. They will receive full tuition, fees, book expense and $100 per month during their last two years. Upon graduation, they will receive Regular Navy commissions and enter nuclear power training or other Navy fields as Ensigns. Applications should be made by April 1st, usually in the sophomore year.

4. NROTC Scholarship Program: This is a nationwide competition open to physically qualified men and women between the ages of 17 and 21. U.S. citizenship is required. High school seniors and students enrolled in the NROTC College Program are eligible to apply. Successful applicants receive $100 per month for four years, plus full payment for tuition, fees
and book expenses. Three summer training cruises are required. Upon graduation, the student receives a commission in the Regular Navy or Marine Corps, with a four-year active duty obligation. December 1st is the application deadline for Fall admissions.

Naval science courses may be taken as free elective courses and applied toward the total course requirement of the student's major department. It is important to contact the Naval Science Department and the cognizant College or department to determine the number of free elective courses for which naval science courses may be substituted.

For further information on program requirements, etc., contact the Professor of Naval Science, 123 Men's Gym (825-9075).

Freshman Year


1B. Naval Ship Systems I. An introduction to the principles of ship hull and superstructure design. The concepts of ship structural integrity. stability and buoyancy are examined in detail. Basic thermodynamic principles inherent in ship power generation(s) propulsion and salt water distillation systems are analyzed. Mr. Baugh

Sophomore Year

2A. Seapower and Maritime Affairs (1/4 course). A conceptual study of seapower, emphasizing the historical development of naval and commercial power. Seapower is examined in relation to economic, political, cultural and historical strengths, focusing on current abilities of specific nations to utilize the oceans to attain national objectives. Mr. Melampy

2B. Naval Ship Systems II. A study of naval weapon systems with emphasis on target designation and acquisition, methods of solving fire control problems and target identification systems. Analysis of transfer and feedback functions inherent in weapon systems. Infrared, radar and sonar principles. Mr. Baugh

Junior Year

101A. Navigation I. A study of principles of piloting, rules of the road, shiphandling and basic concepts of multiple ship formations in ocean transit. Course includes in-depth discussion of problems associated with high seas and inland water, applying to small craft and supertankers alike. Mr. Messmer

101B. Navigation II. Prerequisite: course 101A or consent of instructor. A continuation of Navigation I to include a detailed study of electronic and celestial navigation employed in the determination of a ship's position at sea. The course includes spherical trigonometry, mathematical analysis, sextant sights and the use of navigational aids. Mr. Messmer

102. Evolution of Warfare. A study of the evolution of warfare including historical and comparative considerations of the influence that leadership, political, economic, and sociological and technological developments have had on warfare, and the influence they will continue to exert in the age of limited warfare. Mr. Carlson

Senior Year

102B. Naval Leadership and Management I. An examination of both current and classical leadership and management theories and their application to the military environment. Various aspects of the leadership process are examined in detail including interpersonal communication, counseling theory, moral and professional ethics, conflict resolution, and management of change. The unique leadership problems created by racism, sexism, alcoholism, and drug abuse are also discussed. Ms. Kane (W)

102C. Naval Leadership and Management II. Prerequisite: course 102B. A continuation of Naval Science 102B which examines current leadership and management utilized by the U.S. Navy. Areas covered include human resources management, personnel management, material management, and performance and career evaluation. Ms. Kane (W)

103. Evolution of Warfare. A study of the evolution of warfare including historical and comparative consideration of the influence that leadership, political, economic, and sociological and technological development factors have had on warfare, and the influence they will continue to exert in the age of limited warfare. Mr. Carlson

104. Amphibious Operations. A study of the art of amphibious operations including the historical development of techniques used to project military power from sea to land. The evolution of amphibious doctrine and techniques is examined through study of the U.S. landings during World War II, the Korean Conflict and the Vietnam War. Mr. Carlson

*Courses to be taken by candidates for commissions in the Marine Corps or Marine Corps Reserve in lieu of courses 101A, 101B, 102B, 102C.

Near Eastern Languages and Cultures

(Department Office: 376 Kinsey Hall)

Amin Banani, Ph.D., Professor of Persian and History
Arnold Band, Ph.D., Professor of Hebrew
Andras Bodrogkligeti, Ph.D., Professor of Turkic and Iranian (Chairman of the Department)
Seeger A. Bonebakker, Ph.D., Professor of Arabic
Giorgio Buccellati, Ph.D., Professor of Ancient Near East and History
Herbert A. Davidson, Ph.D., Professor of Hebrew
Ismail Poonawala, Ph.D., Professor of Arabic
Avedis K. Sanjian, Ph.D., Professor of Armenian
Hanns-Peter Schmidt, Ph.D., Professor of Indo-Iranian
Stanislaw Segert, Ph.D., Professor of Biblical Studies and Northwest Semitics
Wolf Leslau, Doctor-ès-Lettres, Emeritus Professor of Hebrew and Semitic Linguistics
Moshe Perlmann, Ph.D., Emeritus Professor of Arabic
Claude-Francois Audet, Ph.D., Associate Professor of Arabic
Elizabeth Carter, Ph.D., Associate Professor of Near Eastern Archaeology
John Callender, Ph.D., Associate Professor of Egyptology
Thomas Penchoen, Ph.D., Associate Professor of Berber
Yona Sabar, Ph.D., Associate Professor of Hebrew
Lev Hakak, Ph.D., Assistant Professor of Hebrew
Deborah Lipstadt, Ph.D., Assistant Professor of Jewish Studies
Steven West, Ph.D., Assistant Professor of Turkish

Shimeon Brisman, Lecturer in Hebrew
David L. Lieber, D.H.L., Lecturer in Hebrew
Stanford Shaw, Ph.D., Professor of History

Bachelor of Arts Degree

Department Programs: The department offers the Bachelor of Arts degree in four fields: (1) Ancient Near Eastern Civilizations, (2) Arabic, (3) Hebrew and (4) Jewish Studies. In each of these fields the student must meet the prerequisites and take the courses prescribed for majors. Each student is assigned an advisor who will assist the student in devising a plan of study developed around his interests.

The Major in Ancient Near Eastern Civilizations

There are four options for a major in Ancient Near Eastern Civilizations: (1) Mesopotamia, (2) Egypt, (3) Syria-Palestine and (4) Biblical Studies. The prerequisites for options 1 and 2 (Mesopotamia and Egypt) are German 1, 2; the prerequisites for options 3 and 4 (Syria-Palestine and Biblical Studies) are Greek 1, 2, Hebrew 1A-1B-1C, 102A-102B-102C. Majors in all four fields will be expected to continue their study of German or Greek beyond the prerequisite levels. Also, majors in all four options are required to take 14 quarter courses selected in consultation with the program advisor.

Majors selecting options 1, 2 and 3 are required to take four language courses as follows: option 1 (Mesopotamia): Semitics 140A-140B, 141, 142; option 2 (Egypt): Ancient Near East 120A-120B-120C, 121A; option 3 (Syria-Palestine): Semitics 130 and three quarters of Hebrew 120. The remaining 10 courses for all three options are to be selected from the following list of courses: three literature courses from Ancient Near East 150A, 150B, 150C; Jewish Studies 150A; three courses in history and religion from Ancient Near East 130, 170, 171, 172; History 104, 105A, 105B, 193A, 193D, 203, Iranian 169, 170; three courses in archaeology and art from Ancient Near East 160A, 160B, 161A, 161B, 161C, 162, Art 102; one course in research methodology (such as Anthropology 115 or 116 or Linguistics 120) to be taken preferably in another department with the consent of the advisor.

Majors selecting option 4 (Biblical Studies) in Ancient Near Eastern Civilizations are required to take 14 quarter courses as follows: three quarters of Hebrew 120; Ancient Near East 150C, 162, 170; English 108B; Greek 130; Jewish studies 150A; History 191A; Semitics 130. The remaining three courses may be selected from the following: Ancient Near East 130, 150A, 150B, 160A, 160B, 171, 172, Art 102, 105A, Classics 166B; Greek 200C; History 104, 105A, 105B, 193D, Iranian 169, 170.
The Major in Arabic
Prerequisites are Arabic 1A-1B-1C, 150A-150B. The student is required to take 14 quarter courses as follows: Arabic 102A-102B-102C, 103A-103B-103C, 130A-130B-130C; three courses of Arabic 111A-111B-111C or 140A-140B-140C; History 106A, 106B.

The Major in Hebrew
Prerequisites are Hebrew 1A-1B-1C, 102A-102B-102C, Jewish Studies 150A-150B or their equivalents. The student is required to take 16 quarter courses distributed as follows: Hebrew 103A-103B-103C; three quarters of Hebrew 120; two courses from Hebrew 130, 135; two courses from Hebrew 140, 160; Hebrew 190A-190B; two additional courses in Hebrew or Aramaic to be approved by the advisor; two quarter courses from History M191A, M191B, 192A, 192B.

The Major in Jewish Studies
Prerequisites are Hebrew 1A-1B-1C, History M191A-M191B or their equivalents. The student is required to take 16 quarter courses including: Hebrew 102A-102B-102C, 103A-103B-103C, Jewish Studies 150A-150B, 151A-151B, 199 (undergraduate thesis) and five other upper division courses. At least two of the five must be courses in the areas of Hebrew, Jewish history or Yiddish. The remaining three may be chosen either from those areas or from courses with Jewish content given in other departments and approved by the Jewish Studies advisor.

In addition to courses offered at UCLA a number of courses in Jewish studies offered at the University of Judaism are accepted by UCLA for concurrent enrollment credit. Additionally, an agreement between UCLA and the University of Judaism established a Joint Undergraduate Program of concurrent enrollment leading to an award of two degrees: Bachelor of Arts in Jewish Studies by the University of Judaism and Bachelor of Arts or Bachelor of Science by UCLA. A list of University of Judaism courses accepted for concurrent enrollment at UCLA, as well as general information concerning the Joint Program is available from the office of Admissions of the University of Judaism and the Division of Honors Office in UCLA’s College of Letters and Science.

Ancient Near East
(Akkadian, Aramaic, Phoenician and Ugaritic are listed under Semitics.)

Upper Division Courses
**120A-120B-120C. Elementary Ancient Egyptian.** Lecture, three hours; laboratory, two hours. Prerequisite: consent of instructor. Grammar and texts.
Mr. Callender

**121A-121B-121C. Intermediate Ancient Egyptian.** Three hours. Prerequisites: courses 120A-120B-120C. Readings in Ancient Egyptian literature.
Mr. Callender

**123A-123B. Coptic.** Three hours. Prerequisite: consent of instructor. An introduction to Coptic grammar and reading of Coptic texts. The quarters this course is offered vary from year to year. Check with the JTS.
Mr. Callender

**124. Middle Egyptian Technical Literature.** Prerequisite: course 121C. Reading of Middle Egyptian technical literature in hieroglyphic transcription. Included are medical, veterinary, mathematical, astronomical, and religious texts.
Mr. Callender

**130. Ancient Egyptian Religion.** Lecture, three hours. An introductory survey of various Ancient Egyptian religious beliefs and practices, their origin and development. Included will be discussions of religious political institutions such as divine kingship and pharaoh foundations.
Mr. Callender

**140A-140B. Elementary Sumerian.** Lecture, three hours. Prerequisites: Semitics 140A-140B. Elementary grammar and reading of royal inscriptions, letters and administrative texts from the Ur III period.

**145. Sumerian Literary Texts.** Lecture, three hours. Prerequisites: courses 140A-140B or consent of instructor. Reading and interpretation of selected Sumerian literary texts.
The Staff

**150A-150B-150C. Survey of Ancient Near Eastern Literatures in English.** Lecture, three hours. Courses 150A and 150B and 150C may be taken independently for credit. 150A, Mesopotamia; 150B, Egypt; 150C, Syria and Palestine. (Formerly numbered 181.)
Mr. Bucellari, Mr. Callender, Mr. Segert

**160A-160B. Introduction to Near Eastern Archaeology.** Lecture, three hours. Terminology, geography, principles, strategy of research, bibliography and a general survey of Near Eastern archaeology.
Ms. Carter

**161A-161B-161C. Archaeology of Mesopotamia.** Prerequisite: consent of instructor. Survey of the main archaeological periods in Mesopotamia with special emphasis on late prehistoric and early historical periods and with reference to neighboring cultural areas.
May be taken independently for credit.
Ms. Carter

162. Archaeology of Palestine. Lecture, three hours. A survey of the archaeology of Palestine and the Sinai Peninsula from the Paleolithic to the destruction of Jerusalem in 586 B.C. with emphasis on the geographic setting and relationships to the other cultures of the Near East.
The Staff

**163A-163B. Archaeology of Iran.** (Formerly numbered 163.) Lecture, three hours. Prerequisites: None. A lecture course designed to introduce undergraduate students to Iranian archaeology from prehistoric through Achaemenid times. 163A will focus on archaeological phases of Iran. 163B will cover the Archaeology of Elam, the Iron Age and the Achaemenid Empire. Students will be expected to write a term paper.
Mr. Callender, Mr. Segert

**164A-164B-164C. The Archaeology of the Historic Periods in Mesopotamia.** Prerequisites: History 105A-105B, Ancient Near East 161A-161B-161C or consent of instructor. Survey of the main archaeological periods in Mesopotamia with special emphasis on the historic periods and with reference to neighboring cultural areas. May be taken independently for credit.

**170. Introduction to Biblical Studies.** Lecture, two hours. The Bible (Old and New Testaments) as a book, Canon, text and versions. Linguistic, literary, historical and religious approaches to Biblical study. Survey of history of interpretation from antiquity to the present. Knowledge of original languages not required.
Mr. Sager

**171. Old Testament: Hebrew and Septuagint Texts.** Lecture, two hours. Prerequisites: Hebrew 102A-102B-102C, Greek 1, 2 or consent of instructor. Study of the Hebrew original and of the Greek version of the Old Testament books. Mr. Sager

199. Special Studies in the Ancient Near East (4 to 2 courses). Prerequisite: consent of instructor.
The Staff

Graduate Courses
For complete descriptions of graduate-level courses offered by this department, please consult the UCLA Graduate Catalog.

Related Upper Division Courses in Other Departments

Arabic

Lower Division Courses
**11A-1B-1C. Elementary Arabic.** Lecture, four hours; laboratory, two hours. Basic structure.
Miss Audebert

Upper Division Courses
**110A-110B-110C. Intermediate Arabic.** Four hours. Prerequisites: courses 1A-1B-1C or consent of instructor. Readings in both classical and modern Arabic, composition, conversation.
Miss Audebert

**110A-110B-110C. Advanced Arabic.** Four hours. Prerequisites: courses 102A-102B-102C or consent of instructor. Review of grammar, continued reading of literary works. Composition, conversation and a weekly lecture in Arabic.

**111A-111B-111C. Spoken Arabic.** Lecture, three hours; laboratory, three hours. Prerequisites: courses 102A-102B-102C. Introduction to one Arabic dialect with some comparison of the other dialects. May be repeated for credit with consent of instructor.
The Staff

112. Spoken Egyptian Arabic. Lecture, three hours; laboratory, two hours. Prerequisites: courses 111A-111B-111C or consent of instructor. This course will treat the syntactic and morphological structures of Spoken Egyptian Arabic in a more elaborate and in-depth fashion than first year spoken Arabic, which is on an elementary level. Excerpts of literary texts in colloquial Arabic (play, short stories, poetry) and folk literature will constitute the basic material for this course. Emphasis will be put on conversation, laboratory exercises. But this will not exclude the study of dialectology. Oral and written tests will be administered.
Miss Audebert

**113A-113B-113C. Spoken Iraqi Arabic.** Three hours. Prerequisites: courses 102A-102B-102C. Introduction to the contemporary Arabic dialect of Iraq. Phonology, morphology and syntax will be presented with emphasis on oral practice.
The Staff

**114A-114B-114C. Spoken Moroccan Arabic.** Lecture, three hours; laboratory, one hour. Introduction to the Spoken Arabic dialect of Morocco. Phonology, morphology and syntax will be presented. Emphasis will be on developing oral skills.
Mr. Pchenoon

**130A-130B-130C. Classical Arabic Texts.** Lecture, three hours. Prerequisites: courses 102A-102B-102C. Reading and interpretation of texts from classical Arabic literature: Koran, historiography, geography and genealogy.
Mr. Bonebakker

132A-132B-132C. Philosophical Texts. Three hours. Prerequisites: courses 102A-102B-102C or consent of instructor. A study of excerpts from the major works of medieval Arab philosophy. The Staff

**140A-140B-140C. Modern Arabic Texts.** Lecture, three hours. Prerequisites: courses 102A-102B-102C. Readings and interpretation of modern Arabic texts.
Miss Audebert
**141. Modern Arabic Literature.** Prerequisites: courses 140A-140B-140C or equivalent. Readings of selected texts representing the most important modern styles and trends. May be repeated for credit with consent of instructor. Miss Audubert

**150A-150B. Survey of Arabic Literature in English.** Lecture, three hours. Knowledge of Arabic is not required. Courses 150A and 150B may be taken independently for credit. Mr. Bonebakker

**199. Special Studies in Arabic (1/2 to 2 courses).** Prerequisite: consent of instructor. The Staff

Graduate Courses

For complete descriptions of graduate-level courses offered by this department, please consult the UCLA Graduate Catalog.

Related Upper Division Courses in Another Department

History 106A-106B-106C. Survey of the Middle East from 500 to Present.

**Armenian**

Upper Division Courses

**101A-101B-101C. Elementary Modern Armenian.** Four hours. Armenian grammar, conversation and exercises. The Staff

**102A-102B-102C. Intermediate Modern Armenian.** Four hours. Prerequisites: courses 101A-101B-101C or equivalent. Reading of selected texts, composition and conversation. The Staff

**103A-103B-103C. Advanced Modern Armenian.** Three hours. Prerequisites: courses 102A-102B-102C or equivalent. Readings in advanced modern Armenian texts. Mr. Sanjian

**130A-130B. Elementary Classical Armenian.** Three hours. Grammar of the Classical Armenian language and readings of selected texts. Mr. Sanjian

**131A-** **131B. Intermediate Classical Armenian.** Three hours. Prerequisites: courses 130A-130B or equivalent. Reading of selected texts. Mr. Sanjian

**132A-** **132B. Advanced Classical Armenian.** Three hours. Prerequisites: courses 131A-131B or equivalent. Readings in advanced classical Armenian texts. Mr. Sanjian

**150A-150B. Survey of Armenian Literature in English.** Three hours. Knowledge of Armenian is not required. Courses 150A and 150B may be taken independently for credit. Mr. Sanjian

**150A-160B. Armenian Literature of the 19th and 20th Centuries.** Three hours. Prerequisites: courses 102A-102B-102C or equivalent. Reading of texts and discussion of various genres of modern Armenian literature, within the context of the Armenian Cultural Renaissance. Mr. Sanjian

**199. Special Studies in Armenian Language and Literature (1/2 to 2 courses).** Prerequisite: consent of instructor. The Staff

Graduate Courses

For complete descriptions of graduate-level courses offered by this department, please consult the UCLA Graduate Catalog.

Related Upper Division Courses in Other Departments


113. The Caucasus under Russian and Soviet Rule

Indo-European Studies M150. Introduction to Indo-European Linguistics.

**Berber**

Upper Division Courses

**101A-101B-101C. Elementary Berber.** Lecture, three hours; laboratory, two hours. Development of oral proficiency and analysis of basic grammatical structure. Mr. Penchoen

**102A-102B-102C. Advanced Berber.** Prerequisites: courses 101A-101B-101C or consent of instructor. Advanced study of Berber. Regional and stylistic variants in folk literature. Mr. Penchoen

**120A-120B-120C. Introduction to Berber Literature.** Three hours. Prerequisites: courses 102A-102B-102C or consent of instructor. The development of Berber literary forms: systematic analysis of texts and a study of Berber writing systems. Mr. Penchoen

**130. The Berbers.** Examination of the main features of Berber societies and cultures with particular attention being given to social structures and institutions on the one hand, and to customs, values and beliefs on the other. The course will present a broad framework within which the study of particular aspects of Berber cultures may be fruitfully pursued. Mr. Penchoen

**199. Special Studies in Berber Languages (1/2 to 2 courses).** Prerequisite: consent of instructor. Study based on the requirements of the individual student. Mr. Penchoen

Related Upper Division Courses in Other Departments


**Caucasian Languages**

Upper Division Courses

**111A-111B-111C. Elementary Georgian.** Three hours. Prerequisite: consent of instructor. Script, grammar, simple reading in this main Caucasian language. Mr. Sanjian

**119. Special Studies in Caucasian Languages (1/2 to 2 courses).** Prerequisite: consent of instructor. The Staff

**Hebrew**

Lower Division Courses

**11A-1B-1C. Elementary Hebrew.** Lecture, three hours; laboratory, two hours. Structural principles of grammar. Students who have previous knowledge of reading and some vocabulary are advised to take courses 10A-10B-10C. Students with credit 10A will not receive credit for Hebrew 1A. Students with credit for 10B will not receive credit for 1B or 1C. The Staff

**10A-10B-10C. Accelerated Elementary Hebrew.** Open to students who wish to cover the equivalent of two years of college Hebrew in one academic year; for students who have previously studied the rudiments of Hebrew. Students with credit for Hebrew 1A will not receive credit for 10A. Students with credit for 10B will not receive credit for 1B or 1C. The Staff

**101A-101B-101C. Elementary Hebrew.** Lecture, five hours. Prerequisites: courses 1A-1B-1C or equivalent. Amplification of grammar; reading of vocalized texts from modern, Biblical, and Medieval/Rabbinic literature. Section I for students with strong grammatical background. Section II for students with strong conversational background. The two sections should be equal in both language skills by the end of Winter Quarter. Mr. Sabar

**110A-110B-110C. Advanced Hebrew.** Five hours. Prerequisites: courses 102A-102B-102C or equivalent. Reading of unvocalized texts, primarily modern literature. Mr. Hakak

**120A. Biblical Texts.** Three hours. Prerequisites: courses 102A-102B-102C or equivalent. Translations and analysis of Old Testament texts with special attention given to texts of primary literary and historical importance. May be repeated for credit. Mr. Lieber

**130B. Rabbinic Texts.** Lecture, three hours. Prerequisites: courses 103A-103B-103C or consent of instructor. Readings in Mishnah, Talmud, and/or Midrash. May be repeated for credit. Mr. Davidson

**135. Medieval Hebrew Texts.** Lecture, three hours. Prerequisites: courses 103A-103B-103C or consent of instructor. Readings in Medieval Hebrew Prose and Poetry. May be repeated for credit up to four times. Mr. Davidson

**140A. Modern Hebrew Poetry and Prose.** Lecture, three hours. Prerequisites: courses 103A-103B-103C and consent of instructor. A study of the major Hebrew writers of the past one hundred years: prose—Mendele, Ahad Ha'am, Agnon, Yizhar; poetry—Bialik, Tchenrichovsky, Greenberg, Shlonsky, Alterman, Amihai. May be repeated for credit. Mr. Hakak

**160. The Hebrew Essay.** Three hours. Prerequisites: courses 103A-103B-103C or consent of instructor. The Staff

**199A-199B. Survey of Hebrew Grammar.** Three hours. Prerequisites: courses 102A-102B-102C or equivalent of instructor. Descriptive and comparative study of the Hebrew phonology and morphology. Mr. Sabar

**199. Special Studies in Hebrew (1/2 to 2 courses).** Prerequisite: consent of instructor. The Staff

Graduate Courses

For complete descriptions of graduate-level courses offered by this department, please consult the UCLA Graduate Catalog.

**Iranian**

Lower Division Courses

10A-10B-10C. Persian Conversation (1/2 course each). Three hours. Prerequisite: consent of instructor. Systematic and structured conversation Persian. The Staff

Upper Division Courses

**101A-101B-101C. Elementary Persian.** Lecture, four hours; laboratory, two hours. The Staff

**102A-102B-102C. Intermediate Persian.** Lecture, three hours; laboratory, three hours. Prerequisites: courses 101A-101B-101C or equivalent. The Staff

**103A-103B-103C. Advanced Persian.** Lecture, three hours. Prerequisites: courses 102A-102B-102C or equivalent. Mr. Banani

**140. Contemporary Persian Belle Lettres.** Three hours. Prerequisites: courses 103A-103B-103C or equivalent and consent of instructor. A study of the major Persian poets and prose writers of the twentieth century: prose—Jamalzadeh, Hedayat, Chubuk, Al Ahmad, Sa'edi, Golestan; poetry—Nima, Shamlu, Farrokhzad, Akhavan. Mr. Banani

**199* *Contemporary Persian Analytical Prose.** Three hours. Prerequisites: courses 102A-102B-102C or equivalent and consent of instructor. A study of selected modern Persian analytical and expository prose texts with emphasis on social sciences, literary criticism and history. Mr. Banani

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Graduate Courses
For complete descriptions of graduate-level courses offered by this department, please consult the UCLA Graduate Catalog.

Turkish Languages

Upper Division Courses

**101A-101B. Elementary Turkish.** Five hours. Grammar, reading, conversation and elementary composition drills.  
Mr. West

**102A-102B. Intermediate Turkish.** Five hours. Prerequisites: courses 101A-101B or equivalent. Continuing study of grammar, reading, conversation and composition drills.  
Mr. West

**103A-103B. Advanced Turkish.** Five hours. Prerequisites: courses 102A-102B or equivalent. Reading in modern literature and social science texts; conversation and composition.  
Mr. West

**112A-112B-112C. Uzbek.** Three hours. Prerequisite: course 102A or consent of instructor. Grammar, composition drills, reading of literary and folkloric texts.  
Mr. Bodrogligeti

**114A-114B-114C. Bashkir.** Three hours. Prerequisite: course 102A or consent of instructor. Grammar, reading of literary and folkloric texts.  
Mr. Bodrogligeti

**116A-116B. Cultural History of the Turks.** Lecture, three hours. A survey of the cultural history of the Turks, as seen primarily through their literature, from their early history to the present.  
Mr. West

**118A-118B. Introduction to Turkic Studies.** Three hours. Prerequisite: consent of instructor. Obligatory for everyone in the Turkish program. Introduction to Turkic Philology and an ethnic and cultural survey of the Turkic people.  
Mr. Bodrogligeti

199. Special Studies in Turkic Languages (1/2 to 2 courses). Prerequisite: consent of instructor. The Staff

Graduate Courses
For complete descriptions of graduate-level courses offered by this department, please consult the UCLA Graduate Catalog.

Urdu

Upper Division Courses

**101A-101B-101C. Elementary Urdu.** Three hours. Prerequisite: consent of instructor. Elements of Urdu, the language of Pakistan.  
Mr. Bodrogligeti

**199. Special Studies in Urdu.** Prerequisite: consent of instructor. The Staff

Semitics

Upper Division Courses

**110. Neo-Aramaic.** Lecture, three hours. Grammar and reading of selected texts (folktales, homilies, songs) in the modern Aramaic dialects of the Jews and Christians of Kurdistan.  
Mr. Sabar

**130. Biblical Aramaic.** Lecture, three hours. Prerequisites: Hebrew 102A-102B or consent of instructor. Grammar of Biblical Aramaic and reading of texts.  
Mr. Segert

**140A-140B. Elementary Akkadian.** Lecture, three hours. Elementary grammar and reading of texts in standard Babylonian.  
Mr. Buccellati

**141. Modern Anti-Semitism.** Lecture, three hours. An examination of modern anti-Semitism from the 18th century to the present; a comparison of modern racist ideologies with pre-modern theories; case studies, e.g., The Dreyfus affair, the Beiliss Trial, the Holocaust; Jewish reactions to these phenomena.  
Ms. Lipstadt

**142. The History and Institutions of the State of Israel.** Lecture, three hours. A study of the social and cultural development of the State of Israel from its pre-state institutional structures to the present with emphasis upon major trends, personalities, and ideologies; and the state's position in the wider framework of modern Jewish history.  
Ms. Lipstadt

**150A-150B. Hebrew Literature in English.** Lecture, three hours. 150A and 150B may be taken independently for credit. 150B. Biblical and Apocryphal literature. 150B. Rabbinic and Medieval literature.  
Mr. Band, Mr. Davidson

**151A-151B. Modern Jewish Literature in English.** Lecture, three hours. 151A. Diaspora literature; 151B. Israeli literature. Both courses may be taken independently for credit.  
Mr. Band

190. Undergraduate Seminar in Jewish Studies. Three hours. Prerequisites: courses 101A-101B or equivalent. A survey of the Jewish community from the beginnings to the present; a comparison of modern racist ideologies with pre-modern theories; case studies, e.g., The Dreyfus affair, the Beiliss Trial, the Holocaust; Jewish reactions to these phenomena.  
Ms. Lipstadt

190A-190B. Introduction to Modern Jewish Studies. Three hours. Prerequisites: courses 101A-101B or equivalent. A study of the social and cultural development of the State of Israel from its pre-state institutional structures to the present with emphasis upon major trends, personalities, and ideologies; and the state's position in the wider framework of modern Jewish history.  
Ms. Lipstadt

140A. Survey of Persian Literature in English. Three hours. Knowledge of Persian not required. Courses 150A and 150B may be taken independently for credit.  
Mr. Banani

140B. Civilization of Pre-Islamic Iran. (Formerly Indo-European Studies 169.) A survey of Iranian culture from the beginnings through the Sassanian period.  
Mr. Schmidt

170. Religion in Ancient Iran. Lecture, four hours. History of religion in Iran from the beginnings to the period of the Islamic conquest; Indo-Iranian background, Zoroastrianism, Manichaean, Mazdakism.  
Mr. Schmidt

190A-190B. Introduction to Modern Jewish Studies. Three hours. Prerequisites: courses 101A-101B or equivalent. A survey of the Jewish community from the beginnings to the present; a comparison of modern racist ideologies with pre-modern theories; case studies, e.g., The Dreyfus affair, the Beiliss Trial, the Holocaust; Jewish reactions to these phenomena.  
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Ms. Lipstadt

150A-150B. Hebrew Literature in English. Lecture, three hours. 150A and 150B may be taken independently for credit. 150A. Biblical and Apocryphal literature. 150B. Rabbinic and Medieval literature.  
Mr. Band, Mr. Davidson

199. Special Studies in Jewish (1/2 to 2 courses). Prerequisite: consent of instructor. The Staff

Related Courses in Other Departments

History 110A-110B. Iranian History.  
Oriental Languages 160. Elementary Sanskrit.  
162. Advanced Sanskrit.  
Music 81L. Music of Persia.  
91L. Music of Persia.

Islamics

Upper Division Course

**110. Introduction to Islam.** (Formerly Arabic 210.) Lecture, three hours. The course will treat the genesis of Islam, its doctrines and practices with readings from the Qur'an, forms of Islam: tensions and schism; reform and modernism.  
Mr. Poonawala

Related Upper Division Courses in Another Department

History 107A-107B. Islamic Civilization.

Jewish Studies

Upper Division Courses

110. Social, Cultural and Religious Institutions of Judaism. This course will examine Judaism's basic beliefs, institutions and practices. Topics to be covered include: the development of Biblical and Rabbinic Judaism; the concepts of god, sin, repentance, prayer and the messiah; the history of the Talmud and the synagogue; the evolution of folk beliefs and yearcycle and lifecycle practices.  
Ms. Lipstadt

Ms. Lipstadt

**140A-140B. American Jewish History.** Lecture, three hours. An examination of the social and cultural history of the American Jewish community from its inception to the present, with emphasis upon the integration of successive immigrants and the development of institutions.  
140A covers from 1654 to 1914; 140B covers from 1914 to the present.  
Ms. Lipstadt

**141. Modern Anti-Semitism.** Lecture, three hours. An examination of modern anti-Semitism from the 18th century to the present; a comparison of modern racist ideologies with pre-modern theories; case studies, e.g., The Dreyfus affair, the Beiliss Trial, the Holocaust; Jewish reactions to these phenomena.  
Ms. Lipstadt

**142. The History and Institutions of the State of Israel.** Lecture, three hours. A study of the social and cultural development of the State of Israel from its pre-state institutional structures to the present with emphasis upon major trends, personalities, and ideologies; and the state's position in the wider framework of modern Jewish history.  
Ms. Lipstadt

**150A-150B. Hebrew Literature in English.** Lecture, three hours. 150A and 150B may be taken independently for credit. 150A. Biblical and Apocryphal literature. 150B. Rabbinic and Medieval literature.  
Mr. Band, Mr. Davidson

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Mr. Band

190. Undergraduate Seminar in Jewish Studies. Three hours. Prerequisites: courses 101A-101B or equivalent. A survey of the Jewish community from the beginnings to the present; a comparison of modern racist ideologies with pre-modern theories; case studies, e.g., The Dreyfus affair, the Beiliss Trial, the Holocaust; Jewish reactions to these phenomena.  
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Ms. Lipstadt

150A-150B. Hebrew Literature in English. Lecture, three hours. 150A and 150B may be taken independently for credit. 150A. Biblical and Apocryphal literature. 150B. Rabbinic and Medieval literature.  
Mr. Band, Mr. Davidson

199. Special Studies in Jewish (1/2 to 2 courses). Prerequisite: consent of instructor. The Staff

Related Upper Division Courses in Other Departments

History 191C-191D. Focal Themes in Jewish History.  
102A-102B. Jewish Intellectual History.  

Near Eastern Languages

Upper Division Course

130. Archaeology in Armenia and in the Caucasus. Lecture, three hours. A survey of the cultures of Armenia and the Caucasus from late prehistoric to medieval times, from the viewpoint of artifactual evidence. Major recent excavations and finds will be especially highlighted.  
Mr. Arakelian

Graduate Courses
For complete descriptions of graduate-level courses offered by this department, please consult the UCLA Graduate Catalog.

Urdu

Upper Division Courses

**101A-101B-101C. Elementary Urdu.** Three hours. Prerequisite: consent of instructor. Elements of Urdu, the language of Pakistan.  
Mr. Bodrogligeti

**199. Special Studies in Urdu.** Prerequisite: consent of instructor. The Staff
Near Eastern Studies (Interdepartmental)

(Program Office: 10286 Bunche Hall)

Major in Near Eastern Studies

This major is designed primarily for the following students: (1) those seeking a general education and desiring a special emphasis in this particular area, (2) those who plan to live and work in the Near East whose careers will be aided by a knowledge of its peoples, languages and institutions and (3) students preparing for academic study in the various disciplines pertaining to the Near East. Selection of courses should be decided partly by the student’s own special objectives, except that the same Near Eastern language must be maintained in both lower and upper division.

Preparation for the Major

The first-year course in Arabic, Armenian, Hebrew, Persian or Turkish; candidates must also obtain a reading proficiency in French, German, Italian, Russian or Spanish as demonstrated by the completion of six quarter courses in their equivalent in the language of their choice. Candidates may substitute for the European language requirement Engineering 105 and one of Mathematics 50A, Psychology 41, Sociology 18, Political Science 6 or Economics 40, plus one of Psychology 142, 143, 144, 187, 188, 189, Sociology 187, 188, Political Science 132A, 132B, 164, 165, Sociology 132, 133. This program may be modified in exceptional cases with the permission of the advisor.

For further information, contact the Von Grunebaum Center for Near Eastern Studies, 10286 Bunche Hall (825-1181) or Professor Michael Morony, 6242 Bunche Hall (825-1962).

Nursing

(School Office: 2-137 Louis Factor Building, Center for Health Sciences)

Mary E. Reres, R.N., M.P.N., Ed.D., Dean and Professor of Nursing
Phyllis A. Puinam, R.N., Ph.D., Associate Dean and Associate Professor of Nursing
Donna F. Ver Steeg, R.N., Ph.D., Associate Dean for Student Affairs and Associate Professor of Nursing
Charles E. Lewis, M.D., Ph.D., Professor of Medicine
Donna L. Vredove, Ph.D., Professor of Nursing
Laurie Gunter, Ph.D., Visiting Professor of Nursing
Beatrice M. Dambacher, R.N., D.N.Sc., Emeritus Professor of Nursing
Lulu Wolf Hassenplug, R.N., M.P.H., Sc.D., Emeritus Professor of Nursing
Dorothy E. Johnson, R.N., M.P.H., Emeritus Professor of Nursing
Harriet C. Moidel, R.N., M.A., Emeritus Professor of Nursing
Agnes A. O'Leary, R.N., M.P.H., Emeritus Professor of Nursing
Pamela J. Brink, R.N., Ph.D., Associate Professor of Nursing and Anthropology
Sharon J. Reeder, R.N., Ph.D., Associate Professor of Nursing
Sally A. Thomas, R.N., Ph.D., Associate Professor of Nursing
Gwen Van Sersvellen, R.N., Ph.D., Associate Professor of Nursing
Iris D'Antonio, R.N., Ph.D., Acting Associate Professor of Nursing
Aileen B. Canfield, R.N., Ed.D., Assistant Professor of Nursing
Betty L. Chang, R.N., D.N.Sc., Assistant Professor of Nursing
Barbara H. Davis, R.N., Ed.D., Assistant Professor of Nursing
Jacqueline Flaskefier, R.N., Ph.D., Assistant Professor of Nursing
Bonnie Holaday, D.N.Sc., Assistant Professor of Nursing
Maryalice Jordan-Marsh, R.N., Ph.D., Assistant Professor of Nursing
Jean A. Kerr, R.N., Ph.D., Assistant Professor of Nursing
Constance W. McAdams, R.N., Ph.D., Assistant Professor of Nursing
Margaret Topf, R.N., M.S., Acting Assistant Professor of Nursing
Cecily L. Betz, R.N., M.N., Assistant Clinical Professor of Nursing

Eleanor Brazil, R.N., M.A., M.Ed., Assistant Clinical Professor of Nursing
Christine S. Breu, R.N., M.N., Assistant Clinical Professor of Nursing
Randy Cane, R.N., M.S., Assistant Clinical Professor of Nursing
Mary Canobbio, R.N., M.S., Assistant Clinical Professor of Nursing
Diane Czlonka, R.N., M.S., Assistant Clinical Professor of Nursing
Anayis Derdisian, R.N., M.N., Assistant Clinical Professor of Nursing
Roxana Down-Wilson, R.N., M.S., Assistant Clinical Professor of Nursing
Robert Gerds, R.N., M.N., Assistant Clinical Professor of Nursing
Susan Griffith, R.N., M.S., Assistant Clinical Professor of Nursing
Gernie Kilburn, R.N., M.S.N., Assistant Clinical Professor of Nursing
Jackline C. Knable, R.N., M.S., Assistant Clinical Professor of Nursing
Flora Gil Krieloff, R.N., M.N., Assistant Clinical Professor of Nursing
Ann Lewis, R.N., M.N., Assistant Clinical Professor of Nursing
Ellen M. Meier, R.N., M.N., Assistant Clinical Professor of Nursing
Jo Ellen Murata, R.N., M.P.H., Assistant Clinical Professor of Nursing
Agnes F. Padermalt, R.N., M.A., M.Ed., Assistant Clinical Professor of Nursing
Christine Petze, R.N., M.N., Assistant Clinical Professor of Nursing
Laurel Skillings, R.N., M.S., Assistant Clinical Professor of Nursing
Carolyn F. Troupe, R.N., M.N., Assistant Clinical Professor of Nursing
Sharon L. Valente, R.N., M.N., A.N.P., Assistant Clinical Professor of Nursing
Charles K. Ferguson, Ed.D., Lecturer in Nursing
Esther Seeley, R.N., M.N., Adjunct Lecturer in Nursing
Genevieve Bahu, R.N., M.N., Visiting Lecturer in Nursing
Janice L. Betz, R.N., M.N., Visiting Lecturer in Nursing
William Crawford, Ed.D., Visiting Lecturer in Nursing
Marylin Eisig, R.N., M.N., Visiting Lecturer in Nursing
Carmel Leiberger, R.N., M.A., Visiting Lecturer in Nursing
Celine Marsden, R.N., M.N., Visiting Lecturer in Nursing
Elizabeth Mayberry, R.N., Ph.D., Visiting Lecturer in Nursing
Nancy McNeill, R.N., M.N., Visiting Lecturer in Nursing
Joyce Moomaw, R.N., Visiting Lecturer in Nursing
Brooke Randell, R.N., M.N., Visiting Lecturer in Nursing
Joana Riehl, R.N., Ph.D., Visiting Lecturer in Nursing
Linda Sarna, R.N., M.N., Visiting Lecturer in Nursing
Shirley Wallace, R.N., Ph.D., Visiting Lecturer in Nursing

The School of Nursing accepts students of junior or higher standing and offers curricula leading to the degrees of Bachelor of Science and Master of Nursing. See the “School of Nursing” section in the chapter on “Undergraduate Education” earlier in this catalog for further information.

Preparation for the Major

Completion of 21 courses (84 quarter units) of college work including the courses listed under the “Prenursing Curriculum” in the “College of Letters and Science” section of this catalog.

Neuroscience (Interdepartmental)

(Program Office: 73-346 Center for Health Sciences)

The Neuroscience Program does not offer an undergraduate degree. For detailed information on graduate degrees offered by this program, please refer to the UCLA Graduate Catalog.
The Major
At least 25 required upper division nursing and elective courses (100 quarter units) designed to prepare University students for professional nursing responsibilities in the care of the patient and his family, including courses 101, 104A, 104B, 104C, 109, 120A, 120B, 120C, 120D, 120E, 120F, 184, 190A, 190B, 193, 195, four electives, Public Health 100A, 180, Physiology 105.

Upper Division Courses
101. Introduction to Art and Science of Nursing (2 courses). Lecture, four hours; discussion, two hours; laboratory, twelve hours; autotutorial laboratory, variable; seminars, variable. An introduction to nursing theory and practice. The content will include the following modules: nursing process, pharmacology, interpersonal and technical skills. Methodology will include laboratory, lectures, discussion, seminars, autotutorial laboratory and clinical application. Ms. Caine

104A. Behavior of Man in Health and Illness. Lecture, four hours. An examination of the health-illness continuum from the framework of social and biological sciences. Contemporary, developmental, theoretical, transcultural communication theory and other theories relevant to nursing practice. The Staff

104B. Behavior of Man in Health and Illness. Lecture, four hours. Prerequisite: course 104A. An examination of the health-illness continuum from the framework of illness as a stressor and the possible responses to such stress. Content includes anxiety, pain, cognitive distortions, loss and other responses relevant to nursing practice. The Staff

104C. Behavior of Man in Health and Illness. Lecture, four hours. Prerequisites: courses 104A, 104B. Continuation of the examination of the health-illness continuum from the framework of illness as a stressor and the possible responses to such stress. Content includes anxiety, pain, cognitive distortions, loss and other responses relevant to nursing practice. The Staff

109. Communication in Health Care. Lecture, two hours; laboratory, six hours. Study of basic communication and group process theory and its application to practice. Laboratory experience emphasizes development of each individual's ability to communicate effectively in a dyad and in a small group. Ms. Topf

120A. Clinical Nursing. Five weeks. Lecture, four hours; laboratory, 24 hours. Study of basic communication and group process theory and its application to practice. Laboratory experience emphasizes development of each individual's ability to communicate effectively in a dyad and in a small group. Ms. Topf

120B. Clinical Nursing. Five weeks. Lecture, four hours; laboratory, 24 hours. Study of basic communication and group process theory and its application to practice. Laboratory experience emphasizes development of each individual's ability to communicate effectively in a dyad and in a small group. Ms. Topf

120C. Clinical Nursing. Five weeks. Lecture, four hours; laboratory, 24 hours. Prerequisites: courses 101, 104, Physiology 105N. Application of nursing theory in community situations: acute care, convalescent and ambulatory. Theoretical content will include pathophysiology, pharmacology and treatment modalities. Application of the theoretical concepts related to the nursing care of the patient undergoing medical interventions. Ms. Padernal

120D. Clinical Nursing. Five weeks. Lecture, four hours; laboratory, 24 hours. Prerequisites: courses 101, 104, Physiology 105N. Application of nursing theory in community situations: acute care, convalescent and ambulatory. Theoretical content will include pathophysiology, pharmacology and treatment modalities. Application of the theoretical concepts related to the patient undergoing medical intervention. Ms. Bahu

120E. Clinical Nursing. Five weeks. Lecture, four hours; laboratory, 24 hours. Prerequisites: courses 101, 104, Physiology 105N. Application of nursing theory in community situations: acute care, convalescent and ambulatory. Theoretical content will include pathophysiology, pharmacology and treatment modalities. Application of the theoretical concepts related to the patient undergoing medical intervention. Ms. Bahu

Oriental Languages

(Dean's Office: 222 Royce Hall)

Hartmut E. F. Scharfe, Ph.D., Professor of Indic Studies (Chairman of the Department; Emeritus Professor of Oriental Languages.

Kenneth K. S. Chen, Ph.D., Emeritus Professor of Oriental Languages.

Kan Lao, B.A., Academician, Emeritus Professor of Oriental Languages.

Richard C. Rudolph, Ph.D., Emeritus Professor of Oriental Languages.

Ben Befu, Ph.D., Associate Professor of Oriental Languages.

Hung-tsiang Chou, Ph.D., Associate Professor of Oriental Languages.

Robert C. Epp, Ph.D., Associate Professor of Oriental Languages.

American Indian Languages.

E. Perry Link, Jr., Ph.D., Associate Professor of Oriental Languages.

Herbert E. Flueckiger, Ph.D., Associate Professor of Oriental Languages.

Shirlene S. Wong, Ph.D., Associate Professor of Oriental Languages.

Richard E. Strassberg, Ph.D., Assistant Professor of Oriental Languages.

Department undergraduate advisers: Kuo-yi Pao, Chinese; Robert Epp, Japanese.

Advising: At the beginning of each academic year all majors in the department should see the advisor concerning their program of studies. New students entering the department should consult immediately with the appropriate
ate advisor concerning their proposed study program.

Aim: The Department of Oriental Languages aims to provide the general undergraduate student with an exposure to the cultural heritage of China and Japan. This is accomplished through courses in civilization, religion, archaeology and literature in translation. For those undergraduates who wish to major in Oriental Languages, the department offers a program leading to the B.A. degree in Chinese or Japanese, in which the emphasis is on a more specialized knowledge of the language and literature of the area of major interest. In the language program, the emphasis proceeds from an acquaintance with the spoken language (either Chinese or Japanese) to a reading knowledge of the modern and classical forms of the language.

No credit will be allowed for completing a less advanced course after satisfactory completion of a more advanced course in grammar and/or composition.

Preparation for the Major


The Major

Required for the major in Chinese: Seven upper division language courses which must include:

(1) Two courses to be chosen from 121A, 121B, 121C, 122A, 122B, 124A, 124B, 124C, 126.

(2) Two courses to be chosen from 113A, 113B, 151, 152A, 152B, 163A, 163B, 163C.

Also: 140A or 140B or 140C; one course chosen from 170A, 170B, 173 or 183; 199 (at least ½ course); Art 114B and either History 182A, 182B, 182C or 183.

Required for the major in Japanese: Seven upper division courses chosen from 119A, 119B, 129, 134A, 134B, 137, 139, 142A, 142B, 153A, 153B, 175, 179A, 179B. The seven courses must include 119B, 129 and 134A or 134B or 153A or 153B. Also, 141A or 141B; one course chosen from 174, 184, 199 (at least ½ course); Art 114C and either History 187A, 187B or 187C.

Recommended for both majors: English 100A, 100B, 100C and additional courses in history. Those planning to undertake graduate study are urged to include in their undergraduate program three courses in classical Chinese or Japanese at the upper division level. Those planning to undertake advanced graduate study are urged to include five quarters of French or German.

Lower Division Courses

1A-1B-1C. Elementary Modern Chinese. Lecture, five hours. Not open to students with previous training. An introduction to standard spoken Chinese and Chinese characters with emphasis on conversation.

Mr. Chu, Mr. Pao

3A-3B-3C. Basic Cantonese. An introduction to a major dialect of the Chinese language. Basic grammar and culture of the dialect will be given with emphasis on conversational patterns. Basic Chinese characters will also be introduced.

The Staff

9A-9B-9C. Elementary Modern Japanese. Lecture, five hours. Not open to students with previous training. Introduction to modern Japanese with attention to conversation, grammar and the written forms. Conversation drill to be based on material covered in class.

Mr. Takahashi

10A-10B-10C. Intermediate Spoken Chinese (½ course each). Prerequisite: course 1C. To be taken in conjunction with second year Chinese to enhance command of spoken Mandarin at the intermediate level and above. Permission of department required.

Mr. Link, Mr. Pao, Mr. Strassberg

11A-11B-11C. Intermediate Modern Chinese. Lecture, three hours; laboratory, one hour. A continuation of 1A-1B-1C, with balanced instruction in reading, writing and conversation.

Mr. Pao

13A-13B-13C. Introduction to Classical Chinese. Lecture, three hours; reading or discussion, one hour. Prerequisite: course 1C or consent of instructor. Study of the development of the writing system and introduction to literary Chinese.

Mr. Epp, Mr. Takahashi

40A. Chinese Civilization. No knowledge of Chinese required. A survey of the development of the outstanding aspects of Chinese culture from prehistoric to modern times.

Mr. Chou


Mr. Plutschow

42. The Tea Ceremony — An Introduction to the History of Japanese Culture in Theory and Practice. Lecture, three hours; demonstration. This course will treat the history and culture of Japan as revealed through study and practice of the Tea Ceremony. It will invite investigation of a number of topics: Buddhism, aesthetics, Calligraphy, painting, architecture, gardens, ceramics and politics.

Mr. Plutschow

45. Chinese Civilization in Modern Times. Prerequisite: no knowledge of Chinese required. A survey of developments in Chinese culture from the late 19th century to the present.

Mr. Link

Upper Division Courses

113A-113B. Intermediate Classical Chinese. Lecture, three hours; reading or discussion, one hour. Prerequisites: courses 13A-13B. Further readings in the classics.

Ms. Wong

115A-115B-115C. Advanced Spoken Chinese (½ course each). Prerequisites: courses 19C. Enrollment limited; permission of department required; priority to be given Chinese majors.

The Staff


Mr. Takahashi

121A-121B-121C. Advanced Modern Chinese. Lecture, four hours. Prerequisite: course 11C. Readings in modern prose and newspaper style.

Mr. Chu

122A-122B. Readings in Modern Chinese Literature. Lecture, three hours. Prerequisite: course 121B or consent of instructor. Readings and discussion of masterpieces of modern Chinese literature.

Mr. Link

124A-124B-124C. Readings in Modern Expository Chinese. Lecture, three hours. Prerequisite: course 121B or consent of instructor. Readings in the social sciences, political and philosophical literature.

Mr. Link

124A. Nationalist Chinese materials including the May 4th Movement; 124B. Political and military materials of Communist China; 124C. Economic and educational materials of Communist China.

Mr. Chu

126. Post-1949 Chinese Literature. Prerequisite: courses 121B or consent of instructor. Reading and discussion of selected works in contemporary poetry, drama and fiction with emphasis on the People's Republic of China.

Mr. Link

129. Introduction to Classical Japanese. Lecture, three hours. Prerequisite: course 119B or consent of instructor. Introduction to literary Japanese, with readings and discussions in the prose and poetry of the Heian Period.

Mr. Belu

134A. Introduction to Kawabata Yasunari. Lecture, three hours. Prerequisite: course 19C. Reading and analysis of the Nobel Laureate's short stories with particular emphasis on their emotional structure.

Mr. Epp

134B. Introduction to Mushakoji Sanetatsu. Lecture, three hours. Prerequisite: course 19C. Reading and discussion of Mushakoji's prose, fiction and poetry.

Mr. Epp

135. Buddhist Themes in Asian Literature. No knowledge of Asian languages required. A survey of selected works of Buddhist literature of India, China and Japan. Includes canonical works like the Lotus Sutra and noncanonical works of poetry, prose and drama containing Buddhist themes.

Mr. Lafleur

137. Introduction to Kambun and Other Literary Styles. Lecture, three hours. Prerequisite: courses 119B or consent of instructor. Introduction to Kambun, the Japanese literary rendering of Classical Chinese, and Sorobun, the epistolary style.

Mr. Belu, Mr. Plutschow

139. Introduction to Buddhist Texts. Lecture, three hours. Prerequisite: course 13C, 122A or 119A. Studies in Buddhist terminology.

The Staff

140A-140B-140C. Chinese Literature in Translation. No knowledge of Chinese required. Lectures and collaborative reading of representative works in English translation. 140A. Poetry from earliest times to the 19th century; 140B. Drama and fiction from the 13th century to the end of the Ch'ing period; 140C. 20th-century poetry, drama, fiction.

Mr. Link, Ms. Wong

141A-141B. Japanese Literature in Translation. No knowledge of Japanese required. A survey of Japanese literature from the beginning to modern times, emphasizing Chinese, Buddhist and Western influences. 141A. Beginning to 1600; 141B. 1600 to modern times.

Mr. Plutschow

142A. Readings in the Japanese Family System. Lecture, three hours. Prerequisite: course 119B. Analysis and discussion of articles describing and criticizing the family-system mindset, how this mindset permeates modern interpersonal relationships, and the way the system has functioned in the past.

Mr. Epp

142B. Human Problems in the Modernization of Japan. Lecture, three hours. Prerequisite: course 119B. Analysis and discussion of articles that deal with the definition of modernization, with its relation to traditional values and self-awareness, and with the role of the intellectual.

Mr. Epp

145. Readings in Modern Expository Japanese. Prerequisite: course 119A. Readings in contemporary affairs, including politics, economics, trade and social issues. The reading material will be taken from current Japanese newspapers and journals.

Mr. Plutschow
151A-151B. Readings in Traditional Chinese Fiction. Prerequisite: course 11C, the equivalent or permission of instructor. Selected readings from the classical Chinese novels and plays in a language course; emphasis will be on translation, obtaining a command of the various literary styles, as well as on critical interpretation of the texts. Mr. Strassberg

152A-152B. Readings in Classical Chinese Poetry. Lecture, three hours. Prerequisite: course 13A or consent of instructor. Discussion and collative reading of representative works selected on the basis of such critical concerns as thematic patterns, image clusters, genres, and the characteristics of major poets. Ms. Wong

153A. Kawabata's Contemporaries. Lecture, three hours. Prerequisite: course 119A or 134A or 134B. Readings in the fiction and poetry of Ibuse Masaji, Maruyama Kiyoaki, Okazaki Kazuo, Tsuboi Sa-kae and Yokomitsu Ishi. Mr. Epp

153B. Introduction to Shiga Naoya. Lecture, three hours. Prerequisite: course 119A or 134A or 134B. Reading and discussion of Shiga's short stories with special emphasis on his I-novel technique. Mr. Epp

154A-154B. Mongolian. Lecture, three hours; laboratory, one hour. To be offered when requested by a sufficient number of students. Mr. Pao

160. Elementary Sanskrit. Introduction to script and grammar, with reading exercises and attention to the significance of Sanskrit for the understanding of other Indo-European languages.

161. Intermediate Sanskrit. Prerequisite: course 160 or equivalent. Advanced aspects of grammar and the reading of literary texts. Mr. Scharfe

162. Advanced Sanskrit. Prerequisite: course 161 or equivalent. In this course the entire Bhagavadgita or a comparable amount of other Sanskrit literature is read. Mr. Scharfe

163A-163B-163C. Readings in Classical Chinese Literary Texts. Lecture, three hours. Prerequisite: course 113B. 163A-163B. Literary texts. 163C. Historical texts. The Staff

165. Readings in Sanskrit. Prerequisite: course 162 or equivalent. Extensive reading in such texts as best serve the students' needs. Mr. Scharfe

166. Introduction to Indic Philosophy. A survey of the main trends in Indian philosophy from ancient to modern times. Mr. Scharfe

170A-170B. Archaeology in Early and Modern China.

170A. Introduction to Chinese archaeology: early Chinese study of their own past, types of artifacts, antiquarianism, and the beginnings of scientific archaeology in China before 1949.

170B. Archaeology in the People's Republic of China: survey of major excavations of sites of all periods carried out under the intensive archaeological program of the PRC, and the interpretation of the archaeological findings. Mr. Chou

172. Introduction to Buddhism. No language requirement. Not open to students who received credit for former courses 172A or 172B. Life of the Buddha and fundamental doctrines of Buddhism; Buddhist writings; the monastic order; early sects. The popular cult. The rise and development of Mahayana Buddhism: writings and doctrines. The Tantric doctrines and the end of Indian Buddhism. The Staff

173. Chinese Buddhism. No language requirement. The introduction and development of Buddhism in China, interaction between Buddhism and Chinese culture, rise of the Chinese schools of Buddhism such as Pure Land and Zen, contributions to Chinese culture. The Staff

174. Japanese Buddhism. No language requirement. The development of Buddhism in Japan and its influence on Japanese culture with emphasis on the arts. The Staff

175. The Structure of the Japanese Language. Lecture, three hours; reading or discussion, one hour. Prerequisite: consent of instructor. Phonology, morphology, syntax of Japanese. Mr. Takahashi

179A. Readings in Medieval Japanese Literature. Lecture, three hours. Prerequisite: course 129 or consent of instructor. Reading and discussion in the prose, poetry and drama from 1600. Mr. Mitschow

179B. Readings in Edo Literature. Lecture, three hours. Prerequisite: course 129. Readings and discussion in the prose, poetry and drama from 1600 to 1868. Mr. Befu

183. Introduction to Japanese Thought. No language requirement. A general "survey" of indigenous Chinese thought from the Chou period to circa 1800, covers Confucianism, Taoism, Mo-tzu, the Legalists, the study of the Classics, pseudo-scientific thoughts, the rise of the skeptical tradition, the penetration of Buddhism, the development of neo-Taoism and neo-Confucianism. Buddhism will be touched on only in the general context of Chinese thought. The Staff

184. Introduction to Japanese Thought. No language requirement. A general survey of Japanese thought from the earliest records to the Tokugawa period with primary emphasis on indigenous elements. Deals with the religious ideas that shaped Shinto, the encounter of Shinto with Buddhism, the formation of "syntheses" such as Ryobu Shinto, the rise of pessimistic attitudes (mappo), philosophies of history and the growth of Japanese self-consciousness, the rise of new Shinto sects in the medieval period, Confucianism in the Tokugawa period and the "National Learning" movement. The Staff

188. Chinese Etymology and Calligraphy. Prerequisite: one year of Chinese classical or consent of instructor. Covering (1) the development of the Chinese writing system starting from the "Pottery Inscriptions," (2) a study of the modern "Simplified Forms," and (3) the study of the Six Scripts principles which were used to form Chinese characters, and (2) the aesthetic training of calligraphic art and its appreciation, with focus on the ways of recognizing and interpreting the "Cursive Style," a common form of handwriting. Mr. Chou

189. Chinese Brush Painting. A combination studio-lecture course surveying the aesthetics and techniques of Chinese literati painting. Emphasis will be on realizing the philosophico-idealistic principles of traditional Chinese painting through mastery of the traditional materials and elements of landscape. Mr. Strassberg

199. Special Studies in Oriental Languages (%1 to 1 course). Prerequisites: senior standing in department, permission of instructor. Required of incoming senior majors transferred from other institutions. Special individual study. May be repeated only once with consent of instructor. The Staff

Graduate Courses

For complete descriptions of graduate-level courses offered by this department, please consult the UCLA Graduate Catalog.
Graduate Courses
For complete descriptions of graduate-level courses offered by this department, please consult the UCLA Graduate Catalog.

Philosophy

(Department Office: 321 Dodd Hall)
Marilyn Adams, Ph.D., Professor of Philosophy.
Robert Merrilflew Adams, Ph.D., Professor of Philosophy.
Rogers Abbritton, Ph.D., Professor of Philosophy.
Tyler Burge, Ph.D., Professor of Philosophy.
Alonzo Church, Ph.D., Professor of Philosophy and Mathematics in Residence.
Keith S. Donnellan, Ph.D., Professor of Philosophy.
Philipa Foot, M.A., Professor of Philosophy.
Montgomery Furth, Ph.D., Professor of Philosophy.
Robert Merrihew Adams, Ph.D., Professor of Philosophy.
Robert M. Yost, Ph.D., Professor of Philosophy.

Preparation for the Major
Philosophy 21, 22, 31 and one other lower division course in philosophy.

The Major
Twelve upper division or graduate philosophy courses (48 units). Seven of the twelve courses must be distributed among the groups into which the undergraduate and graduate courses are divided, in the following manner: two courses (8 units) in each of three of the groups and one course (4 units) in the remaining group.

Courses listed under "No Group" may apply toward the major, but not toward a group requirement. A maximum of eight units of course 190 may apply toward the major but not toward a group requirement. No course employed to satisfy the major or preparation requirements may be taken on a P/NP basis.

Upon the recommendation of the Philosophy Department faculty, Honors in Philosophy will be awarded at graduation to a major whose grade-point average in upper division philosophy courses is 3.3 and who has completed two graduate courses (8 units) in philosophy with an average GPA of 3.5.

Students intending to do graduate work in philosophy should consult with the graduate advisor, as well as with the undergraduate advisor.

Lower Division Courses
All lower division courses are introductory and without prerequisites except as otherwise stated.

1. The Beginnings of Western Philosophy. Lecture, three hours; discussion, one hour. The views of Plato, Aristotle, and other thinkers from before Socrates to St. Augustine on such topics as the nature of the physical universe, the nature of knowledge, the concept of God, soul and body, the foundations of morality, the Greek and Christian ideas of love.

2. Introduction to the Philosophy of Religion. Lecture, three hours; discussion, one hour. An introductory study of such topics as the nature and grounds of religious belief, the nature of religious experience, and the nature and existence of God, the problem of evil, and what can be learned from religious experience.

3. Personal and Social Ideals. Lecture, three hours; discussion, one hour. A study of various conceptions of human perfection and social utopias. Readings will be chosen from such authors as Freud, Thomas More, Marx, B.F. Skinner and Sartre.

4. Philosophical Analysis of Contemporary Moral Issues. Lecture, three hours; discussion, one hour. A critical study of principles and arguments advanced in discussion of current moral issues. Possible topics: revolutionary violence, rules of warfare, sexual morality, the right of privacy, punishment, nuclear warfare and deterrence, abortion and mercykilling, experiments with human subjects, rights of women, the drug culture.

5A. Philosophy in Literature. Lecture, three hours; discussion, one hour. A philosophical inquiry into such themes as freedom, responsibility, guilt, love, self-knowledge and self-deception, death and the meaning of life, by examination of great literary works in the Western tradition.

5B. Recurring Philosophical Themes in Black Literature. Lecture, three hours; discussion, one hour. Analysis of some main themes in African American political writings; for example, assimilation, cultural nationalism, and separatism in the writings of Booker T. Washington, Frederick Douglass, W.E.B. du Bois, and others.

6. Historical Introduction to Moral and Political Philosophy. Lecture, three hours; discussion, one hour. A study of some classic works in moral and political philosophy. Questions that may be discussed include: What is justice? Why be moral? Why obey the law? When is a form of government is best? How much personal freedom should be allowed in society?

7. Introduction to the Philosophy of Mind. Lecture, three hours; discussion, one hour. An introductory study of some main themes in the philosophy of mind and its relation to the body, including some of the following: materialism, functionalism, behaviorism, determinism and free will, the nature of psychological knowledge.

8. Introduction to the Philosophy of Science. Lecture, three hours; discussion, one hour. An introduction to philosophical questions about the nature of science, drawing examples from specific scientific theories and controversies that can be understood without much mathematical or technical background. What role do observation and explanation play in building and evaluating scientific theories? How should we reason the relation between science and common sense?

9. Principles of Critical Reasoning. The course concerns the nature of arguments: how to analyze them and assess the soundness of the reasoning they represent. Common fallacies that often occur in arguments will be discussed in light of what counts as a good deductive or inductive inference. Other topics to be discussed include the use of language in argumentation to arouse emotions as contrasted with conveying thoughts, the logic of scientific experiments and hypothesis-testing in general, and some general ideas about probability and its application in making normative decisions, e.g., betting.

10. Virtues and Vices. Lecture, three hours; discussion, one hour. A study of the traditional theory of the virtues and vices, and an inquiry into its truth. Readings in Aristotle, Aquinas, and contemporary authors; and the discussion of concepts such as courage, wisdom, and justice. Should we accept the traditional list of the virtues and vices, or should it be revised?

11. Skepticism and Rationality. Lecture, three hours; discussion, one hour. Can we know anything with certainty? How can we justify any of our beliefs? An introduction to the study of these and related questions, through the works of some great philosophers of the modern period, such as Descartes, Leibniz, Berkeley, and Hume.

12. Logic. First Course. Lecture, three hours; discussion, one hour. A systematic introduction to logical theory, including discussion of egoism, utilitarianism, justice, responsibility, the meaning of ethical terms, relativism, etc. Recommended or required for many upper division courses in Group III.

13. Logic. Second Course. Lecture, three hours; discussion, one hour. Prerequisite: course 31, preferably in the preceding quarter. Symbolic logic and extension of the systematic development of course 31. Quantifiers, identity, definite descriptions.

"Upper Division Courses"

GROUP I

101A. Plato—Earlier Dialogues. (Formerly numbered M101A) Lecture, three hours; discussion, one hour. Prerequisite: one course in philosophy or consent of instructor. A study of selected topics in the early and middle dialogues of Plato.

101B. Plato—Later Dialogues. (Formerly numbered M101B) Lecture, three hours; discussion, one hour. Prerequisite: course 101A. A study of selected topics in the middle and later dialogues of Plato.

102. Aristotle. Lecture, three hours; discussion, one hour. Prerequisite: one course in philosophy or consent of instructor. A study of selected works of Aristotle.

104. Topics in Islamic Philosophy. Lecture, three hours; discussion, one hour. Prerequisite: one course in philosophy or consent of instructor. The development of Muslim philosophy in its great age (from Kindo to Averroes, 850 to 1200), considered in connection with Muslim theology and Mysticism.

105. Medieval Philosophy from Augustine to Malebranche. Lecture, four hours. Prerequisite: one course in philosophy or consent of instructor. The development of early medieval philosophy within the framework of Judeo-Christian theology and its assimilation and criticism of the Greek philosophical heritage. Focus on the problem of universals, the existence and nature of God, the problem of evil, and the doctrines of the Trinity and atonement. Selected writings from Augustine through Maimonides, read in English translation.

106. Later Medieval Philosophy. Lecture, four hours. Prerequisite: one course in philosophy or consent of instructor (course 105 is not required). Metaphysics, theory of knowledge, and theology of Aquinas, Duns Scotus, and Ockham, with less full discussion of other authors from the 13th through early 15th centuries. Selected texts read in English translation.

Mrs. Adams
107. Topics in Medieval Philosophy. Lecture, four hours. Prerequisite: one course in philosophy; 105 or 106 recommended. The study of the philosophy and theology of one medieval philosopher such as Augustine, Abelard, Aquinas, Scotus, or Ockham; or the study of a single area such as logic or theory of knowledge in several medieval philosophers. Consult the department for topic to be treated in a given quarter. May be repeated for credit with consent of instructor.

Ms. Adams

C109. Descartes. Lecture, four hours. Prerequisites: course 21 or two courses in philosophy or consent of instructor. A study of the works of Descartes with emphasis on metaphysics and epistemology. Such issues as the problems of scepticism, the foundations of knowledge, the existence of God, the relation between mind and body will be discussed. Enrollment will be limited to 30 students when offered concurrently with course C209.

Mr. Burge, Mr. Yost

C110. Spinoza. Lecture, three hours; discussion, one hour. Prerequisite: course 21 or consent of instructor. A study of the philosophy of Spinoza. May be concurrently scheduled with course C210, in which case there will be a weekly discussion meeting for undergraduates only, and fewer readings and shorter papers will be required of undergraduates than of graduates. Enrollment is limited to 30 students when offered concurrently with course C210.

Mr. Adams

C111. Leibniz. Lecture, three hours; discussion, one hour. Prerequisite: course 21 or consent of instructor. A study of the philosophy of Leibniz. May be concurrently scheduled with course C211, in which case there will be a weekly discussion meeting for undergraduates only, and fewer readings and shorter papers will be required of undergraduates than of graduates. Enrollment is limited to 30 students when offered concurrently.

Mr. Adams

C112. Locke and Berkeley. Lecture, four hours. Prerequisite: one course in philosophy or consent of instructor. A study of the philosophies of Locke and Berkeley; the emphasis may sometimes vary from one figure to the other. May be offered concurrently with course C212.

Mr. Deleian

C114. Hume. Lecture, four hours. Prerequisite: one course in philosophy or consent of instructor. Selected topics from the metaphysical, epistemological and ethical writings of Hume. May be offered concurrently with course C214, in which case enrollment will be limited to 40.

Ms. Hampton, Mr. Hill

116. Nineteenth-Century Philosophy. Lecture, three hours; discussion, one hour. Prerequisite: one course in philosophy or consent of instructor. Selected topics in the work of one or more of the following philosophers: Bolzano, Frege, Husserl, Meinong, the early Russell and Wittgenstein.

Mr. Burge

GROUP II

125. Introduction to Modern Logic. Lecture, three hours; discussion, one hour. Open to lower division students with consent of instructor. A survey of elementary topics in sentential logic, axiomatic foundations of arithmetic, calculus of classes and relations, elementary theory of probability, modal logic.

Mr. Kalish

126A. Philosophy of Science. Lecture, three hours; discussion, one hour. Prerequisite: one course in philosophy or consent of instructor. A historical introduction to the philosophy of science. Such issues as the nature of scientific theories will be discussed in the context of actual episodes in the development of the natural sciences.

Mr. Healey

126B. Philosophy of Science. Lecture, three hours; discussion, one hour. Prerequisite: course 31, 125, 126A or consent of instructor. An introduction to contemporary philosophy of science, focusing on problems of central importance.

Mr. Healey

126C. Philosophy of Science: Social Sciences. Lecture, three hours; discussion, one hour. Prerequisites: two courses in philosophy or consent of instructor. A discussion of topics in the philosophy of social sciences with emphasis on their relation to the physical sciences; value-bias in social inquiry; concept formation; theory construction; explanation and predication; the nature of social laws.

Mr. Healey

127A. Philosophy of Language. Lecture, four hours. Prerequisite: course 31 or consent of instructor. Syntax, semantics, pragmatics. The 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.

Mr. Burge, Mr. Church, Mr. Kaplan

127B. Philosophy of Language. Lecture, four hours. Prerequisite: course 32 or consent of instructor. Course 127A is not a prerequisite for course 127B. Selected topics similar to those considered in course 127A will be discussed but at a more advanced and technical level.

Mr. Church, Mr. Kaplan

128A. Philosophy of Mathematics. Lecture, four hours. Prerequisites: course 31, 32 and preferably one additional course in logic. The philosophy of mathematics; logicism of Frege and Russell, arithmetic reduced to logic; ramified type theory and impredicative definition (Russell, Poincare, the early Weyl). Mr. Church

128B. Philosophy of Mathematics. Lecture, four hours. Prerequisite: course 128A or consent of instructor. Intuitionism of Brouwer, Heyting, and the later Weyl; proof theory of Hilbert. Mr. Church

129. Philosophy of Psychology. Lecture, three hours; discussion, one hour. Prerequisite: the four-unit course in philosophy, one course in psychology. Selected philosophical issues arising from psychological theories. Relevance of computer simulation to accounts of thinking and meaning; relations between semantical theory and learning theory; psychological aspects of the theory of syntax; behaviorism, functionalism and alternatives; psychology and psycholinguistics.

Mr. Burge

130. Philosophy of Space and Time. (Formerly numbered 185.) Lecture, three hours; discussion, one hour. Prerequisites: two courses in philosophy or one course in philosophy and one course in physics or consent of instructor. Selected philosophical problems concerning the nature of space and time. The philosophical implications of spacetime theories, such as those of Newton and Einstein. Topics may include the nature of geometry, conventionalism, absolutist versus relationalist views of space and time, philosophical impact of relativity theory.

Mr. Healey

131. Science and Metaphysics. Lecture, three hours; discussion, one hour. Prerequisites: two courses in philosophy or consent of instructor. An intensive study of the physical sciences on which the results of modern science have been thought to bear. Topics may include the nature of causation, the reality and direction of time, time-travel, backwards causation realism, etc. Mr. Healey

133. Logic, Third Course. Lecture, four hours. Prerequisite: course 32. Topics in logic and semantics: formal theories, definitions, alternative theories of descriptions. Mr. Kalish, Mr. Kaplan

134. Introduction to Set Theory. Lecture, four hours. Prerequisites: course 32 or upper division standing in mathematics and consent of instructor. Introduction to axiomatic set theory; sets, natural numbers, relations, functions, cardinality, infinity. Mr. Kalish

135. Introduction to Metamathematics. Lecture, four hours. Prerequisites: course 32; 134 or equivalent required. Truth, definability, logical truth and logical consequence; consistency and completeness.

Mr. Church, Mr. Kalish, Mr. Kaplan

136. Modal Logic. Lecture, four hours. Prerequisite: course 32; 133 or 135 recommended. The logic of necessity and possibility. Various formulations of the syntax and semantics of such logics. The problem of interpreting quantified modal logic, deontic, and other non-extensional logics.

Mr. Kaplan

GROUP III

150. Society and Morals. Lecture, three hours; discussion, one hour. Prerequisite: course 22 or consent of instructor. A critical study of principles and arguments advanced in discussion of current moral and social issues. The topics will be similar to those of course 151A, but familiar with a greater emphasis on methodological issues. Concepts and methods will be presupposed. May be repeated for credit with consent of instructor.

Mr. Hill

151A-151B. History of Ethics. Lecture, three hours; discussion, one hour. Prerequisite: course 22 or consent of instructor. A study of selected topics in early ethical theories. 151B. Selected classics in later ethical theories. Mr. Hill, Mr. Quinn

153A. Topics in Ethical Theory: Normative Ethics. Lecture, four hours. Prerequisite: course 22 or consent of instructor. A study of selected topics in normative ethical theory. Topics may include various conceptions of the criteria of right action, human rights, virtues and vices, principles of culpability and praise-worthiness.

Mr. Hill

153B. Topics in Ethical Theory: Metaethics. Lecture, three hours. Prerequisite: course 22 or consent of instructor. A study of selected problems in metaethical theory. Topics may include the analysis of moral language and the justification of moral beliefs.

Ms. Foot, Mr. Quinn

155. Medical Ethics. An examination of the philosophical issues raised by problems of medical ethics such as abortion, euthanasia, and medical experimentation. May be repeated for credit with consent of instructor.

Ms. Hampton, Mr. Hill

157. History of Political Philosophy. Lecture, three hours; discussion, one hour. Prerequisites: two courses in philosophy or consent of instructor; course 22 is advised. Analysis of some basic concepts in political theory. May be repeated for credit with consent of instructor.

Ms. Hampton, Mr. Hill

158. History of Political Philosophy. Lecture, three hours; discussion, one hour. Prerequisite: two courses in philosophy or consent of instructor; course 22 is advised. Analysis of some basic concepts in political philosophy.

Ms. Hampton, Mr. Hill

161. Topics in Aesthetic Theory. Lecture, three hours; discussion, one hour. Prerequisite: one course in philosophy or consent of instructor. Philosophical theories about the nature and importance of art and art criticism, aesthetic experience, and aesthetic values. May be repeated for credit with consent of instructor.

Mr. Quinn

166. Introduction to Legal Philosophy. Prerequisite: one course in philosophy or consent of instructor. An examination, through the study of recent philosophical writings, of such topics as: the nature of law, the relationship of law and morals, legal reasoning, punishment, and the obligation to obey the law.

Ms. Hampton, Mr. Morris

GROUP IV

170. Philosophy of Mind. Lecture, three hours; discussion, one hour. Prerequisites: two relevant courses in philosophy or consent of instructor. An analysis of various problems concerning the nature of mind and mental phenomena, such as the relation between the mind and the body, and our knowledge of other minds.

Mr. Donnellan

172. Philosophy of Language. Lecture, three hours; discussion, one hour. Prerequisites: two relevant courses in philosophy or linguistics or consent of instructor. Analysis of the concepts of meaning, reference and truth in natural languages; syntactic and semantic descriptions of natural languages; theory of speech acts.

Mr. Donnellan
174. Contemporary Philosophy. Lecture, three hours; discussion, one hour. Prerequisites: two lower division courses in philosophy or one upper division course in philosophy or one course in logic or consent of instructor. Analysis of the views of several recent philosophers. Mr. Donnellan

175. Topics in Philosophy of Religion. Lecture, three hours; discussion, one hour. Prerequisite: course 21 or 22 or consent of instructor. An intensive investigation of one or two topics or works in the philosophy of religion, such as the attributes of God, arguments for or against the existence of God, or the relation between religion and ethics. Consult the department for topics to be treated in a given quarter. May be repeated for credit with consent of instructor. Mr. Adams, Mrs. Adams, Mr. Albritton

177A. Existentialism. Lecture, three hours; discussion, one hour. Prerequisite: one course in philosophy or consent of instructor. Analysis of the methods, problems and views of some of the following: Kierkegaard, Nietzsche, Heidegger, Jaspers, Sartre, Marcels, and Camus. Possible topics: metaphysical foundations, nature of mind, freedom, problem of the self, other people, ethics, existential psychoanalysis.

177B. Historical Studies in Existentialism. Lecture, three hours; discussion, one hour. Prerequisite: one course in philosophy or consent of instructor. Analysis of the methods, problems and views of some of the following: Kierkegaard, Nietzsche, Heidegger, Jaspers, Sartre, Marcels, and Camus. The course will focus primarily on explication and interpretation of the texts.

178. Phenomenology. Lecture, three hours; discussion, one hour. Prerequisite: two courses in philosophy or consent of instructor. Introduction to the phenomenology of Husserl and others, emphasizing philosophical problems via the works of some of the following: Brentano, Husserl, Heidegger, Scheler, Sartre, Merleau-Ponty, Ricoeur. Topics fall in the areas of ontology, epistemology, and particularly philosophy of mind.

182. Elements of Metaphysics. Lecture, three hours; discussion, one hour. Prerequisite: course 21 or consent of instructor. Study of basic metaphysical questions: nature of the physical world, of minds, and of universals; and the answers provided by alternative systems, e.g., phenomenalism, materialism, dualism. Mr. Adams, Mr. Yost

183. Theory of Knowledge. Lecture, four hours. Prerequisite: course 21 or consent of instructor. An analysis of the concept of empirical knowledge. Mr. Yost

184. Topics in the Theory of Knowledge. Lecture, four hours. Prerequisite: course 21 or consent of instructor. An analysis of the concept of empirical knowledge. Mr. Yost

185. Topics in the Theory of Knowledge. Lecture, four hours. Prerequisite: course 21 or consent of instructor. An analysis of the concept of empirical knowledge. Mr. Yost

186. Topics in the Theory of Knowledge. Lecture, four hours. Prerequisite: course 182 or 183 or consent of instructor. An intensive investigation of one or two selected topics or works in the theory of knowledge, such as: a priori knowledge, the problem of induction, memory, knowledge as justified true belief. Consult the department for topics to be treated in a given quarter. May be repeated for credit with consent of instructor. Mr. Albritton, Mr. Yost

187. Philosophy of Action. Lecture, four hours. Prerequisite: two courses in philosophy or consent of instructor. A study of various concepts employed in the understanding of human action. Topics may include rational choice, desire, intention, weakness of will, and self-deception. Mr. Albritton, Mr. Burge, Mr. Donnellan

188. Philosophy of Perception. Lecture, four hours. Prerequisite: two courses in philosophy or consent of instructor. A critical study of the main philosophical theories of perception and the arguments used to establish them. Mr. Yost

189. Major Philosophers of the 20th Century. Prerequisite: two courses in philosophy or consent of instructor. A study of the writings of one major modern philosopher: for example, Russell, Moore, Wittgenstein, Carnap, Quine. Mr. Albritton, Mr. Burge

NO GROUP

190. Third World Political Thought. Lecture, three hours; discussion, one hour. The political philosophy of various third world thinkers. The topics chosen may vary from year to year, but typically will be chosen from the following: Franz Fanon, Senghor and Caesar’s “Nègritude,” W.E.B. du Bois’ Pan-Africanism, Che and Mao.

192. Philosophical Analysis of Issues in Women’s Liberation. Lecture, four hours. Prerequisite: one course in philosophy or consent of instructor. A critical study of concepts and principles which arise in the discussion of women’s rights and liberation. Topics may include economic and educational equality, preferential treatment, abortion, sex roles, sexual morality, marriage, love, friendship.

193. Christian Ethical Thought. Lecture, three hours; discussion, one hour. Reading of selected classic Christian thinkers. An intensive investigation of the Christian ethical tradition, with philosophical analysis and assessment of their views on morality and the religious life. Mr. Adams

195. 19th- and 20th-Century Religious Thought. Lecture, three hours; discussion, one hour. Modern Religious Thought. A philosophical approach to Western religious thought of the last two hundred years, through study of selected works by such authors as Kant, Schleiermacher, Kierkegaard, Einstein, Camus, and Tillich. Mr. Adams

196. Undergraduate Seminar in Philosophy. Lecture, three hours; discussion, one hour. Prerequisite: consent of instructor. Variable Topics; consult Schedule of Classes or Department Announcements for current topic. May be repeated for credit with consent of instructor. The Staff

199. Special Studies (1 to 2 courses). Prerequisite: consent of instructor. As many as eight units of this course can be used for the Philosophy major, but the course cannot be substituted for a course in one of the four groups on the basis of similarity of subject matter. The Staff

Graduate Courses

For complete descriptions of graduate-level courses offered by this department, please consult the UCLA Graduate Catalog.

Physics

(Department Office: 3-174 Knudsen Hall)

Ernest S. Abers, Ph.D., Professor of Physics.
Rubin Braunstein, Ph.D., Professor of Physics.
Nina Byers, Ph.D., Professor of Physics.
Paul M. Chakian, Ph.D., Professor of Physics.
Marvin Chester, Ph.D., Professor of Physics.
W. Gilbert Clark, Ph.D., Professor of Physics.
John M. Cornwall, Ph.D., Professor of Physics.
John Dawson, Ph.D., Professor of Physics.
Robert J. Finkelstein, Ph.D., Professor of Physics.
A. Theodore Forrester, Ph.D., Professor of Physics and Engineering.
Burton Fried, Ph.D., Professor of Physics.
Christian Fronsdal, Ph.D., Professor of Physics.
George Gruner, Ph.D., Professor of Physics.
Roy P. Haddock, Ph.D., Professor of Physics.
Theodore Holstein, Ph.D., Professor of Physics.
George J. Igo, Ph.D., Professor of Physics.

1. Charles Kennel, Ph.D., Professor of Physics.
2. Leon Knopoff, Ph.D., Professor of Physics and Geophysics and Earth and Space Sciences.
3. Steven A. Moskowski, Ph.D., Professor of Physics.
4. Bernard M. K. Nefkens, Ph.D., Professor of Physics.
5. Richard E. Norton, Ph.D., Professor of Physics.
6. Raymond L. Orbach, Ph.D., Professor of Physics.
7. Philip A. Pincus, Ph.D., Professor of Physics.
8. T. Reginald Richardson, Ph.D., Professor of Physics.
9. Isadore Rudnick, Ph.D., Professor of Physics.
10. J. J. Sakurai, Ph.D., Professor of Physics.
11. Robert A. Satten, Ph.D., Professor of Physics.
12. David S. Saxton, Ph.D., Professor of Physics.
13. Peter Schlein, Ph.D., Professor of Physics.
14. Julian Schwinger, Ph.D., Professor of Physics.
15. William E. Slater, Ph.D., Professor of Physics.
16. Donald H. Stork, Ph.D., Professor of Physics.
17. Harold K. Ticho, Ph.D., Professor of Physics.
18. Charles A. Whitten, Jr., Ph.D., Professor of Physics.
19. Alfred Y. Wong, Ph.D., Professor of Physics.
20. Chun Wu Wong, Ph.D., Professor of Physics.
21. Eugene Wong, Ph.D., Professor of Physics.
22. Byron T. Wright, Ph.D., Professor of Physics.
23. Alfredo Bahos, Jr., Dr.Eng., Ph.D., Emeritus Professor of Physics.
24. Hans E. Bommel, Ph.D., Emeritus Professor of Physics.
27. Norman A. Watson, Ph.D., Emeritus Professor of Physics.
28. Charles D. Buchanan, Ph.D., Associate Professor of Physics.
29. Ferdinand V. Coroniti, Ph.D., Associate Professor of Physics and Astronomy.
30. Seth J. Puttermann, Ph.D., Associate Professor of Physics.
31. Reiner Stenzel, Ph.D., Associate Professor of Physics.
32. Claude Bernard, Ph.D., Assistant Professor of Physics.
33. Gary A. Williams, Ph.D., Assistant Professor of Physics.

S. Merton Burkhard, M.S., Lecturer in Physics.
Jesusa Kinderman, Ph.D., Lecturer in Physics.

Preparation for the Major in Physics

Required: Physics 8A-8E; Chemistry 11A, 11B, 11BL; 11C required (Chemistry 11CL is recommended but not required); Mathematics 31A, 31B, 32A-32B, 33A, 33B.

The Major in Physics†
The department desires to take into account prior preparation in physics. Students who feel their background would permit acceleration may be exempted from courses 8A-8E by taking the final examination with a class at the end of any quarter. These will serve as placement examinations. Qualified students are urged to discuss such possibilities with their advisors.

Physics 3A, 3B, 3C form a one-year sequence of courses in general physics (with laboratory) primarily for students in the biological and health sciences but open to any student who meets the prerequisites. In this sequence only algebra and trigonometry are used in providing a mathematical description of physical phenomena; calculus is not used.

Physics 6A, 6B, 6C form a one-year sequence of courses in basic physics for students in the biological and health sciences. However, unlike Physics 3A, 3B, 3C, calculus is used throughout and satisfactory completion of basic calculus courses is a prerequisite for admission to this sequence. Individual departments will, on an individual basis, advise students as to which physics sequence is required for each major. After an interim period, it is expected that all Biology and Microbiology majors will be required to complete the Physics 6A, 6B, 6C sequence.

The organization of the lower division physics courses is in the process of being revised. The entries in this catalog describe the present program of instruction. Information describing the modified lower division physics courses for 1981-82 may be obtained from the Physics Department Undergraduate Office, 3-145R Knudsen Hall, after July 1, 1981.

Physics 10 is a one-quarter, non-laboratory course which surveys the whole field of physics. It is designed for the liberal arts student and satisfies in part the College of Letters and Science "A" requirement in the physical sciences for nonphysical science majors. Any two or more courses from Physics 10, 3A, 6A and 8A shall be limited to six units credit.

1Q. Contemporary Physics (1/2 course). Prerequisite: a major in Physics. A review of current problems in physics with emphasis on those being studied in our research laboratories at UCLA. The significance of the problems and their historical context. (F)

3A. General Physics: Mechanics of Solids and Fluids. Lecture and demonstration, three hours; discussion, one hour; laboratory, two hours. Prerequisites: Mathematics 31A completed and 31B concurrent with Physics 8A or equivalent courses. (F,W,Sp)

3B. General Physics: Heat, Sound and Electricity and Magnetism. Lecture and demonstration, three hours; discussion, one hour; laboratory, two hours. Prerequisite: course 3A or equivalent. Temperature, heat, and the laws of thermodynamics; introduction to wave motion, resonance. Sound and acoustics. Electric and magnetic fields. Electric power. Elements of DC and AC circuits. (W,Sp)

3C. General Physics: Light, Relativity, and Modern Physics. Lecture and demonstration, three hours; discussion, one hour; laboratory, two hours. Prerequisite: course 3A or equivalent. Elements of optics, relativity, wave-particle duality, quantum theory. (F,Sp)

6A. General Physics: Mechanics of Solids—Honors Sequence. Lecture and demonstration, two hours; discussion, one hour; laboratory, two hours. Prerequisites: Mathematics 31A completed and 31B concurrent with Physics 8A or equivalent courses. (F,W)

6AH. General Physics: Mechanics of Solids—Honors Sequence. Lecture and demonstration, four hours; discussion, one hour. Prerequisites: high school physics or chemistry (preferably both), Mathematics 31A completed and 31B concurrent with Physics 8A or equivalent courses. (F,W,Sp)

BB. General Physics: Vibration, Wave Motion, Sound, Fluids, Heat, and Kinetic Theory—Honors Sequence. Lecture and demonstration, three hours; discussion, one hour; laboratory, two hours. Prerequisites: course 8A, Mathematics 31B completed and 32A concurrent with Physics 8B or equivalent courses. (F,W,Sp)

BBH. General Physics: Vibration, Wave Motion, Sound, Fluids, Heat, and Kinetic Theory—Honors Sequence. Lecture and demonstration, four hours; discussion, one hour; laboratory, two hours. Prerequisites: course 8A, Mathematics 31B completed and 32A concurrent with Physics 8B or equivalent courses. (F,W,Sp)

BG. General Physics: Electricity and Magnetism. (Formerly numbered 7B.) Lecture and demonstration, four hours; discussion, one hour; laboratory, two hours. Prerequisites: course 8A, Mathematics 32A completed and 32B concurrent with Physics 8C. (Sp)

BGH. General Physics: Electricity and Magnetism—Honors Sequence. Lecture and demonstration, three hours; discussion, one hour; laboratory, two hours. Prerequisites: course 8A, Mathematics 32A completed and 32B concurrent with Physics 8C. (F,W,Sp)

BGH. General Physics: Electricity and Magnetism—Honors Sequence. Lecture and demonstration, three hours; discussion, one hour; laboratory, two hours. Prerequisites: course 8A, Mathematics 32A completed and 32B concurrent with Physics 8C. (F,W,Sp)

BD. General Physics: Electromagnetic Waves, Light, and Relativity. (Formerly numbered 7D.) Lecture and demonstration, three hours; discussion, one hour; laboratory, two hours. Prerequisites: course 8C, Mathematics 32A completed and 33A concurrent with Physics 8D or equivalent courses. (F,W,Sp)
Upper Division Courses


114. Mechanics of Wave Motion and Sound. Vibra- 
tivity of sound waves in liquids and solids including elements of hydrodynamics and elasticity. Applications in ultrasonics, low temperature physics, solid state physics, architectural acoustics.

115A. Elementary Quantum Mechanics. Prerequisite: course 115A. Development of the methods and concepts of quantum mechanics.

115B. Elementary Quantum Mechanics. Prerequisite: course 115B. Further development in the methods and concepts of quantum mechanics.

116. Electronics. Lecture, three hours; laboratory, three hours. Alternating current circuits, vacuum tube characteristics and parameters, transistor characteristics and parameter, amplifiers, oscillators, nonlinear and tube and transistor circuits.

122. Plasma Physics. (Same as Engineering M118.) Prerequisite: Engineering 100B or Physics 110A. Senior-level introductory course to physics of plasmas and ionized gases and fundamentals of controlled fusion. Particle motion in magnetic fields; fluid behavior, plasma waves; resistivity and transport; equilibrium and stability; kinetic effects. Illustrative laboratory experiments will be discussed.

123. Atomic Structure. (Formerly numbered 113.) Prerequisite: course 115B. The theory of atomic structure. Interaction of radiation with matter.

124. Nuclear Physics. Prerequisite: course 115A. Nuclear charge, mass, radius, spin, and moments; nuclear models; nuclear forces; alpha, beta, and gamma emission.

126. Elementary Particle Physics. Prerequisite: course 115B. Experimental determination of the properties of elementary particle states. Relativistic kinematics and phase space; angular momentum and isotopic spin formalism; elastic and inelastic scattering; invariance principles and conservation laws; strong, electromagnetic, and weak interactions. Survey of important experiments.


131B. Mathematical Methods of Physics. Prerequisite: course 131A. Green's functions and boundary value problems, complex variables and selected topics from: Tensors, Laplace transforms, probability theory, perturbation theory, approximation techniques.

140. Introduction to Solid State Physics. Prerequisite: course 115B or equivalent. Introduction to the basic theoretical concepts of solid state physics with applications. Crystal symmetry; cohesive energy; diffusion of electron, neutron, and electromagnetic waves in a lattice; the reciprocal lattice; phonons and their interactions; free electron theory of metals; energy bands.

140A. Nuclear Physics Laboratory.

140B. Physical Optics and Spectroscopy Laboratory.

140C. Solid State Physics Laboratory.

140D. Acoustics Laboratory.

140E. Plasma Physics Laboratory.

140F. Elementary Particle Physics Laboratory.

145. Foundations of Physics. Prerequisite: senior standing in physics or consent of instructor. The historical development and philosophical sources of classical and modern physics.

199. Special Studies in Physics (1/2 to 1 course). May be repeated, but not more than three courses may be applied toward the bachelor's degree.

Graduate Courses

For complete descriptions of graduate-level courses offered by this department, please consult the UCLA Graduate Catalog.

Physiology

The Department of Physiology does not offer an undergraduate degree. The following upper division courses are offered with enrollment restrictions as indicated:

Upper Division Courses

100. Elements of Human Physiology (1 1/2 courses). Prerequisite: enrollment in School of Den- tistry or consent of instructor. Required course for first-year dental students. Lectures, laboratories and demonstration-discussions concerning functional activities of the living body in terms of tissue, cellular and system functions. Examples will be presented, where possible, on the basis of information relevant to oral function.

101. Neuromuscular and Cardiovascular Physiol- ogy (1 1/2 courses). Prerequisites: basic courses in chemistry, physics and biology, at least one year each; organic chemistry; histology; gross anatomy, human or comparative. Primarily for first-year medical students, but open to others with consent of instruc- tor. Lectures, laboratory and conferences. An analysis of the electrical properties of muscle and nerve, the contractility of muscle and the heart, and the cardio-vascular system and its regulation.

102. Renal, Respiratory and Gastrointestinal Physiology (1 1/2 courses). Prerequisites: same as for course 101. Primarily for first-year medical students but open to other students with consent of in- structor. Lectures, laboratory and conferences. A continuation of course 101, dealing with respiration, and the distribution of water, electrolytes and metabo- lites by the renal and gastrointestinal systems, and the special physiology of certain organs.

103A. Physiology, Gross Anatomy and Histology (13'4 courses). Prerequisites: basic courses in chemistry, physics and biology, at least one year each. Chemistry, physics and biology, at least one year each. Chemistry, physics and biology, at least one year each.

103B. Basic Neurology. (Same as Anato- my M103A-M103B.) Two four-hour sessions and one three-hour session per week of the last three weeks of Winter Quarter; two two-hour sessions and two three-hour sessions per week in Spring Quarter. Prerequisites: Medical School status or consent of instructor. Lectures, conferences, demonstrations and labora- tory procedures necessary to an understanding of the function of the human nervous system. In Progress.

105N. Human Physiology. Prerequisite: enrollment in the School of Nursing or consent of instructor. Re- quired course for third-year nursing students. Lecture and discussion emphasizing a correlative approach to anatomy and physiology of the human body.

105P. Human Physiology. Prerequisite: enrollment in the School of Nursing or consent of instructor. Re- quired course for third-year nursing students. Lecture and discussion emphasizing a correlative approach to anatomy and physiology of the human body.

199. Special Studies (1/2 to 2 courses). Prerequisite: consent of instructor. Special studies in physiology, including either reading assignments or laboratory work, designed for appropriate training of each student who registers in this course.

The Staff

Graduate Courses

For complete descriptions of graduate-level courses offered by this department, please consult the UCLA Graduate Catalog.
Political Science

(Department Office: 4289 Bunche Hall)

Richard E. Ashcraft, Ph.D., Professor of Political Science.
Hans H. Baerwald, Ph.D., Professor of Political Science.
Richard D. Baum, Ph.D., Professor of Political Science.
Irving Bernstein, Ph.D., Professor of Political Science.
John C. Bollens, Ph.D., Professor of Political Science.
David T. Cattell, Ph.D., Professor of Political Science.
James S. Coleman, Ph.D., Professor of Political Science.
Materi A. Docteur es Lettres, Professor of Political Science.
Ernest A. Engelbert, M.P.A., Ph.D., Professor of Political Science.
Leonard Friedman, Ph.D., Professor of Political Science.
Robert C. Fried, Ph.D., Professor of Political Science.
Rister H. Gerstein, LL.B., Ph.D., Professor of Political Science.
Edward Gonzalez, Ph.D., Professor of Political Science.
Malcolm H. Kerr, Ph.D., Professor of Political Science.
Roman Kolłowicz, Ph.D., Professor of Political Science.
Andrzej Korbonski, Ph.D., Professor of Political Science (Chairman of the Department).
Michael F. Lotch, Ph.D., Professor of Political Science.
Dwaine Marvick, Ph.D., Professor of Political Science.
Charles R. Nixon, Ph.D., Professor of Political Science.
David C. Rapoport, Ph.D., Professor of Political Science.
John C. Ries, Ph.D., Professor of Political Science.
Ronald L. Rogowski, Ph.D., Professor of Political Science.
David O. Sears, Ph.D., Professor of Political Science and Psychology.
John R. Sissun, Ph.D., Professor of Political Science.
Richard L. Sklar, Ph.D., Professor of Political Science.
David O. Wilkinson, Ph.D., Professor of Political Science.
David A. Wilson, Ph.D., Professor of Political Science.
E. Victor Wolfenstein, Ph.D., Professor of Political Science.
Charles E. Young, Ph.D., Professor of Political Science.
Winston W. Crouch, Ph.D., Emeritus Professor of Political Science.
David G. Farrelly, Ph.D., Emeritus Professor of Political Science.
J. A. C. Grant, Ph.D., LL.D., Emeritus Professor of Political Science.
Foster H. Henwood, Ph.D., LL.D., Emeritus Professor of Political Science.
H. Arthur Steiner, Ph.D., Emeritus Professor of Political Science.
L. Blair Campbell, Ph.D., Associate Professor of Political Science.
Douglas S. Hobs, Ph.D., Associate Professor of Political Science.
Paul Jabber, Ph.D., Associate Professor of Political Science.
Stephen D. Krasner, Ph.D., Associate Professor of Political Science.
Karen J. Orren, Ph.D., Associate Professor of Political Science.
John H. Petrock, Ph.D., Associate Professor of Political Science.
Susan Kaufman Purcell, Ph.D., Associate Professor of Political Science.
Raymond A. Rocco, Ph.D., Associate Professor of Political Science.
Duane E. Smith, Ph.D., Associate Professor of Political Science.
Leo M. Snodgrass, Ph.D., Associate Professor of Political Science.
Steven L. Spiegel, Ph.D., Associate Professor of Political Science.
Ciro Zoppo, Ph.D., Associate Professor of Political Science.
Thad A. Brown, Ph.D., Assistant Professor of Political Science.
P. Brett Hammond, Ph.D., Assistant Professor of Political Science.
Stephen L. Showmerok, Ph.D., Assistant Professor of Political Science.
Arthur A. Stein, Ph.D., Assistant Professor of Political Science.
Robert C. Welsh, Ph.D., Assistant Professor Political Science.

Goals of the Undergraduate Program in Political Science

The undergraduate program aims to provide an understanding of basic political processes and institutions as these operate in different national and cultural contexts, of the interaction between national states, of the changing character of the relations between citizens and governments, and of the values and criteria by which the quality of political life is judged. This 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 public and public organizations.

Preparation for the Major

Two lower division courses (8 units): Political Science 1 and 2, 3, 4 or 6. These courses must be taken for a letter grade.

The Major

Requirements I: For those students who had less than 64 quarter units at the beginning of Fall Quarter 1975 the following requirements apply (all other students see Requirements II below):

Ten upper division political science courses (for a total of 40 units) numbered from 102 to 199 must be taken for a letter grade. The student is also required to complete 4 upper division courses (for a total of 16 units) in one or more of the following social sciences: anthropology, communication studies (only 160), economics, geography, history, management (only 150, 180, 190), psychology (except 115, 116, 117), sociology. These courses must also be taken for a letter grade. In addition to requirements for graduation prescribed by the College of Letters and Science, the student is expected to maintain a 2.8 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) Politics, (IV) Comparative Government, (V) Public Law and (VI) Public Administration and Local Government.

In fulfilling the requirement of 10 upper division political science courses, the student must satisfy the following:

(a) A concentration in one field by completing at least four upper division courses in that field. It is recommended that one of these courses be an Undergraduate Seminar, 197A-197F (see field concentration requirements below).

(b) A distribution of two courses in each of two other fields (4 courses).

(c) Political Science 110, Introduction to Political Theory, is required of all Political Science majors and must be taken no later than the junior year. The Political Science 110 requirement may be met by taking two quarters of the Political Science 111 series. Political Science 110 may count for either the concentration or the distribution requirement.

(d) One additional elective course in political science to comprise the total of ten.

Field Concentration Requirements: Specific requirements for field concentration are as follows:

(I) Political Theory: Political Science 110 and three additional courses in Field I.

(II) International Relations: Political Science 2 and any four upper division courses in Field II. Four units from 175A-175B may be counted as one of the four courses in Field II. Only one of the defense studies courses—138A, 138B, 138C—may be counted toward field concentration requirement.

(III) Politics: Any four courses in Field III. Political Science 182A may also be counted toward concentration in this field.

(iv) Comparative Government: Political Science 166 and any three additional courses in Field IV. Political Science 115, 188A or 188B—but not more than one of them—may also be counted toward concentration in this field. Political Science 3 is recommended as the second lower division course.

(V) Public Law: Political Science 170 or 171 and any three additional courses in Field V. Political Science 171 is a prerequisite for Political Science 172A or 172B. Political Science 171 is recommended as the second lower division course.
(VI) Public Administration and Local Government: Any four courses in Field VI. Political Science 138C, 173 or 174—but not more than one of them—may also be counted toward concentration in this field.

Note: No course may be counted toward both concentration and distribution requirements. Also, courses 119, 139, 149, 169, 179 and 189 may be applied no more than twice toward the field concentration requirement. No more than three of these courses may be applied toward the major.

Political Science 198 and 199 may not apply to fulfill either the concentration or distribution requirement.

Requirements II: Those students who had more than 84 quarter units at the beginning of Fall Quarter 1975 should see the undergraduate counselor for applicable requirements.

Undergraduate Seminars

Each quarter the department will offer a series of seminars, limited to 20 students, in each field. The prerequisites will be two upper division courses in the field in which the seminar is offered, a 3.25 average at the upper division level in political science or discretion of the instructor.

The courses will be numbered: 197A-Theory, 197B-International Relations, 197C-Politics, 197D-Comparative Government, 197E-Public Law and 197F-Public Administration and Local Government.

These courses may count for either the concentration or distribution requirement, and students who qualify are encouraged to take them.

The Honors Program

Qualifications: Completion of an undergraduate seminar; a 3.5 grade-point average at the upper division level in political science; eligibility for College of Letters and Science honors status.

The Program: Students wishing to qualify for graduation with Departmental Honors must maintain a 3.5 grade-point average in upper division political science and complete the following: (1) a one-year seminar (Political Science 198A, 198B, 198C), the first quarter of the seminar, Political Science 198A, is a general seminar on political science and involves research. The second and third quarters, Political Science 198B and 198C, are devoted to writing a senior thesis under the direction of a faculty member. The honors thesis will be read by the respective field committees and judged for its quality and graded as to high honors, honors, Passed, Not Passed, which is equivalent to "A", "B", "C", "F" on the grade scale; (2) eight upper division courses, excluding courses 119, 139, 149, 169, 179 and 189, distributed as follows: Political Science 110, four courses in one field and four additional courses, two in each of two other fields. These eight courses plus the one-year seminar will comprise the eleven upper division courses required for Honors in Political Science; (3) four upper division courses in the social sciences other than political science.

Related Curricula

For the curricula in international relations and public service, see "International Relations" and "Urban Studies or Organizational Studies" in this section of the catalog.

Lower Division Courses

1. Introduction to American Government. Lecture, three hours; discussion, one hour. An introduction to the principles and problems of government with particular emphasis on national government in the United States. This course fulfills the requirement of American History and Institutions and is required of all students majoring in Political Science. The Staff

2A-2B: World Politics. Lecture, three hours; discussion, one hour. There are no prerequisites for 2A or 2B. Either 2A or 2B is required of all students concentrating in Field II and may be used to fulfill one of the two requirements for the "Preparation for the Major." An introduction to problems of world politics: 2A: Problems of Power Politics: 2B: Problems of World Order. The Staff

3. Introduction to Comparative Government. Lecture, three hours; discussion, one hour. Prerequisite: course 1. A comparative study of constitutional principles, governmental institutions, and political processes in selected contemporary states, with emphasis on the major European governments. This course may be used to fulfill one of the two course requirements for the "Preparation for the Major." The Staff

4A-4Z: Current Problems in Political Science. Prerequisites: successful completion of or concurrent enrollment in Political Science 1 and consent of instructor. Prospective seminar students will be offered each quarter dealing with selected political problems. Topics will be announced upon the preceding quarter. Enrollment will be limited. Preference will be given to declared freshman majors. This course may be used to fulfill one of the two course requirements for the "Preparation for the Major." The Staff

5. Introduction to Quantitative Research. Prerequisites: one previous course in political science, e.g., Political Science 1, 2 or 3. An introduction to the collection and analysis of political data. The course emphasizes the application of statistical reasoning to the study of relationships among political variables. Students use the computer as an aid in analyzing data from various fields of political science, among them comparative politics, international relations, American politics, and public administration. Students will be required to develop a survey questionnaire, designing a sample, collecting interviews, maintaining quality control, and coding the interviews for machine tabulation. The final requirement for the course is that the student perform a computer-assisted analysis of some part of the data and submit a written report of their research. Both quarters must be taken to receive credit. The Staff

FIELD I. POLITICAL THEORY

110. Introduction to Political Theory. (Formerly numbered 101.) Lecture, three hours; discussion, one hour. An exposition and analysis of selected political theorists and concepts from Plato to the present. This course is required of all majors and must be taken no later than the junior year. The Staff

111A. History of Political Thought: Ancient and Medieval Political Theory. An exposition and critical analysis of the major political philosophers and schools from Plato to Machiavelli. The Staff

111B. History of Political Thought: Early Modern Political Theory. An exposition and critical analysis of the major political philosophers and schools from Hobbes to Bentham. Mr. Ashcraft

111C. History of Political Thought: Late Modern and Contemporary Political Theory. An exposition and critical analysis of the major political philosophers and schools from Hobbes to Bentham. Mr. Wolfenstein

112. Nature of the State. A systematic analysis of modern concepts and problems of political association. The Staff

113. Problems in Twentieth-Century Political Theory. A study and interpretation of theorists who have focused their analyses on the social and political problems of the twentieth century. Mr. Rocco

114A-114B. American Political Thought. Prerequisites: course 114A or consent of instructor is prerequisite to 114B. Mr. Smith

114A. An exposition and critical analysis of American political thinkers from the Puritan period to 1865. Mr. Smith

114B. An exposition and critical analysis of American political thinkers from 1865 to the present. Mr. Smith
115. Theories of Political Change. Prerequisite: course 110 or consent of instructor. A critical examination of theories of political change, the relation of political change to changes in economic and social systems, and the relevance of such theories for the explanation of both Western and non-Western societies. This course may be counted in either Field I or IV.

Mr. LoChic, Mr. Nixon

116. Marxism. A critical analysis of the origins, nature, and development of Marxist political theory.

Mr. Ashcraft, Mr. Wolfenstein

117. Jurisprudence. Development of legal systems; consideration of fundamental legal concepts; consequences and influence of modern school of legal philosophy in relation to law and government. This course may be counted in either Field I or V.

Mr. Garstein

119A-119Z. Special Studies in Political Theory. Prerequisites: course 110, one additional course in Field I and consent of instructor. Intensive examination of one or more special problems appropriate to political theory. Sections will be offered on a regular basis with topics announced in the preceding quarter. Courses 119, 139, 149, 169, 179 and 189 may be applied no more than twice toward the field concentration requirement. No more than three of these courses may be applied toward the major.

The Staff

FIELD II. INTERNATIONAL RELATIONS

120. Foreign Relations of the United States. Lecture, three hours; discussion, one hour. A survey of the factors and forces entering into the formation and implementation of American foreign policy, with special emphasis on contemporary problems.

Mr. Jabber, Mr. Spiegel, Mr. Stein

121. Studies in Formulation of American Foreign Policy. A study of the formation of American foreign policy with respect to individual cases. Specific topics will be announced in the Schedule of Classes each quarter. This course is not repeatable for credit.

Mr. Krasner

122. International Organization and Administration. A general survey of the institutions, political and administrative, of international organization, with emphasis on the United Nations.

Mr. Wilkinson

123. International Political Economy. A study of the political aspects of international economic issues.

Mr. Krasner

124. Arms Control and International Security. Lecture, four hours. Survey of contemporary arms control issues, with emphasis on efforts to limit nuclear weapons proliferation and the international arms trade.

Mr. Porter

125. Peace and War. Theory and research on the causes of war and the conditions of peace.

Mr. Wilkinson

127. The Atlantic Area in World Politics. A contemporary survey of the foreign policies of the North Atlantic countries and of cooperative efforts to attain political, economic, and military coordination on a regional basis.

Mr. Zoppo

128A-128B. The Soviet Sphere in World Politics. A contemporary survey of the foreign policies and aspirations of the Soviet Union and other Eastern Communist countries. An analysis of the effects and consequences of Communist doctrine affecting relations between the Soviet Union and democratic societies.

Mr. Cattell, Mr. Kołkowski, Mr. Korbutowski

131. Latin American International Relations. The major problems of Latin-American international relations and organization in recent decades.

Mr. Gonzalez, Ms. Pucell

132A-132B. International Relations of the Middle East. Prerequisite: course 132A is prerequisite to 132B, or consent of instructor for 132B.

Mr. Jabber

132A. Contemporary regional issues and conflicts, with particular attention to inter-Arab politics, the Arab-Israeli problem, and the Persian Gulf area.

Mr. Jabber

132B. Role of the Great Powers in the Middle East, with emphasis on American, Soviet and West European policies since 1945.

Mr. Jabber

135. International Relations of China. The relations of China with its neighbors and the other powers, with emphasis on political conflicts and policies of China vis-a-vis the United States and the Soviet Union.

Mr. Baum

136. International Relations of Japan. The foreign policies of Japan, and their interests and policies of other countries, particularly the United States, as they relate to Japan.

Mr. Baerwald

137. International Relations Theory. An examination of various theoretical approaches to international relations and their application to a number of historical cases and contemporary problems.

Mr. Krasner, Mr. Stein


Mr. Stein


The Staff

138B. The Conduct of Modern War. A study of recent and contemporary wars with special emphasis on political and strategic problems. This course may be counted in either Field I or IV.

Mr. Ries

139A-139Z. Special Studies in International Relations. Prerequisites: two courses in Field II or course 2 and one course in Field II and consent of instructor. Intensive examination of one or more special problems appropriate to international relations. Sections will be offered on a regular basis with topics announced in the preceding quarter. Courses 119, 139, 149, 169, 179 and 189 may be applied no more than twice toward the field concentration requirement. No more than three of these courses may be applied toward the major.

The Staff

FIELD III. POLITICS

M140. Political Psychology (Same as Psychology M138.) Prerequisite: Psychology 10. Examination of political behavior, political socialization, personality and politics, racial conflict, and the psychological analysis of public opinion on these issues.

Mr. Sears

141. Public Opinion and Voting Behavior. Lecture, three hours; discussion, one hour. A study of the character and formation of political attitudes and public opinion. The role of public opinion in the electoral process, the relationship of political attitudes to the vote decision, and the influence of public opinion on public policy formulation will be examined.

Mr. Brown, Mr. Petrocik

142. The Politics of Interest Groups. A systematic investigation of the role of political interest groups in the governmental process, with attention directed to the internal organization, leadership, and politics of such groups to the goals and functions of various types of groups, and to the strategies and tactics of influence.

Ms. Orren, Ms. Skowronek

143. Legislative Politics. A study of those factors which affect the character of the legislative process and the capacity of representative institutions to govern in contemporary societies.

Mr. Marvick, Mr. Snowsill

144. The American Presidency. A study of the nature and problems of presidential leadership, emphasizing the impact of the bureaucracy, Congress, public opinion, interest groups, and the party system upon the presidency and national policy-making.

Ms. Orren, Ms. Skowronek, Mr. Snowsill

145. Political Parties. The organization and activities of political parties in the United States. Attention is focused upon the historical development of the parties, the nature of party change, campaign functions, and the electoral role of the parties, membership problems and party activists, political finance, and policy formulation practices.

Mr. Brown, Mr. Marvick, Mr. Petrocik

146. Political Behavior Analysis. Prerequisite: course 141. The use of quantitative methods in the study of political behavior, especially in relation to voting patterns, political participation, and techniques of political action.

Mr. Brown, Mr. Marvick, Mr. Petrocik

147. Minority Group Politics. Lecture, three hours; discussion, one hour. Prerequisites: course 1 plus one of the following: one additional 140-level course or one upper division course on race or ethnicity from history, psychology or sociology or consent of instructor. Study of the systemic effects of the functioning of the American polity, related to problems of race and ethnic identity. Topics include: leadership, organization, ideology, conventional versus unconventional political behavior, inter-group relations, co-optation, synthesis, and repression.

Mr. Rocco

149A-149Z. Special Studies in Politics. Prerequisites: two courses in Field III and consent of instructor. Intensive examination of one or more special problems appropriate to politics. Sections will be offered on a regular basis with topics announced in the preceding quarter. Courses 119, 139, 149, 169, 179 and 189 may be applied no more than twice toward the field concentration requirement. No more than three of these courses may be applied toward the major.

The Staff

Also see course 182A

FIELD IV. COMPARATIVE GOVERNMENT

152. British Government. The government and politics of the United Kingdom; the British constitution, parliament, parties and elections, foreign policies, administrative problems, and local governments.

The Staff

153. Governments of Western Europe. The constitutional and political structure and development of France and other states of continental Western Europe, with particular attention to contemporary problems.

Mr. Rogowsky

154. Governments of Central Europe. The constitutional and political structure and development of Germany and other Central European states, with particular attention to contemporary problems.

Mr. Rogowsky

155. The Government of the Soviet Union. An intensive study of the political and institutional organization of the Soviet Union and its component parts, with special attention to contemporary political issues, as well as party and governmental structures.

Mr. Cattell, Mr. Kołkowski, Mr. Korbutowski

157. Governments of Eastern Europe. A study of the political and governmental organization of the Communist countries of Eastern and Central Europe (exclusive of the U.S.S.R.) with special reference to the institutions, practices and ideologies including interregional relations.

Mr. Korbutowski

159. Chinese Government and Politics. Organization and structure of Chinese government with particular attention to the policies, doctrines, and institutions of Chinese Communism; political problems of contemporary China.

Mr. Balm

160. Japanese Government and Politics. The structure and operation of the contemporary Japanese political system, with special attention to domestic political forces and problems.

Mr. Baerwald


The Staff

163A. Government and Politics in Latin America. (Formerly numbered 163A.) A comparative study of governmental and political development, organization and practices in the states of Middle America.

Mr. Gonzalez, Ms. Pucell
163B. Government and Politics in Latin America. (Formerly numbered 168B.) A comparative study of governmental and political development, organization and practices in the states of South America.

Mr. Gonzalez, Ms. Purcell

164. Government and Politics in the Middle East. A comparative study of government in the Arab States, Turkey, Israel and Iran.

Mr. Jabber, Mr. Kerr


Mr. Kerr

166A-166B-166C. Government and Politics in Sub-Saharan Africa. Patterns of political change in Africa south of the Sahara with special reference to nationalism, nation-building and the problems of development. (Course is offered in three parts.)

166A. Western Africa.

166B. Eastern Africa.

166C. Southern Africa. Mr. Lofchie, Mr. Sklar

167. Ideology and Development in World Politics. A comparative study of the major modes of political and economic development in the world today. Relations between politics and economics are examined in light of the current debate about imperialism.

Mr. Sklar

168L. Comparative Political Analysis. Lecture. Prerequisites: two courses in Field IV or Political Science 3 and one course in Field IV. Major approaches to the study of comparative politics. Concepts and methodology of comparative analysis. Course 168L or 168S is required of all students concentrating in Field IV. This course will be conducted as a lecture course. Either 168L or 168S can be taken for credit; credit will not be given for both. The Staff

168S. Comparative Political Analysis. Seminar. Prerequisites: two courses in Field IV or Political Science 3 and one course in Field IV. Consent of instructor. Major topics to explore such topics as politics, concepts and methodology of comparative analysis. Course 168L or 168S is required of all students concentrating in Field IV. This course will be conducted as a seminar. Either 168L or 168S can be taken for credit; credit will not be given for both. The Staff

169A-169Z. Special Studies in Comparative Government. Prerequisites: two courses in Field IV or course 3 and one course in Field IV and consent of instructor. Intensive examination of one or more special problems appropriate to comparative government. Sections will be offered on a regular basis with topics announced in the preceding quarter. Courses 169, 169A, 169B, 169C and 169Z may be applied no more than twice toward the field concentration requirement. No more than three of these courses may be applied toward the major. The Staff

Also see courses 117, 187

FIELD VI. PUBLIC LAW

180. State and Local Government. A study of state political systems, including their administrative and local sub-systems; intergovernmental relationships; their policy outputs, with specific attention being given to California. Mr. Bollens, Mr. Hammond

181. Introduction to Public Administration. An introduction to the study of the processes and structures designed to convert citizen demands and public decisions into collective action and achievement. Particular attention is devoted to the capacity of American administrative systems to respond effectively to citizen expectations within the restraints of due process. Mr. Fried

182A. Metropolitan Area Government and Politics. An overview of the political and social organization of metropolitan areas and their central cities and suburbs. Emphasis on the relationship of local governmental systems to the national, state, and regional governments and the utility of various models of urban government. Particular attention will be paid to the role of urbanization in political development. This course may be counted in either Field V or VI.

Mr. Bollens

182B. City Government and Politics, Prerequisites: course 182A or consent of instructor. Intensive analysis of contemporary urban governance in the United States. Emphasis is given to such student participatory activities as field-work, research, and gaming of urban politics and policy problems.

Mr. Bollens

186. National Policy and International Affairs. Programs. An examination of the administrative patterns and practices of the United Nations agencies and overseas development programs, including distinctive characteristics of organization and management selection of personnel, and methods of financing.

The Staff

185. Public Personnel Administration. The process of formulating and administering public personnel policies: concepts and principles utilized in selected governmental systems. Emphasis will be primarily upon governmental systems in the United States (national, state, local, foreign service, military) but also comparisons will be made with selected governmental systems.

The Staff

186. National Policy and Administration. A study of the major policies and programs of the national government and their administration as illustrated in such areas as national defense, social welfare, agriculture, etc. Particular attention will be paid to the role of the President and cabinet agencies in formulation and implementation of public policy and in maintaining a responsible bureaucracy.

Mr. Engelbert, Mr. Fried

187. Law and Administration. Legal controls of administration action. Substantive and procedural limits on administrative discretion. Emphasis will be placed on the role of judicial and administrative agencies and the sources of legal powers of administrative bodies within these limits. This course may be counted in either Field V or VI.

Mr. Fried

188. Comparative Urban Government. A cross-cultural examination of the forms and processes of urban government. Particular attention will be paid to the role of urbanization in political development. This course may be counted in either Field V or VI.

Mr. Fried

189A-189Z. Special Studies in Public Administration. Prerequisites: two courses in Field VI and consent of instructor. Intensive examination of one or more special problems appropriate to public administration. Sections will be offered on a regular basis with topics announced in the preceding quarter. Courses 119, 139, 149, 169, 179 and 189 may be applied no more than twice toward the field concentration requirement. No more than three of these courses may be applied toward the major. The Staff

Also see courses 138C, 173, 174

FIELD VII. POLITICAL SCIENCE

170. The Anglo-American Legal System. Lecture, four hours; discussion, one hour. Evolution of the English common law courts and their legal system, with emphasis on the development of the basic concepts of law which were received from that system in the United States. Emphasis on the role of today's common law or Political Science 171 is required of all students concentrating in Field V.

Mr. Gerstein

171. The Supreme Court. Lecture, four hours; discussion, one hour. The history, procedures, and role of the Supreme Court in its legal-constitutional and political aspects. Emphasis will be given to the current and recent activities of the Court. Decisions of the Court, historical and current commentaries, and judicial biography will be utilized. Either this course or Political Science 170 is required of all students concentrating in Field V.

Mr. Gerstein, Mr. Hobbs

172A. American Constitutional Law. Prerequisite: course 171. Constitutional questions concerning the separation of powers, federalism, and the relationship between government and property.

Mr. Gerstein, Mr. Hobbs

172B. American Constitutional Law. Prerequisite: course 171. The protection of civil and political rights and liberties under the Constitution.

Mr. Gerstein, Mr. Hobbs

173. Government and Business. The nature of the corporation: the regulation of competition, government promotion of economic interests; regulation of industries clothed with a public interest; government ownership and operation. This course may be counted in either Field V or VI.

Mr. Bernstein, Ms. Orren

174. Government and Labor. The labor force and the role of the trade union; regulation of labor relations; programs of unemployment and to mitigate unemployment; protective labor legislation. This course may be counted in either Field V or VI.

Mr. Bernstein

175A-175B. International Law. A study of the nature and place of international law in the conduct of international relations. Courses 175A and 175B may be offered in consecutive terms or simultaneously. If offered consecutively, 175A is prerequisite to 175B, and a student may take 175A alone for four units credit. If they are offered simultaneously, a student must take both courses for 8 units. A maximum of 4 units (1 course) may be counted in Field II.

Mr. Bernstein

179A-179Z. Special Studies in Public Law. Prerequisites: course 170 or 171, one additional course in Field V, any special requirements and consent of instructor. Intensive examination of one or more special problems appropriate to public law. Sections will be offered on a regular basis with topics announced in the preceding quarter. Courses 119, 139, 149, 169, 179 and 189 may be applied no more than twice toward the field concentration requirement. No more than three of these courses may be applied toward the major. The Staff

Also see courses 117, 187

POLITICAL SCIENCE / 181
Students participate in courses and research at Lanterman State Hospital and Developmental Center (formerly Pacific State Hospital), a facility for mentally retarded citizens in Pomena, and do related fieldwork while living together at the nearby UCLA Learning Center. During each quarter of the program up to twenty units of course work related to the theme of developmental disabilities are offered. Most of the courses are in the Psychiatry/Psychology M180-M181 series, but courses from other departments (such as biology) may supplement these offerings. Many of the courses fulfill Psychology undergraduate major requirements. Students interested in the program should contact the Office of Instructional Development—Field Studies Development or the Psychology Advising Office.

Information on clinical practicums which are offered in conjunction with other educational institutions and UCLA departments may be obtained from the department’s Educational Activities Office.

The department does not offer an undergraduate degree. The following upper division courses are offered with enrollment restrictions as indicated:

### Upper Division Courses

**M112. A Laboratory for Naturalistic Observations: Developing Skills and Techniques.** (Same as Anthropology M136Q and Psychology M155.) Prerequisites: consent of instructor. The skill of observing and recording behavior in natural settings will be taught, emphasizing field training and practice in observing behavior. Group and individual projects will be included. Some of the uses of observations and their implications for research in the social sciences will also be discussed. Mr. Gallimore, Mr. Levine, Mr. Turner

**CM135. Theoretical Issues in Disorders of Language Development.** (Same as Linguistics CM135.) Lecture, two hours; discussion, two hours. Prerequisites: Linguistics 101 or 100 and 130 or 131 or consent of instructor. Introduction to the field of language disorders of children. The course will deal primarily with some clinical syndromes which are associated with delayed or deviant language acquisition: aphasia, autism, mental retardation. Theories regarding etiology and the relationship of these disorders to each other will be examined. Such questions as the relationship of cognition to linguistic ability will be considered. Concurrently scheduled with Psychology CM237/Linguistics CM235. Graduate students will be expected to apply more sophisticated knowledge and produce a research paper of greater depth. Ms. Needelman

**M180A. Contemporary Problems in Mental Retardation.** (Same as Psychology M180A.) Prerequisites: Psychology 10, 41 and 127 or 130 and enrollment in Immersion Program. Presentation of the concepts, issues and research techniques in the area of mental retardation. Biological, psychological and community questions concerning the causes and treatment of developmental mental disabilities as well as systems for the care and training of retarded individuals will be explored. Lectures, directed reading and discussion. To be taken concurrently with Research in Contemporary Problems in Mental Retardation (M181A-M181B). The Staff

**M180B. Contemporary Issues in Mental Retardation.** (Same as Psychology M180B.) Prerequisites: course M180A and enrollment in Immersion Program. Psycho-social issues in mental retardation, relating literature to ongoing field experiences through lectures, discussions, media and 6 student papers. Mr. Baker

For concurrently scheduled courses ("C" prefix), prerequisites and/or standards for performance and evaluation are applied separately for undergraduates and graduates.
Training in psychology at UCLA emphasizes the idea of psychology as a biosocial laboratory science. To meet the diverse needs of students, there are three different major curricula: the Psychology major, the Quantitative Psychology major, and the Psychobiology major. Students should note that all courses required for these majors (which include lower division courses and major courses) must be taken for a letter grade.

The Pre-Psychology Major

While students are completing the lower division preparation courses for one of the majors listed above, they should be enrolled as Pre-Psychology majors. Students may enroll in this premajor at the Psychology Undergraduate Advising Office, 1531 Franz Hall. Students must complete the preparation courses according to the rules set down in the major before they can enroll in that major. When students have completed the preparation courses for the major, they must petition to enter that major at the Psychology Undergraduate Advising Office.

The Psychology Major

PLEASE NOTE: Students must complete all premajor courses with a 2.0 grade-point average and petition for change of major by the time they attain 135 units. Students entering UCLA as freshmen can easily complete the nine preparation courses within 135 units. Transfer students who have a number of these preparation courses left to complete will have a more difficult time meeting this requirement. All transfer students must see a counselor in the Psychology Undergraduate Advising Office.

Required Lower Division Courses for the Psychology Major: Broad training in general science is required for the major in Psychology. The required lower division courses are as follows: Anthropology 11 or 1; Biology 2 or 5; Chemistry 2 (for those students who have completed one year of high school chemistry with a "C" or better, this requirement will be waived) or 11A; Mathematics 2; Physics 10 or 3A or 6A or 8A; Philosophy 1, 3, 4, 7, 8, 9, 10 or 21 (choose one); Psychology 10; Psychology 41 or Mathematics 50A or Economics 40 (Psychology 41 recommended). Students must complete all premajor courses with a 2.0 grade-point average and petition for change of major status by the time they attain 135 units. It should be noted that the above are the minimum requirements in preparing for the major. More advanced courses in science and statistics would provide stronger preparation for the major.

Required Upper Division Major Courses (Admission to the major and to certain of the courses listed below is limited to students who have completed all of the above preparation courses with a 2.0 grade-point average by the time they attain 135 units. See the section above entitled "The Pre-Psychology Major" for the procedures to follow to enroll in the Psychology major): (1) all of the following content core courses: 110, 115, 120, 125, 135; (2) Psychology 100 (it is important to take this course immediately after completion of the statistics requirement and early in the student's undergraduate career); (3) one of the following laboratory and field research courses: 111, 116, 121, 126, 132B, 136A, 136B, 143, M155, 170B, 173, 174, 176, M181A, M181B; (4) an additional three upper division elective courses (12 units) in psychology.
The Quantitative Psychology Major

This major is an alternative to the Psychology major. It provides students with basic training in both quantitative skills and in psychology. Quantitative and computer skills are important in all fields of psychology and are of very positive aspect in the student's preparation for a career in psychology or related fields.

Required Lower Division Courses for the Quantitative Psychology Major: The following courses must be completed with a 2.0 grade-point average: Biology 2 or 5; Chemistry 2 (for those students who have completed one year of high school chemistry with a "C" or better, this requirement will be waived) or 11A; Engineering 10S (recommended) or 10C or 10F; Mathematics 31A, 31B, 32A-32B, 33A, 33B; Physics 10 or 3A or 6A or 8A; Psychology 10.

It should be noted that the above are minimum requirements in preparing for the major. More advanced courses in science would provide stronger preparation for the major.

Required Upper Division Quantitative Psychology Major Courses (Admission to the Quantitative Psychology major is limited to students who have completed the above preparation courses with a 2.0 grade-point average. See the section above entitled "The Pre-Psychology Major" for the procedures to follow to enroll in the Quantitative Psychology major): (1) one of the following sets of courses: Public Health 100A, 100B or Mathematics 150A-150B or Mathematics 152A-152B or Engineering 153A, 153B; (2) all of the following courses: Psychology 110, 115, 120, 125, 135; (3) seven additional upper division courses in quantitative psychology, mathematics, biostatistics, computer science and system science. Two of these courses must emphasize research methodology in psychology.

Particular courses for the last requirement will depend on a student's needs and interests. Students will consult their advisor for prior approval of courses to meet these requirements. See the Psychology Undergraduate Advising Office for details.

The Psychobiology Major

This major is an alternative to the Psychology major and is designed for students who plan to go on to postgraduate work in psychobiology or in the health sciences.

Required Lower Division Courses for the Psychobiology Major: The following courses must be completed with a 2.0 in EACH course: Biology 5, 7; Chemistry 11A, 11B/11BL, 11C/11CL, 21, 23, 25; Mathematics 3A, 3B, 3C or 31A, 31B, 32A; Philosophy 1, 3, 4, 7, 8, 9, 10 or 21 (choose one); Physics 6A, 6B, 6C or 3A, 3B, 3C; Psychology 10; Psychology 41 or Mathematics 50A or Economics 40 (Psychology 41 recommended).

Required Upper Division Psychobiology Major Courses (Admission to the Psychobiology major is limited to students who have completed the above preparation courses with a 2.0 in each course. See the section above entitled "The Pre-Psychobiology Major" for the procedures to follow to enroll in the Psychobiology major): (1) all of the following courses: Biology 129 or Psychology 118A; Psychology 100, 110, 115, 116, 120; (2) one of the following courses: Psychology 125, 127, 130, 135; (3) four courses from the following list with the noted conditions: Psychology 117 (only one section may be used); Biology 107, 112, 113, 114, 115 (no more than one from this group); Psychology 118B, 118C, 118D, 118E, 118F, 119, M153, Biology 105, 110, 111, 120, 122, 134, 135, 137, 138, 139, 144, 145A, 145B, 145c, 153, 158, 166, 168, 169, 171, 172A, 172B, 173, 177, 179; Kinesiology 140 and Chemistry 152.

Preparation for Graduate Work in Psychology

Although requirements for admission to graduate programs in psychology in most universities will be satisfied by the above major requirements, students should realize that both admission to graduate work and progress toward the degree will be impeded in certain areas of psychology if additional preparation is not obtained at the undergraduate level. For this reason, students who plan to do graduate work in psychology are advised to take additional work in methodology and statistics, and to take advantage of the many advanced undergraduate courses in specific fields offered both by the Psychology Department and related departments.

Students should plan to give some time to the acquisition of a reading knowledge of one or two foreign languages which might be required for the Ph.D. The department no longer requires a foreign language except in the area of Measurement/Psychometrics, but at some other universities one or two foreign languages are required.

Consult the Psychology Undergraduate Advising Office, 1531 Franz Hall, for information concerning graduate programs at other institutions; consult the Graduate Admissions Assistant, 1283 Franz Hall, for information concerning the graduate program at UCLA.

Honors Program in Psychology

The Psychology Honors Program is intended to provide exceptional students with an opportunity in the junior or senior year for advanced research and study under the tutorial guidance of a member of the faculty. (For information on "College Honors," see the "College of Letters and Science" section of this catalog.) Honors students participate in an Honors Seminar and work toward the completion of a formal bachelor's thesis. Students whose theses are judged acceptable by the Honors Committee are awarded the degree with Honors or Highest Honors in Psychology. Interested students should consult the Psychology Undergraduate Advising Office early in their educational planning for further information and application forms.

Developmental Disabilities Immersion Program

The Developmental Disabilities Immersion Program is cosponsored by the Departments of Psychology and Psychiatry and Biobehavioral Sciences and by the Office of Instructional Development—Field Studies Development. Each year two groups of eighteen juniors and seniors are selected for the program, which runs once during the Fall/Winter Quarters and again in the Spring/Summer Quarters. Students participate in courses and research at Lanterman State Hospital and Developmental Center (formerly Pacific State Hospital), a facility for mentally retarded citizens in Pomona, and do related fieldwork while living together at the nearby UCLA Learning Center.

During each quarter of the program up to twenty units of course work related to the theme of developmental disabilities are offered. Most of the courses are in the Psychology/Psychiatry M180-M181 series, but courses from other departments (such as biology) may supplement these offerings. Many of the courses fulfill Psychology undergraduate major requirements.

Student individualized research projects are part of the immersion experience. Each student teams up with a research sponsor (one of the participating faculty or other Lanterman State staff members) and designs a project commensurate with the student's interests and level of research experience. Many research projects tie in to ongoing research activities at the hospital. Final project reports are published in Pacific State Archives, the annual journal of student research.

To supplement their academic activities, students spend ten hours a week working with the developmentally disabled by assisting teachers in the special education classes in nearby public schools or by helping supervise at sheltered workshops. They have the opportunity to lead classes, to produce lesson plans, to devise learning activities and to work individually with clients.

Group living intensifies the learning experience and presents increased opportunities for the development of interpersonal skills. The residential format accommodates the many extra program activities (workshops, guest lectures, etc.) related to the organizational theme of mental retardation.

Students interested in the program should contact the Psychology Undergraduate Advising Office or Field Studies Development, 50 Dodd Hall. Freshmen are not eligible, and sophomores will be admitted only under exceptional circumstances. Applicants need not be Psychology majors.
Fernald School

Fernald (formerly the Psychology Clinic School), a faculty of the Department of Psychology, was established in 1921 as a research and training center focusing on learning problems.

The uniqueness of the facility lies in its lively experimental atmosphere, in its varied population, in the scope of its training, demonstration and research programs, and in its interdisciplinary approaches in which the talents of teachers, clinical psychologists and school counselors are integrated and brought to bear upon the student's learning difficulties. The facility's current focus is on those children with average or better intelligence who are functioning significantly below grade level in basic school skills and school achievement.

Fernald offers observation, classroom participation and intervention, research and other training opportunities to graduates and undergraduates in many fields, notably psychology and education. Fellowships are available for graduate students in psychology and education. Three courses focusing on learning disorders, Psychology 132A (lecture) and 132B and 132C (laboratory) are specifically associated with the Fernald School programs. Psychology 132A provides an overview of the field of learning problems. Psychology 132B affords the University student the unique opportunity to observe and to participate under supervision in selected activities of the Fernald School. Psychology 132C allows for more and more independent participation in working with learning problems.

Fernald's population includes approximately 85 students, enrolled in classroom programs, and an average of 80 children, adolescents and adults who are seen in individual and small group tutoring programs. In addition, a substantial number of individuals are seen for an initial assessment and consultation process. This process is designed to help them formulate an appropriate course of action in dealing with socioemotional and academic concerns. The research activities, based on these populations, are directed toward an analysis of the processes mediating learning difficulties and toward an evaluation of the effectiveness of various psychological and educational programs.

Spanish Speaking Mental Health Research Center

The Spanish Speaking Mental Health Research Center (SSMHRC) was established in 1973 to conduct basic and applied research on the mental health needs of the Spanish-speaking population. Supported by the National Institute of Mental Health, the SSMHRC is one of only two centers in the United States to provide an interdisciplinary research environment for Hispanic mental health scholars, students and professionals at the national level. The Center collects and disseminates scientific information through its Clearinghouse Division which publishes monographs, occasional papers and bimonthly research bulletins. It also maintains a computer-based bibliographic storage and retrieval system to facilitate access to the literature in this field. The Center sponsors students in a wide variety of mental health disciplines, maintains close ties with community organizations and promotes the increased representation of Hispanic professionals in mental health and social services. Research projects currently under way include studies on acculturation and ethnicity, psychological assessment, health, bilingualism, community mental health, social psychology, socialization practices and the role of the family.

Lower Division Courses

10. Introductory Psychology. A general introduction including the topics of learning, perception, thinking, intelligence and personality.

15. Introductory Psychobiology. A survey of genetic, evolutionary, physiological, pharmacological and experiential factors affecting behavior. Using the comprehensive approach where appropriate, the relation of biological mechanisms to an understanding of man and his interaction with his environment will be emphasized. Not intended for Psychology majors.

The Physiological Staff

41. Psychological Statistics. Prerequisite: Mathematics 2. Basic statistical procedures and their application to research and practice in various areas of psychology.

Mr. Comrey, Mr. Mount, Mr. Woodward

95. Lower Division Seminars. Prerequisite: course 10. Open only to freshmen and sophomores. Intensive analysis in seminar situations of selected topics of current psychological interest. See the Schedule of Classes for current topics and instructors. May be repeated more than once for credit.

*Upper Division Courses*

The following courses have only Psychology 10 as the prerequisite plus the prerequisites listed with each course: 127, 130, 132A, 132B, 134, 135, 137A, 137B, 137C, 138, 139, 148, 170A. For special topics courses such as 195, prerequisites will depend upon the nature of the course. The prerequisites to other upper division courses are all courses listed under the "Pre-Psychology Major."

100. Research Methods in Psychology. Prerequisites: courses 10, 41. Introduction to research methods and critical analysis in psychology. Lecture and lab topics will include: experimental and nonexperimental research methods, statistical design and analysis as applied to a broad range of basic and applied research issues.

Ms. Bjork, Mr. Friedman, Mr. Thomas

102. History and Systems of Psychology. Prerequisite: senior standing or consent of instructor. An historical and systematic analysis of psychological thought and points of view.

Mr. Maltzman, Mr. Parucci

110. Fundamentals of Learning. Prerequisite: course 41. Experimental findings on animal and human conditioning; retention and transfer of learning; the relation of learning and motivation. The course is intended to provide an empirical basis for theory and research in this area.

Mr. Bjork, Mr. Holman, Mr. Houston

*For concurrently scheduled courses ("C" prefix), activities and/or standards for performance and evaluation are stated separately for undergraduates and graduates.

111. Learning Laboratory. Prerequisites: courses 41, 100 and Psychology major standing. Prerequisite or concurrent: course 110. Laboratory experience with techniques in the study of learning especially of animals.

Mr. Holman

112A. Human Learning. Prerequisite: course 110. Acquisition, retention, and transfer of verbal and nonverbal human learning.

112B. Theories of Learning. Prerequisite: course 110. Critical discussion of the major theories in the field of experimental evidence.

Mr. Padilla

112C. Thinking. Prerequisite: course 110. An analysis of experimental studies of problem solving, reasoning, insight, concept formation, and related topics.

Mr. Mackay

112E. Current Topics in Learning. Prerequisite: course 110. A study of related issues in the psychological literature. Topics dependent on instructors. Consent of the instructor and the class. May be repeated for credit with permission of instructor.

The Learning Staff

114. Alcoholism. Prerequisite: upper division standing. Theories and research on the impact, causes, characteristics, and treatment of alcoholism considered from a biobehavioral point of view.

Mr. Maltzman

115. Physiological Psychology. Prerequisites: Biology 2, Psychology 41; for non-Psychology majors, Biology 5, 7 and consent of instructor. Integrative activities and affective processes, relation to neuromuscular and structure and function. Facts, problems and methods.

The Physiological Staff

116. Physiological Psychology Laboratory. Prerequisites: courses 41, 100 and Psychology major standing. Prerequisite or concurrent: course 115. Laboratory experience with various topics in physiological psychology.

Mr. Dearnor

117. Seminar in Psychobiology. Prerequisite: course 115. Advanced topics in brain and behavior. May be repeated for credit with permission of instructor. Only one section of 117 may be applied as an elective on the Psychobiology major.

The Physiological Staff

118A. Comparative Psychobiology. Prerequisite: course 115. A survey of the determinants of species-specific behavior including genetic influences and learning.

Mr. Arnold, Mr. Krasne

118B. Behavioral Pharmacology. Prerequisite: course 115. Experimental and theoretical treatment of drug-behavior relationships. Particular emphasis on mechanisms and development of the physiological responses and drug action and drug interaction with neuronal function; drugs as tools to investigate various behavior processes such as mood, aggression, learning and motivation, experimental study of addiction.

Mr. Butcher, Mr. Ellison

118C. Psychophysiology of Motivation. Prerequisite: course 115. The basic psychophysiology, including brain and endocrine mechanism, involved in the control of motivation. Discussion of homeostatic drives such as hunger and thirst and nonhomoestatic drives such as reproductive behavior will be emphasized.

Mr. Novin

118D. Experimental Neuropsychology. Prerequisite: course 115. Studies the experimental analysis of higher brain functions. Special emphasis on attention, memory, perception and language.

Mr. Beatty

118E. Current Topics in Physiological Psychology. Prerequisite: course 115 or permission of instructor. Advanced topics of current interest in physiological psychology will be presented in depth. The emphasis will be in bringing students to a point where they can appreciate and evaluate current research papers on the topics covered. The course may be repeated for credit.

The Physiological Staff

119F. Biological Psychology: Physiology of Behavior and Learning in Animals. (Same as Psychiatry M190.) Prerequisite: consent of instructor. Basic course for undergraduate students which integrates a systematic overview of common forms of behavioral plasticity and standard training procedures in laboratory animals (in behavioral, neuropsychological and pharmacological studies) with a broad biological, evolutionary perspective.

Mr. Soltysik
119. Evolution of Intelligence. Prerequisites: course 15 or 115, an introductory statistics course, junior or senior standing and consent of department. Intelligence is treated as neural information-processing capacity, and its evolution in vertebrates is correlated with the evolution of enlarged brains. Quantitative approaches in evolutionary biology and the neurosciences are emphasized.

120. Perception. Prerequisite: course 41. Methods and approaches to the study of perception. Experimental results, theoretical interpretations, and demonstrations.

Ms. Rader, Mr. Thomas

121. Perception Laboratory. Prerequisites: courses 41, 100 and Psychology major standing. Prerequisite or concurrent: course 120. Laboratory experience with various topics in perception.

Ms. Bjork, Ms. Rader

122. Language and Communication. Prerequisite: course 41 or consent of instructor. A survey of language behavior, communication and speech perception, including acquisition, sequential structure, and semantic aspects. Recent developments in linguistics, theory of information transfer, analysis and synthesis of speech. Social communication. Aphasia and speech pathology. Animal communication.

Mr. Carterette

123. Psycholinguistics. A survey of current theory and research in psycholinguistics: the description of language in generative grammars; the acquisition of language by children; brain functions on speech production, comprehension and production; errors in speech perception and production; speech physiology and pathology.

The Staff

124A. Current Topics in Perception. Prerequisite: current or advanced consideration of specific topics in perception. May be repeated for credit with consent of instructor.

Mr. Parducci

124B. Current Topics in Psycholinguistics. Prerequisite: course 123. Advanced consideration of special topics in the psychology of language. May be repeated for credit with consent of instructor.

Mr. MacKay

125. Personality. Prerequisite: course 41. A survey of the major topics in the field of personality, including personality theory, personality assessment, and the physiological, behavioral and cultural role of perception, learning and motivation in personality.

Mr. Abramson, Mr. Mehrabian

127. Abnormal Psychology. Study of the dynamics and prevention of abnormal behavior, including neuroses, psychoses and personality disorders. Psychological reactions and other abnormal personality patterns.

Mr. Baker, Mr. Goldstein, Ms. Henker

129A. Personality Measurement. Prerequisite: course 125. The rationale, methods and content of studies in personality in terms of the dimensions of personality in terms of a limited set of dimensions. Detailed consideration of research literature dealing with a few representative personality dimensions.

Mr. Mehrabian

129B. Personality Dynamics. Prerequisite: course 125. Detailed conceptual examination of one or two areas of personality in which the main and interactive effects of personality and situational variables have been investigated. Personality as related to the study of psychology as an internal information processing system. Course work includes an examination of current research literature.

Mr. Weiner

129C. Personality and Cognition. Prerequisite: course 125. Theoretical and experimental analyses of cognitive processes such as imagery, sensation, language and memory and their implication for theories of personality.

Mr. Weiner

129D. Special Topics in Personality. Prerequisite: course 125. Study of selected topics in the psychology of personality. Topics will vary with the instructor's expertise and interests. May be repeated for credit by consent of instructor.

The Personality Staff

130. Developmental Psychology. An elaboration of the developmental aspects of physical, mental, social, and emotional growth from birth to adolescence.

Ms. Greenfield, Mr. Padilla, Ms. Madsen

132A. Learning Disabilities (1 to 1 1/2 courses). Prerequisite: upper division standing. Exploration of different orientations to persons with learning problems, emphasizing assessment and intervention approaches and the psychological impact of such approaches. Topics include the interaction of learner and environment, the sociopolitical nature of the classroom as a psychological impact of schooling, grades, and evaluations, problems encountered in learning. The course may be taken for 4 or 5 units. The 5th unit is devoted to practicum experiences involving the Fernald School. All students planning to enter Psychology 132B may take the 5th-unit option. Where possible, it is recommended that the course be taken on a Passed/Not Passed basis.

Mr. Adelman

132B. Learning Disabilities Laboratory. Prerequisites: courses 120 and consent of instructor. Participation in special activities at the Fernald School is made available to University students to further explore by means of a laboratory experience the topics and issues discussed in 132A. The emphasis is on experiencing and evaluating the psychological and educational impact of research, training and service programs on learners, teachers, etc. Since a limited number of students can be accommodated, different alternatives for students; agreements regarding participation will be worked out during the fifth-unit experience in Psychology 132A. A commitment of eight and a half hours per week is expected (1 hour meeting plus 0.5 hours of activity). Where possible it is recommended that the course be taken on a Passed/Not Passed basis.

The Fernald Staff

132C. Learning Disabilities Advanced Laboratory. Prerequisites: courses 132A, 132B plus consent of instructor. A personalized laboratory participation experience designed to allow the advanced student to explore relevant topics in depth. The Fernald Staff

133B. Exceptional Children. Prerequisite: course 130. Study of the issues and research problems in the area of abnormality. Problems of learning disabilities, emotional disorders, and childhood psychoses.

The Staff

133C. Psychological Development in the Adult Years. Prerequisite: course 130 or consent of instructor. Theory and research on changes in motivation, aptitudes and abilities as related to genetics, age, sex and sociocultural variables.

The Staff

133E. Current Issues in Developmental Psychology. Prerequisites: course 130 and upper division psychology standing. A critical examination of current issues in developmental psychology. The specific issues of concern will vary depending on the interests of the class and instructor. May be repeated with permission of instructor.

The Developmental Staff

134. Psychology and Education. Prerequisite: course 130. Application of principles of cognitive development, learning and perception to educational problems; topics will include general instructional issues, psychology of reading and mathematics, exceptional children, early childhood education, and educational psychology.

Mr. Fairchild

135. Social Psychology. Prerequisite: course 41. The interrelationships between the individual and his social environment. Social influences upon motivation, perception and behavior. The development and change of attitudes and opinions. Psychological analysis of small groups, social stratification and mass phenomena.

Ms. Peplau, Mr. Raven, Ms. Sears

136A. Social Psychology Laboratory. Prerequisites: courses 130, 100 and Psychology major standing. The laboratory experience with such topics as small group behavior, attitude measurement, and interpersonal influence.

Mr. Gerard, Mr. Kelley, Mr. Shure

136B. Survey Methods in Psychology. Prerequisites: courses 100, 135 and Psychology major standing. Methods of data collection in research, including the effective design and management of community research. A variety of measurement by means of attitude scales and public opinion surveys. Class projects and fieldwork. Concurrently scheduled with course 223.

Ms. Gutik

137A. Group Behavior. Prerequisite: course 135. Psychology of interdependence, group membership, leadership, and social influence.

Mr. Kerley

137B. Attitude Formation and Change. Prerequisite: course 135. An interdisciplinary approach to the role of propaganda, personal influence, socialization and social structure on private attitudes and public opinion.

Mr. Gerard

137C. Interpersonal Relations. Prerequisites: course 135, consent of instructor. A study of the psychological facts, principles, problems and theories concerned with interactions and relationships between persons. Focus is upon such phenomena as interpersonal attraction, exchange, aggression, conflict, control, power relations, and the initiation, development and dissolution of relationships.

Ms. Peplau

137D. Introduction to Health Psychology. Prerequisite: course 10. The course determines what areas of health, illness, treatment, and delivery of treatment can be elucidated by an understanding of psychological concepts and research, explores the psychological perspective on these problems, and considers how the psychological perspective might be enlarged and extended in the medical area.

Ms. Taylor

137E. Work Behavior of Women and Men. (Same as Women's Studies M137E) Prerequisites: course 10 or Women's Studies 100 and junior or senior standing. Examination of work behavior of men and, especially women. Covers such topics as antecedents of career choice, job finding, leadership, performance evaluation, discrimination and evaluation bias, job satisfaction and interdependence of work and family roles.

Ms. Gutek

137F. Special Topics in Social Psychology. Prerequisite: course 135. Study of selected topics in social psychology. May be repeated for credit with permission of instructor.

Ms. Peplau, Mr. Raven, Mr. Shure

M138. Political Psychology. (Same as Political Science M140) Prerequisite: course 10. Examination of the political behavior, political socialization, personality and politics, racial conflict, and the psychological analysis of public opinion on these issues.

Mr. Sears

139. Psychology of Social Issues. Prerequisite: course 10. An analysis of the contribution of current psychological theory and research to the understanding of selected historical, social and political problems.

Mr. Fairchild

142. Advanced Statistical Methods in Psychology. Prerequisite: course 41. Chi square, special correlation methods, multiple regression, nonparametric methods, analysis of variance, reliability and validity.

Mr. Nihira

143. Foundations of Psychological Investigation. Prerequisites: courses 141, 100 and Psychology major standing. Outline and examination of concepts associated with psychological investigation and the interpretation of results. Readings, discussions and reports, individual and class projects.

Mr. Mount

144. Psychological Tests and Evaluation. Prerequisite: course 41. Further study of the principles of measurement, stressing basic concepts. Application to problems of test construction, administration and interpretation.

Mr. Bron


Mr. Barthol

148. Industrial and Organizational Psychology. Introduction to the applications of psychology in industrial and other organizations.

Mr. Barthol
150. Mathematical Models in Psychology. Prerequisites: Mathematics 3C or 31B, Engineering 10C, 10F, 10S or consent of instructor. Review of theoretical models and the experimental evidence for these models in various areas of psychology. Topics will include, among others, various methodological issues of learning, perception, cognition and personality. Recommended for Quantitative Psychology majors.

Mr. Holman, Mr. Wickers

151. Computer Applications in Psychology. Prerequisite: Engineering 10C, 10F, 10S or consent of instructor. This course will include hardware and software computer problems in the design, control, and analysis of experiments; programming problems arising in the evaluation of models of psychological processes; the use of the various computer packages for learning, perception, social, and personality, and clinical. Recommended for Quantitative Psychology majors. Mr. Carterette

153. Principles of Biotechnology. (Same as Engineering M107A.) Prerequisite: third quarter sophomore or higher standing. The principles of biological science are developed in an engineering context. An emphasis is placed on how physiological, psychological, and sociological factors affect the integration of man into environmental, informational and managerial systems by engineering means. Mr. Lyman

155. A Laboratory for Naturalistic Observations: Developing Skills and Techniques. (Same as Anthropology M136Q and Psychiatry M112.) Prerequisite: consent of instructor. Students will learn skills and recording behaviors in natural settings will be taught, emphasizing field training and practice in observing behavior. Group and individual projects will be included. Some of the uses of observations and their implications for research and policy will be discussed. Mr. Gallowe, Mr. Levine, Mr. Turner

162. The Psychological Approaches of Henry Murray. The Study of Biography. Prerequisite: consent of instructor. The study of lives and the personal backgrounds of individuals whose ideas have had a major impact on psychology. The emphasis is on the relationships among historical, biographical, and theoretical materials in the study of people. The course will explore the psychological principles to the understanding and solution of community problems. Topics will include community development, community mental health problems, drugs, racism, and rehabilitation of disabled individuals in structured social systems (communities, schools, mental hospitals, prisons, etc.). Mr. Myers

177. Counseling Relationships. Prerequisites: junior or senior Psychology major standing or consent of instructor. Examination and experimental application of concepts drawn from interpersonal and community psychology and their implementation by experimental research. Topics include problems in mental retardation and their applied value. Mr. Mednick and the Staff

190A. 190B. Honors Courses. Prerequisite: junior or senior Psychology major standing and consent of instructor. The Staff

195. Directed Individual Research and Study. Prerequisites: senior Psychology major standing or junior Psychology major standing with at least a 3.0 grade-point average in courses 100, 125, 150, 155, and Biology 10, or consent of instructor. Fieldwork in applications of psychological theory in special projects. Note the following regulations concerning 199 courses: a student may take only one 4-unit 199 course in any one semester. All 199 courses may be applied toward the Psychology major elective course requirement. Only one Psychology 199 course may be taken for a letter grade; additional Psychology 199 courses may be taken for Pass/Not-Pass only.

300, Practicum In The Teaching of Psychology. Prerequisite: upper division Psychology major and consent of instructor. Training and supervised practice for advanced undergraduates in the teaching of psychology. Students will be supervised as junior teaching assistants in the preparation of materials and the development of innovative programs. This course may be repeated once for credit and is offered on a Pass/No Pass basis.

350. Fieldwork in Psychology. Prerequisites: sophomore Psychological major standing and consent of instructor. Fieldwork in applications of psychology. Students will spend two hours in a weekly seminar and six hours per week in applications in the psychology department, the Counseling Center, the Undergraduate Curriculum Development Office, 1531A Franz Hall, should be consulted for application forms and further information. P/ND grading only. May be repeated once for credit. Mr. Friedman

M181A-M181B. Research in Contemporary Problems in Mental Retardation. (Same as Psychiatry M181A-M181B.) Prerequisites: concurrent enrollment in courses M180A-M180B. Fieldwork experience to be completed concurrently with the study of Contemporary Problems in Mental Retardation (M180A).

Mr. Fluharty and the Staff

M182A. Advanced Statistical Methods in Mental Retardation. (Same as Psychiatry M182A.) Prerequisite: course 41 and enrollment in Immersion Program. Introduction of statistical method and design in experimentation principles of statistical inference and appropriate testing methods. An introduction to the use of computers and various software packages is presented. Mr. Silverstein, Mr. Silverstein

M182B. Advanced Design and Statistics. (Same as Psychiatry M182B.) Prerequisite: course M182A. Continuation of course M182A.

Mr. Eyman, Mr. Silverstein

M182C. Perception. (Same as Psychiatry M182C.) Prerequisite: enrollment in Immersion Program. Human information processing, both physical and psychological with special emphasis on pathologies in the mentally retarded. Mr. Gaithright

M182D. Current Issues in Mental Retardation. (Same as Psychiatry M182D.) Prerequisite: junior or senior Psychology major standing. Some sections may require permission of instructor. A study of selected current topics of psychological interest. See Schedule of Classes for topics and instructors to be offered each quarter. This course may be repeated for credit and may apply as elective units on the Psychology major. This course may not apply as an elective on the Psychological major. The Staff

M183. Contemporary Problems in Mental Retardation. (Same as Psychiatry M183.) Prerequisites: course 41 and enrollment in Immersion Program. Presentation of the concepts, issues and research techniques related to the area of mental retardation. Mr. Weiner

M184A. Contemporary Problems in Mental Retardation (Immersion Program). Prerequisites: courses 10, 41 and 127 or 130 and enrollment in Immersion Program. Presentation of the concepts, issues and research techniques related to the area of mental retardation. Biological, psychological and community questions concerning the causes and treatment of developmental disabilities as well as systems for the care and treatment of individuals with special needs will be explored. Lectures, directed reading and discussion. To be taken concurrently with Research in Contemporary Problems in Mental Retardation (M181A-M181B).

Mr. Fluharty and the Staff

M186B. Contemporary Issues In Mental Retardation. (Same as Psychiatry M186B.) Prerequisites: course M180A and enrollment in Immersion Program. Psycho-educational issues in mental retardation, relating literature to ongoing field experiences through lectures, discussions, media and student projects. Mr. Baker
Graduate Courses
For complete descriptions of graduate-level courses offered by this department, please consult the UCLA Graduate Catalog.

Public Health

(School Office: 16-035 School of Public Health)

Abdelmonen A. Alifi, Ph.D., Professor of Biostatistics and Biomathematics.
Roslyn B. Allen-Slater, Ph.D., Professor of Nutrition and Biological Chemistry.
Rolando Armijo, M.D., M.P.H., Professor of Epidemiology in Residence.
Lawrence R. Ash, Ph.D., Professor of Public Health.
A. Ralph Barr, Sc.D., Professor of Public Health.
JudithBlake, Ph.D., Fred H. Bixby Professor of Population Policy and Sociology.
Lester Breslow, M.D., M.P.H., Professor of Public Health.
Virginia A. Clark, Ph.D., Professor of Biostatistics and Biomathematics.
Irvin Cushner, M.D., M.P.H., Professor of Obstetrics and Gynecology and Public Health.
Roger Detels, M.D., Professor of Epidemiology.
Olave Jean Dunn, Ph.D., Professor of Biostatistics and Biomathematics.
Jonathan E. Fielding, M.D., M.P.H., Professor of Pediatrics and Public Health.
Snehenodu B. Kar, Dr.P.H., Professor of Public Health.
Alfred H. Katz, M.A., D.S.W., Professor of Public Health and Social Welfare.
Jessa Kraus, Ph.D., Professor of Epidemiology.
Robert A. Mah, Ph.D., Professor of Environmental Sciences.
Frank J. Massey, Jr., Ph.D., Professor of Biostatistics and Biomathematics.
Edward L. Rada, Ph.D., Professor of Economics in Public Health.
Milton I. Roemer, M.D., M.P.H., Professor of Public Health.
John F. Schacher, Ph.D., Professor of Public Health in Residence.
William Shonick, Ph.D., Professor of Nutrition and Biological Chemistry.
Paul R. Torres, M.D., M.P.H., Professor of Public Health.
Daniel M. Wilner, Ph.D., Professor of Public Health.
Telford H. Work, M.D., M.P.H., D.T.M.&H., Professor of Infectious and Tropical Diseases and Microbiology and Immunology.
Ruth Baik, Ph.D., M.D., Emeritus Professor of Microbiology and Immunology, Pediatrics and Public Health.
John M. Chapman, M.D., M.P.H., Emeritus Professor of Epidemiology.
Gladya A. Emerson, Ph.D., Emeritus Professor of Nutrition.
Carl E. Hopkins, Ph.D., M.P.H., Emeritus Professor of Public Health.
Raymond J. Jessen, Ph.D., Emeritus Professor of Management and Public Health.
Edward B. Johnson, Ed.D., Emeritus Professor of Health Education.
John F. Kessel, Ph.D., Emeritus Professor of Infectious Diseases.
Frank F. Tallman, M.D., Emeritus Professor of Psychiatry and Public Health.
Emil Berkovanic, Ph.D., Associate Professor of Public Health.
Linda B. Bourque, Ph.D., Associate Professor of Public Health.
Albert Chang, M.D., Associate Professor of Public Health.
Poter C. Chang, Ph.D., Associate Professor of Biostatistics.
Ralph R. Frenchi, M.P.H., Dr.P.H., Associate Professor of Epidemiology.
Michael S. Goldstein, Ph.D., Associate Professor of Public Health and Sociology.
Sheldon Greenfield, M.D., Associate Professor of Medicine and Public Health.
Isabelle F. Hunt, M.P.H., Dr.P.H., Associate Professor of Nutrition.
Mohammad G. Mustafa, Ph.D., Associate Professor of Public Health and Medicine.
Charlotte G. Neumann, M.D., M.P.H., Associate Professor of Nuclear Public Health and Pediatrics.
Dennis D. Pointer, Ph.D., Associate Professor of Public Health.
Alfred M. Sadler, Jr., M.D., Associate Professor of Medicine and Public Health.
Stuart O. Schweitzer, Ph.D., Associate Professor of Public Health.
Susan Scrimshaw, Ph.D., Associate Professor of Public Health.
Gary H. Spivey, M.D., M.P.H., Associate Professor of Biostatistics.
Barbara R. Visscher, M.D., Dr.P.H., Associate Professor of Epidemiology.
E. Richard Brown, Ph.D., Assistant Professor of Public Health.
James M. Cameron, Ph.D., Assistant Professor of Public Health.
M. Myra Chern, Ph.D., Assistant Professor of Biostatistics.
Joseph S. Coyne, Ph.D., Assistant Professor of Public Health.
Shan Crelin, M.P.H., Dr.P.H., Assistant Professor of Public Health.
William G. Cumberland, Ph.D., Assistant Professor of Biostatistics.
Climis A. Dawos, Ph.D., Assistant Professor of Environmental Health Sciences.
Curtis D. Eckert, Ph.D., Assistant Professor of Nutrition.
Martin B. Ross, Dr.P.H., Assistant Professor of Public Health.
Judith M. Siegel, Ph.D., Assistant Professor of Public Health.
Jane Valentine, Ph.D., Assistant Professor of Environmental Health Sciences.
William N. Washington, M.P.H., D.P.A., Assistant Professor of Health Education.
Ellen Alkon, M.D., Adjunct Professor of Public Health.
Nancy H. Allen, M.P.H., Adjunct Lecturer in Public Health.
Fanny Rosenzuig Armijo, M.D., M.P.H., Visiting Lecturer in Public Health.
Arnold R. Beisser, M.D., Adjunct Lecturer in Public Health and Associate Clinical Professor of Psychiatric Medicine.
Stewart N. Blumenfeld, Dr.P.H., Researcher and Adjunct Lecturer in Public Health.
Robert H. Brook, M.D., Sc.D., Professor of Medicine and Public Health.
Harold V. Brown, M.P.H., Dr.P.H., Adjunct Lecturer in Public Health.
Marianne P. Brown, M.P.H., Adjunct Professor in Public Health.
Edith M. Carlisle, Ph.D., Research Biochemist and Adjunct Professor of Public Health.
Wen-Ping Chang, M.D., M.P.H., D.M.Sc., Visiting Lecturer in Public Health.
Leonard M. Chansky, Ph.D., Adjunct Assistant Professor of Public Health.
Dia E. Chatty, M.D., M.P.H., Assistant Researcher in Public Health.
George Clayton, B.S., Visiting Lecturer in Public Health.
Davida Coady, M.D., M.P.H., Adjunct Associate Professor of Public Health.
Cari F. Coffelt, M.D., M.P.H., Visiting Lecturer in Public Health.
Anne H. Coulsen, Adjunct Lecturer and Researcher in Public Health.
Lewis Craley, Ph.D., Visiting Lecturer in Public Health.
Joseph W. Cullen, Ph.D., Adjunct Professor of Public Health.
Sigrid Deeds, M.P.H., Dr.P.H., Adjunct Associate Professor of Public Health.
G. A. Dhopleshwarkar, Ph.D., Research Biochemist of Nuclear Medicine and Radiation Biology and Adjunct Professor of Public Health.
Wilfrid J. Dixon, Ph.D., Professor of Biomathematics and Public Health.
Frederick Dorey, Ph.D., Adjunct Lecturer in Public Health.
Robert M. Elashoff, Ph.D., Professor of Biomathematics and Biostatistics.
Elizabeth C. Ellis, Ph.D., Visiting Lecturer in Public Health.
Patricia Engel, Ph.D., Visiting Lecturer in Public Health.
James E. Enstrom, Ph.D., Associate Researcher in Public Health.
Daniel Ershoff, Dr.P.H., Adjunct Assistant Professor of Public Health.
Charles M. Ewe1, Jr., Ph.D., Visiting Lecturer in Public Health.
Edward J. Faeder, Ph.D., Adjunct Associate Professor of Public Health.
Arlene Fink, Ph.D., Associate Research Social Scientist in Medicine and Adjunct Lecturer in Public Health.
Janis Fisher, Ph.D., Visiting Lecturer in Public Health.
Emile Gauvreau, M.P.H., Visiting Lecturer in Public Health.
Bruce S. Gillis, M.D., M.P.H., Adjunct Assistant Professor of Public Health.
Raymond D. Goodman, M.D., M.P.H., Assistant Clinical Professor of Medicine and Adjunct Associate Professor of Public Health.
Sander Greenland, Dr.P.H., Assistant Professor of Public Health in Residence.
Persni Guppanjani, M.D., Ph.D., Adjunct Lecturer in Public Health.
Donald Guthrie, Ph.D., Adjunct Professor of Psychiatriy and Biobehavioral Sciences and Biostatistics.
Brian E. Henderson, M.D., Adjunct Professor of Epidemiology.
Arthur C. Hollister, Jr., M.D., M.P.H., Visiting Lecturer in Public Health.
Richard L. Hough, Ph.D., Adjunct Associate Professor of Public Health.
E. P. Patrice Hufle, R.N., M.P.H., Associate Researcher and Adjunct Lecturer in Public Health.
Robert I. Jenrich, Ph.D., Professor of Mathematics, Biomathematics and Biostatistics.
Michael R. Jones, Ph.D., Assistant Researcher in Medicine and Adjunct Lecturer in Public Health.
Wilbert Jordan, M.D., M.P.H., Adjunct Assistant Professor of Public Health.
Martine Jozan, M.D., Dr.P.H., Assistant Researcher in Public Health.
Stephen W. Kathane, D.Env., Visiting Lecturer in Public Health.
Robert L. Kane, M.D., Professor of Medicine and Public Health in Residence.
Joel D. Koppel, M.D, Professor of Medicine and Public Health in Residence.
133. Interpersonal Dynamics in Health Services Management (1 course). Lecture, two hours. Prerequisites: one undergraduate course in sociology or psychology, or consent of instructor. Examination of the application of behavioral science theory to understanding the interpersonal dynamics of health care facilities and their management. Mr. Pointer

134. Introduction to Comprehensive Health Planning. Lecture, four hours; field work, four hours. Prerequisites: one undergraduate division course in microeconomics, statistics, calculus or political science. Concepts underlying health planning, state of the art and some relevant literature. The Staff

M135. Organization of Medical Practice (1 course). If human resources (M158) or Medicine (M158). Lecture, two hours. Prerequisites: course 130 and graduate standing in public health, medicine or nursing. Education and certification of medical practitioners. Organization of medical practice: solo, group, HMO. Doctor-patient relationships, medical ethics, economics, professional liability, health care evaluations. Mr. Goodman

136A. Introduction to Health Services Research. Lecture, four hours. Prerequisites: prior or concurrent enrollment in course 100A. A course equivalent and consent of instructor. Review of the field of health services research. Uses of quantitative methods and the applications of conceptual-theoretical constructs (as well as applications of medical and behavioral sciences and epidemiology to studies of the workings of health services. Mr. Lewis

136B. Practices of Evaluation in Health Services: Theory and Methodology. Lecture, four hours. Prerequisites: course 136A or equivalent and consent of instructor. Introduction to health services evaluation. Examine and perform specific evaluation procedures. Conduct health services investigations and evaluations, and communicate results and methodologies. Ms. Fink, Mr. Ross

136C. Social Experimentation as a Research Tool for Health Care Policy. Lecture, four hours. Prerequisites: courses 136A, 136B or equivalent and consent of instructor. Economic and psychometric issues underlying social experimentation in health care. Topics include: relation of demand to insurance; role of regulation; relation of health insurance to health status; reliability of health status; approach to measurement validation and scale construction. Mr.指

137. Managing Human Resources in Health Facilities and Programs. Lecture, four hours. Prerequisites: one course in social science and consent of instructor. Didactic and experimental study of management of human resources in health-related organizations and programs. Mr. Pointer, Mr. Ross

138. Politics of Health Care. Lecture, four hours. Prerequisites: one course in social science and consent of instructor. Concepts and procedures for political analysis of national, state and local policies in health care; examination of selected case studies. Mr. Cameron


140A-140B. Health Record Science (1 course each). Lecture, two hours; laboratory, two hours. Prerequisites: one course in health administration or consent of instructor. A is required for B. Principles and theories of systems and techniques used for organization, analysis, and maintenance of records and reports are studied and evaluated according to their use in varied situations. Ms. Johnson

141. Financial and Managerial Accounting for Health Services Organizations. Prerequisites: course 130 or equivalent and consent of instructor. An introduction to financial management accounting and its application to the health services industry. Mr. Coyle

142. Health Care Issues in International Perspective. Lecture, four hours. Prerequisites: course 130, another course in health administration, upper division course in psychology, or consent of instructor. Analysis of crucial issues in health care, manpower policy, economic support, health facilities, patterns of health service delivery, regulation, planning and other aspects of health care systems are probed in the settings of European welfare states, developing nations, and socialist countries. Mr. Roemer

143. Integrating Medical and Fiscal Records in Health Institutions. Lecture, four hours. Prerequisites: course 140A, Management 403 or equivalent and consent of instructor. This course will explore the patient charge system from admission through collection. The interfacing of patient medical records and patient fiscal records will be presented via a student field project. Mr. McLaughlin

144. Decisions in Automating Data Systems in Ambulatory Patient Care Facilities. Lecture, two hours; discussion, two hours. Prerequisites: courses 130, 140A. Definition of the techniques used to propose, design, and evaluate the automation of data systems for patient care and operations of ambulatory care facilities. Practical experience through analysis of a case problem. Mr. Chansky

150. Environmental Health. Lecture, three hours; field work, one hour. Prerequisites: Chemistry 5, Mathematics 3A, Physics 3A or 6A. Broad coverage of environmental health with particular reference to water quality, air quality, noise, food, housing, radiation, vector control, toxicology, occupational health and safety and environmental management. Ms. Valentine

152. Biological Effects of Air Pollution. Lecture, three hours; discussion, one hour. Prerequisites: Biology 5, Chemistry 11A, Biology 17, 171. Study of effects of air contaminants present in urban, industrial and occupational environments. Mr. Mustafa

153. Public Health Microbiology. Lecture, three hours; laboratory, six hours. Prerequisites: Chemistry 25, Biology 7 or equivalent and consent of instructor. Basic principles and laboratory procedures employed in the provision of sanitary elements to the community, including food and milk, water supply and waste disposal, soil and environmental effluents. Mr. Mah

154. Environmental Management. Lecture, four hours; discussion, one hour. Prerequisites: Economics 100, Political Science 142 or 143 or equivalent and consent of instructor. Introduction to foundations and principles of environmental management, decision-making, and evaluation of environmental policies and programs. Mr. Davos

155. Introduction to Environmental Health (1 course). Lecture, two hours. Prerequisites: one college-level course in biology or equivalent courses and consent of instructor. Introduction to environmental health, including coverage of sanitary principles and chronic and acute health effects of environmental contaminants. This course is not open to students specializing in environmental health. Mr. Mah and the Staff

160. Principles of Food and Nutrition (1 course). Lecture, two hours. Prerequisites: one course in biological science or consent of instructor. Principles of nutrition and nutritional requirements for normal growth and development. Nutrition majors will not receive credit for this course toward their major. Ms. Allin-Slater

161. Nutrition and Health (1 course). (Formerly numbered 193.) Lecture, two hours. Prerequisites: course 110 or equivalent and consent of institutions in nutrition and clinical nutrition theory for students in health science curricula. Nutrition majors will not receive credit for this course toward their major. Ms. Allin-Slater, Mr. Jelliffe

162. Nutrition, Lecture, three hours. Prerequisites: organic chemistry, Biology 7 or equivalent and consent of instructor. Analysis of aspects of carbohydrates, fats, proteins, vitamins and minerals. Digestion and absorption of nutrients, energy and protein requirements, mineral and vitamin metabolism. Ms. Hunt

163. Biologic Processes. Lecture, three hours. Prerequisites: one year of organic chemistry, Biology 7. Metabolism of carbohydrates, proteins and other nitrogen compounds, and lipids; role of hormones and enzymes in metabolism; physiological processes. Ms. Eckert

165. Clinical Nutrition Laboratory (1 course). Discussion, one hour; laboratory, four hours. Prerequisites: one course in quantitative analysis or equivalent, one year of organic chemistry, Biology 7 and consent of instructor. Analytical procedures for determining the various constituents of blood and urine. Ms. Eckert

166A. Therapeutic Nutrition (1 course). Lecture, two hours. Prerequisites: courses 162, 163 or equivalent and consent of instructor. Recent findings in metabolism and disease. Identification of the role of diet in normal diet for pathological conditions. Ms. Carlisle

166B. Therapeutic Nutrition (1 course). Lecture, two hours. Prerequisites: course 166A and consent of instructor. Recent findings in the field of diet and disease and modifications made in normal diet for pathological conditions. Ms. Carlisle

167. Biologic Processes: Physiology and Nutrition. Lecture, three hours. Prerequisites: course 163 and consent of instructor. Metabolism of lipids, carbohydrates, proteins, role of enzymes in metabolism; physiology processes occurring in various organs. Ms. Allin-Slater

170. Family Health and Biosocial Development. Lecture, two hours; discussion, two hours. Prerequisites: Psychology 130 or Physiology 100 or equivalent and consent of instructor. Biological factors related to normal human physical, intellectual and emotional growth and development from family and public health perspective. Mr. Katz

171. Child Health in the USA. Lecture, three and one-half hours; discussion, one-half hour. Prerequisites: course 170 and consent of instructor. Examination of health problems which afflict infants, children and adolescents in the USA and discussion of priorities, approaches, services and policies which exist or could be developed to deal with these problems. Ms. Neumann

172. Introduction to Reproductive Health. Lecture, two hours; discussion, two hours. Prerequisites: course 110 or equivalent and consent of instructor. Review of reproductive physiology, normal and abnormal pregnancy, family planning, male-specific and female-specific health problems including health care and psychosocial considerations. Mr. Cusher

173. Population, Ecology and Health. Lecture, four hours; discussion, one hour. Prerequisites: introduction to national and international aspects of current population issues. Particular attention paid to economic development, ecology, and policy conflicts as related to population growth and decline and family planning and health programs. Ms. Scrimshaw

174E. Health, Disease and Health Services in Latin America. Lecture, four hours. Prerequisites: one upper division course in Latin American studies or course 110. Introduction to health, disease and health services in Latin America with emphasis on epidemiology, health administration, medical anthropology and nutrition. Ms. Scrimshaw

174H. Public Health in the People's Republic of China (1 course). Lecture, four hours. Prerequisites: course 130 or equivalent or two upper division or graduate courses in social or behavioral science or medical science and consent of instructor. Mr. Chung.
176. Human Sexuality and Sexual Health. Lecture, three hours; discussion, one hour. Prerequisites: two courses in behavioral and/or life science and consent of instructor. Interdisciplinary review of sexual physiology and sexual behaviors is followed by consideration of pregnancy and its prevention, sexual dysfunction, and sex-transmitted disease. Psychosocial, cultural, political, and health care aspects are included. Mr. Cushner

177. Principles and Techniques of Counseling (1/2 course). Lecture, one hour; discussion, one hour. Prerequisites: course 170 and one course selected from Psychology 118D, 128B, 177 or equivalent. Concepts and methods appropriate to personal counseling in clinical situations by public health workers. Analysis of counseling principles and approaches drawn from case records, files and audio materials. The Staff

178. Legal Aspects of Family Health (1/2 course). Lecture, two hours. Prerequisites: course 170 and consent of instructor. Analysis and clarification of legal issues involving family health services, including family planning, sterilization, abortion, dental care for children, battered child laws, mental hospitalization, personnel and standards for care and implementation of sound health programs. Ms. Roemer

179A. Health Problems and Programs in Africa (1/2 course). Lecture, one hour; discussion and consent. Prerequisites: one of the following or equivalent and consent of instructor: Public Health 110; History 175A-175Z, 176A-176B, 177, 178A, 179A, 275, 278A; Anthropology M168, 171, 254, 269U; Political Science 252E; Geography 122, 186, 281S. Consideration of traditional beliefs about illness and treatment, factors affecting health status in Africa, major health problems and some programs proposed as remedies. Mr. Nicholas

179B. African Health Sector Analysis Seminar (1/2 course). Seminar, two hours. Prerequisite: course 179A (prior or concurrent). Approach is that of a multidisciplinary team analyzing the health sector of a representative African country to determine needs and priorities for external aid. Mr. Blumenfeld, Mr. Nicholas

180. Introduction to Public Health. Lecture, four hours. Prerequisite: four units of life science. Principles of Public Health. Analysis of demographic, professional, organizational, fiscal, social, and research features. Covers health, mental health, environmental health and consumer protection fields. Mr. Winer

181. Introduction to Social Research Methods in Health. Lecture, four hours; assignments, eight hours. Prerequisites: course 100A or equivalent and consent of instructor. Basic methods and techniques in designing and conducting health research using various research methods. Includes discussions of students' own research plans. The Staff

182. Behavioral Sciences and Health. Lecture, three hours. Prerequisite: one course in social science. Basic concepts in behavioral sciences pertinent to health and medical care; cultural and social class variations; health of the family; family roles; community relations; community decision-making in public health. Mr. Berkunov, Mr. Goldstein

183. Community Health Education. Lecture, two hours; discussion, two hours. Prerequisites: one course in social science and consent of instructor. Problems of social, economic, and cultural origin as they apply to sound community organization in the public health field. Examination of health education activities of professional, voluntary, and lay health agencies and analysis of their interrelationships. Mr. Washington

184. Health and Consumer Economics. Lecture, three hours. Prerequisites: Economics 1 and 2 or 100, upper division or graduate standing. Impact of health problems and costs on individual and family incomes and expenditures, including productivity and dependency. Mr. Rada

185. Economics of Health and Medical Care. Lecture, three hours. Prerequisites: Economics 1 and 2 or 100; upper division or graduate standing. Demand, supply and price determinants in private and public sectors of health and medical care fields. Mr. Rada

186. The World's Population and Food. Lecture, three hours. Prerequisites: Economics 1 and 2 or 100, upper division or graduate standing. World food sources; major food groups, human food requirements and consumption; food in developing economies; international movement of foods; interrelations of foods, population, and economic progress. Mr. Rada

187. Health Education for Teacher Credentials (1/2 course). Lecture, two hours. Prerequisite: admission to the teacher education credential program. The teaching-learning process as applied to personal and community health. Content includes psychoactive drugs (alcohol, tobacco, and narcotics), human sexuality, and community health resources. Required for the California State Teaching Credential.

Mr. Linder, Mr. Washington

188. Community Mental Health. Lecture, four hours. Prerequisite: one upper division course in psychology, sociology or anthropology and consent of instructor. Concepts of mental health, mental illness, prevention of mental disorders, mental health in public health programs. Public health aspects of control of mental disorders. Epidemiology, program planning and legal aspects of mental disorders. The Staff

189. Death, Suicide and Homicide: Public Health Perspective (1/2 course). Lecture, two hours; field trips, outside readings and reports, one hour. Prerequisites: courses 110, 112, 182 or equivalent and consent of instructor. Identification and discussion of the role of public health in suicide and homicide prevention, thanatology and death and dying. Lectures will range from vital statistics to the role of the behavioral scientist in prevention, intervention and postvention of suicide and homicide. Ms. Allen

190. Special Studies (1/2 to 1 course). Prerequisites: senior standing, consent of instructor and department chairman. Consent is based on written proposal outlining the course of study. Individual guided studies under direct faculty supervision. Study to be structured by instructor and student at time of initial enrollment. Undergraduate or graduate students may enroll in only four units each academic period. Only four units may be counted toward the minimum course requirements for a master's degree. Offered on a letter grade basis. The Staff

Graduate Courses

For complete descriptions of graduate-level courses offered by this department, please consult the UCLA Graduate Catalog.

Romance Linguistics and Literature

(Interdepartmental)

(Program Office: 5303 Rolfe Hall)

The Romance Linguistics and Literature Program does not offer an undergraduate degree. For detailed information on graduate degrees offered by this program, please refer to the UCLA Graduate Catalog.

Slavic Languages and Literatures

(Department Office: 115 Kinsey Hall)

Aleksei Al'bitsin, Ph.D., Professor of South Slavic Languages and Literatures.
Henrik Binnbaum, Ph.D., Professor of Slavic Languages and Literatures.
Thomas Eekman, Ph.D., Professor of Slavic Literature.
Michael S. Flier, Ph.D., Professor of Slavic Languages and Literatures (Chairman of the Department).
Marija Gimbutas, Ph.D., Professor of European Archaeology.
Kenneth E. Harper, Ph.D., Professor of Russian Literature.
Vladimir Markov, Ph.D., Professor of Russian Literature.
Michael Shapiro, Ph.D., Professor of Russian Linguistics and Poetics.
Dean S. Worth, Ph.D., Professor of Slavic Languages.
Heinrich Heine, Ph.D., Associate Professor of Czech and Russian Literature.
Peter Hodgson, Ph.D., Associate Professor of Russian Literature.

Radiological Sciences

(Department Office: BL-428 Center for Health Sciences)

The Department of Radiological Sciences does not offer an undergraduate degree. The following upper division course is offered with enrollment restrictions as indicated:
The department offers three majors: (1) Slavic Languages and Literatures, (2) Russian Civilization and (3) Russian Linguistics. The major in Slavic Languages and Literatures is normally required for admission to the department’s graduate program and will be used to determine the number of courses in Russian literature and/or linguistics that students majoring in Russian Civilization or Russian Linguistics will be expected to make up in order to receive graduate degrees in the department. Students who do not choose the major in Slavic Languages and Literatures but 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 make-up courses required, since these courses are not applicable towards graduate degrees. Such students should also note that several graduate courses numbered below 220 may be taken by qualified seniors with permission of the instructor and the Graduate Advisor.

Preparation for All Department Majors
Russian 1, 2, 3, 4, 5, 6.

Courses Required for All Department Majors
Russian 101A-101B-101C, 111A-111B-111C, Work completed in the University’s summer or semester Russian programs at Leningrad State University may be applied toward fulfillment of these requirements.

The Major in Slavic Languages and Literatures
Preparation for the Major: Slavic 99, Russian 99.
The Major: Russian 119, 120A-120B, 121, 122, 123, three courses chosen from Russian 130A, 130B, 130C, 134, 140A-140D, 150, one course chosen from Russian 124A-124F or 126, any two electives chosen from Russian 102A, 102B, 102C (when taken in conjunction with Russian 112A, 112B, 112C), 124A-124F, 125, 126, 130A, 130B, 130C, 134, 140A-140D, M150, 193, Czech 155A, 155B, Polish 152A, 152B, Serbo-Croatian 154A, 154B. Note: Russian 119 and 120A-120B may be taken in the sophomore year.

The Major in Russian Civilization
Preparation for the Major: Russian 99.
The Major: Russian 120A-120B, three additional courses in Russian literature, seven courses chosen from Russian M170, Economics 182, Geography 184, History 131A-131D, Political Science 128, 156 or special courses in the Departments of Art, Music, Theater Arts and Slavic Languages and Literatures approved by the Undergraduate Advisor.

The Major in Russian Linguistics
The Major: Russian 121, 122, 123, Linguistics 100, 103, 110, 120A-120B, five courses chosen from Russian 102A, 102B, 102C (when taken in conjunction with Russian 112A, 112B, 112C), 130A, 130B, 130C, 134, 140A-140D, M150, Slavic 201, 202, Linguistics 125, 127, M150, 160, 164, 165A, 165B, Psychology 123. Students majoring in Russian Linguistics who intend to pursue graduate study in this department are strongly encouraged to take at least three of the Russian literature courses enumerated above.

Slavic
Lower Division Course
99. Introduction to Slavic Civilization. Three hours weekly. An introductory survey of the social and cultural institutions of the Slavic peoples and their historical background.

Upper Division Courses
M171. Slavic Folklore in North America. (Same as Folklore M171.) Three hours weekly. The nature and specifics of Slavic folklore in North America including a survey of verbal genres and other folkloric phenomena. Lectures and readings in English. The Staff
M177. Baltic Languages and Cultures (½ course). Two hours weekly. A general survey of the peoples speaking Old Prussian, Lithuanian, and Latvian; their linguistic, historical and ethnic affiliations. Mrs. Gimbutas
M178. Southeast European Folklore and Ethnography. (Same as Folklore M178.) Three hours weekly. An exploration of the folklore and ethnography of Southern European countries with emphasis on Romania and Yugoslavia. Folklore genres will be examined in the context of traditional social organization and in the context of industrializing communist states. The Staff
M179. Baltic and Slavic Folklore and Mythology. (Same as Folklore M126.) Three hours weekly. A general course for students interested in folklore and mythology for those interested in Indo-European mythic antiquities. The Staff
199. Special Studies (½ to 2 courses). No scheduled hours. Prerequisites: senior standing and consent of instructor.

Graduate Courses
For complete descriptions of graduate-level courses offered by this department, please consult the UCLA Graduate Catalog.

Bulgarian
Lower Division Course
99. Introduction to Bulgarian Civilization. Three hours weekly. An introductory survey of the social and cultural institutions of the Bulgarian people and their historical background.

Upper Division Courses
103A-103B-103C. Elementary Bulgarian. Five hours weekly. Basic course in the Bulgarian language. The Staff
154. Survey of Bulgarian Literature. Prerequisite: upper division standing. Three hours weekly. Lectures and readings in English. A survey of Bulgarian literature from the Middle Ages to the present. The Staff

Czech
Upper Division Courses
102A-102B-102C. Elementary Czech. Five hours weekly. Basic course in the Czech language. The Staff
102D-102E-102F. Advanced Czech. Three hours weekly. Prerequisite: Czech 102C. The Staff
155A-155B. Czech Literature. Three hours weekly. Lectures and readings in English. 155A. Survey of Czech literature from the Middle Ages to the present. 155B. Selected topics. The Staff

Polish
Upper Division Courses
102A-102B-102C. Elementary Polish. Five hours weekly. Basic course in the Polish language. The Staff
102D-102E-102F. Advanced Polish. Three hours weekly. Prerequisite: Polish 102C. The Staff
152A-152B. Survey of Polish Literature. Three hours weekly. Lectures and readings in English. 152A. From the Middle Ages to Romanticism. 152B. From Realism to the present. The Staff
160. Polish Romanticism. Three hours weekly. Lectures and readings in English. Comparison of Polish Romanticism with that of other Slavic and Western European countries. The Staff

Russian
Language Courses
1. Elementary Russian. Five hours weekly plus one hour per week in laboratory. The Staff
2. Elementary Russian. Five hours weekly plus one hour per week in laboratory. The Staff
3. Elementary Russian. Five hours weekly plus one hour per week in laboratory. The Staff
4. Intermediate Russian. Five hours weekly plus one hour per week in laboratory. The Staff
5. Intermediate Russian. Five hours weekly plus one hour per week in laboratory. The Staff
6. Intermediate Russian. Five hours weekly plus one hour per week in laboratory. The Staff
10A-10B-10C. Russian Conversation (½ course each). Three hours weekly. Prerequisite: Russian 3 or consent of instructor. Russian conversation designed to supplement the grammar and readings of Russian 4, 5, 6. The Staff
**Linguistics Courses**

121. Russian Phonology. Three hours weekly. Prerequisite: Russian 6. Introduction to transcription and transcription, articulatory phonetics, phonemics. The Staff

122. Russian Morphology. Three hours weekly. Prerequisite: Russian 121. Introduction to morphophonemics, inflection, derivation. The Staff

123. Historical Commentary on Modern Russian. Three hours weekly. Prerequisites: Russian 121, 122. Historical explanation of the phonological and morphological anomalies of modern Russian. The Staff

**Literature and Civilization Courses**

99. Introduction to Russian Civilization. Three hours weekly. An introductory survey of the social and cultural institutions of the Russian people and their historical background. The Staff

100. The Russian Novel in Translation. Three hours weekly. A study of major works by the great nineteenth-century Russian novelists. (Not open to majors.) The Staff

119. Survey of Russian Literature to Pushkin. Three hours weekly. Prerequisite: upper division standing. Slavic majors should take this course during their sophomore year. Lectures and readings in English. The Staff

120A-120B. Survey of Russian Literature. Three hours weekly. Prerequisite: upper division standing. Slavic majors should take this course during their sophomore year. Lectures and readings in English. The Staff

120A. Nineteenth Century. 120B. Twentieth Century. The Staff

124A-124F. Studies in Russian Literature. Three hours weekly. Lectures and readings in English. The Staff

125. The Russian Novel in Its European Setting. Three hours weekly. Prerequisite: upper division standing. The Staff

126. Survey of Russian Drama. Three hours weekly. Prerequisite: upper division standing. Major Russian plays of the 18th to 20th centuries. Lectures and readings in English. The Staff

**Upper Division Courses**

103A-103B-103C. Elementary Serbo-Croatian. Five hours weekly. Basic course in the Serbo-Croatian language. The Staff

103D-103E-103F. Advanced Serbo-Croatian. Three hours weekly. Prerequisite: Serbo-Croatian 103C. The Staff

113A-113B-113C. Advanced Reading and Composition. Three hours weekly. Prerequisite: Serbo-Croatian 103F or consent of instructor. Reading and translation of difficult texts; advanced composition. The Staff

154A-154B. Yugoslav Literature. Three hours weekly. Lectures and readings in English. The Staff

154A. Survey of Yugoslav literature from the Middle Ages to the present. The Staff

154B. Selected topics. The Staff

**Serbo-Croatian**

**Upper Division Courses**

101A-101B-101C. Elementary Ukrainian. Five hours weekly. Basic course in the Ukrainian language. The Staff

152. Ukrainian Literature. Three hours weekly. A review of writers, literary trends and issues in Ukrainian literature from the late eighteenth century to the present. Special attention to the works of such major figures as I. Kotlyarevsky, T. Shevchenko, I. Franko, L. Ukrainka and P. Tychyna. Lectures and readings in English. The Staff

**Ukrainian**

**Upper Division Courses**

**Non-Slavic Languages of Eastern Europe**

**Lithuanian**

**Upper Division Courses**

101A-101B-101C. Elementary Lithuanian. Five hours weekly. Basic course in the Lithuanian language. The Staff

**Romanian**

**Lower Division Course**

99. Introduction to Romanian Civilization. Three hours weekly. An introductory survey of the social and cultural institutions of the Romanian people and their historical background. The Staff

**Upper Division Courses**

101A-101B-101C. Elementary Romanian. Five hours weekly. Basic course in the Romanian language. The Staff

**Related Upper Division Courses in Other Departments**

History 131A-131D; Linguistics 100, 103, 110, 120A, 120B, M150, as well as several of the graduate courses in linguistics.

**Social Welfare**

(School Office: 200 Dodd Hall)

The School of Social Welfare does not offer an undergraduate degree. For detailed information on graduate degrees offered by this School, please refer to the UCLA Graduate Catalog.

**Sociology**

(Department Office: 264 Haines Hall)

Rodolfo Alvarez, Ph.D., Professor of Sociology. Phillip Bonach, Ph.D., Professor of Sociology. Howard E. Freeman, Ph.D., Professor of Sociology. Harold Garfinkel, Ph.D., Professor of Sociology. Oscar Grusky, Ph.D., Professor of Sociology. Gene N. Levine, Ph.D., Professor of Sociology. Ivan H. Light, Ph.D., Professor of Sociology. Valerie K. Oppenheimer, Ph.D., Professor of Sociology. Georges Sabagh, Ph.D., Professor of Sociology. Emanuel A. Schegloff, Ph.D., Professor of Sociology (Chairman of the Department). Melvin Seeman, Ph.D., Professor of Sociology. Warren D. TenHouten, Ph.D., Professor of Sociology. Donald J. Treiman, Ph.D., Professor of Sociology. Ralph H. Turner, Ph.D., Professor of Sociology. Maurice Zeitlin, Ph.D., Professor of Sociology. Leo J. Kuper, Ph.D., Emeritus Professor of Sociology. Richard T. Morris, Ph.D., Emeritus Professor of Sociology.
Kenneth D. Bailey, Ph.D., Associate Professor of Sociology
Robert M. Emerson, Ph.D., Associate Professor of Sociology
Lucie C. Hirata, Ph.D., Associate Professor of Sociology
John E. Horton, Ph.D., Associate Professor of Sociology
David E. Lopez, Ph.D., Associate Professor of Sociology
David D. McFarland, Ph.D., Associate Professor of Sociology
Melvin Pollner, Ph.D., Associate Professor of Sociology
Jerome Rabow, Ph.D., Associate Professor of Sociology
Samuel J. Surace, Ph.D., Associate Professor of Sociology
Jeffrey Alexander, Ph.D., Assistant Professor of Sociology
Roderick J. Harrison, Ph.D., Assistant Professor of Sociology
Jack Katz, Ph.D., Assistant Professor of Sociology
Clarence Lo, Ph.D., Assistant Professor of Sociology
Linda B. Nilson, Ph.D., Assistant Professor of Sociology
Melvin Oliver, Ph.D., Assistant Professor of Sociology
Jeffrey Prager, Ph.D., Assistant Professor of Sociology
William G. Roy, Assistant Professor of Sociology
Lynne G. Zucker, Ph.D., Associate Professor of Sociology

Ralph L. Beals, Ph.D., Emeritus Professor of Anthropology and Sociology
Judith Blake, Ph.D., Professor of Public Health and Sociology
Burton R. Clark, Ph.D., Professor of Education and Sociology
Michael S. Goldstein, Ph.D., Associate Professor of Public Health and Sociology
C. Wayne Gordon, Ph.D., Professor of Education and Sociology
Harry L. Kitano, Ph.D., Professor of Social Welfare and Sociology
David O'Shea, Ph.D., Associate Professor of Education and Sociology
Edwin S. Shneidman, Ph.D., Professor of Thanatology, Medical Psychology, Psychology, and Sociology
Gerald H. Shure, Ph.D., Professor of Psychology and Sociology
Julia C. Wingley, Ph.D., Assistant Professor of Education and Sociology

Also required at the lower division level are two courses from Group A: Mathematics 2, 4A, Philosophy 31, Economics 1, 2, Linguistics 1; two courses from Group B: Anthropology 5, 6, 22, History 1A, 18, 1C, Philosophy 7, 21, Political Science 1, Psychology 10, Geography 3.

All courses required for the major in Sociology, including lower division and allied field courses, must be taken for a letter grade. A 2.0 grade-point average is required for the preparation and for the major.

The Major

Ten upper division sociology courses, not including course 101, are required for the major. These ten courses must include the following (40 units):

1. Sociology 109 and 112 or 113. These courses, devoted to the systematic exploration of sociological methods and theories, introduce students to the skills and concepts necessary for upper division work in the department. Students are strongly advised to complete these two required courses as early as possible in the junior year.
2. Four upper division courses as required by one of the specialized "Concentrations for the Major" listed below.
3. Any four additional upper division sociology courses.
4. Four upper division allied field courses (16 units) in other departments are required to complete the major. The allied fields are: anthropology, economics, geography, history, political science and psychology. Each concentration has its own set of recommended allied field courses. This list of courses (and faculty advisors) is available from the department's Undergraduate Counselor in 254B Haines Hall. Students are encouraged to examine these specific concentration related listings as well as consult the respective faculty advisor for each concentration.

Concentrations for the Major

By the end of the junior year and no later than the beginning of the senior year, students are required to declare their specific concentration by filing a statement with the Undergraduate Counselor. The purpose of the concentration requirement is to expose the student to systematic, in-depth work within a specific area of sociology. Completion of a concentration will require four upper division sociology courses, as well as four upper division allied field courses. A student must take a concentration's required course (if any) before declaring that concentration. Students are required to select one of the following concentrations and to meet its course requirements:

1. Comparative and Historical Sociology
   Required: 138
   Two of the following: 120, 126, 140, 141
   One of the following: 130-137
2. Organizations
   Required: 121
   Three of the following: 120, 123, 128, 140, 141, 147, 152
3. Political Sociology
   Required: 140
   Three of the following: 114, 120, 124, M143, 147, 150
4. Quantitative Sociology
   The student should consult the Faculty Advisor for premajor requirements for this concentration.
   Required: 116
   Three of the following: 123, 126, 152, 154.
   Recommended: Mathematics 152A-152B instead of Sociology 16 on the preparation requirement.
5. Race and Ethnicity
   Required: 124
   Two of the following: 120, 123, 151, 155
   One of the following: 130-137
6. Social Change and Modern Society
   Required: 120
   Two of the following: 123, 140, 150
   One of the following: 124, 125, 136, 141
7. Social Demography
   Required: 126
   Three of the following: 116, 123, 132, 160
8. Social Organization and Language, Thought and Experience
   Four of the following: 144A, 144B, 148, 149, 153, 157, 159
9. Social Psychology
   Required: 154
   Three of the following: 115, 150, 151, 152, 153, 155, 156
10. Social Stratification
    Required: 123
    Three of the following: 114, 116, 124, 128, 136, 140, 155, 160

A psychology course taken to fulfill the breadth requirement cannot also be used for the allied field requirement. Only eight units of Sociology 199 are allowed. At least two of the sociology courses must be taken while in residence in the College of Letters and Science on this campus. Students are encouraged to consult the Undergraduate Counselor in 254B Haines Hall whenever problems arise with regard to their academic programs. This office also provides counseling for students interested in obtaining career advice.

Courses 109, 210A and 210B are recommended for students who intend to pursue graduate work in sociology.
The Honors Program

The Honors Program in Sociology provides an opportunity for outstanding students to undertake an independent year-long research project under the guidance of a member of the sociology faculty. The project culminates with a written honors thesis. The main advantage provided is the opportunity to work closely with individual faculty sponsors. Students intending to obtain advanced degrees will find this program especially useful. Students selected will enroll in Sociology 199HA-199HB-199HC in their senior year. These courses will count toward the ten upper division course requirements for all Sociology majors. Upon completing the program students will graduate either with Departmental Honors or Highest Honors on their record.

Qualifications: In order to qualify for the program the student 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 in the Sociology Undergraduate Counselor's office, 254B Haines Hall. Students should apply in the last quarter of their junior year.

Lower Division Courses

1. Introductory Sociology. No credit will be given for this course to students who have completed Sociology 101. A survey of the characteristics of social life, the processes of social interaction, and the tools of sociological investigation. The Staff

18. Interpretation of Quantitative Data. Prerequisite: course 1 or 101 or may be taken concurrently. Satisfies the statistics requirement for the major in Sociology. Reading graphs and tables; statistical description using indices of central tendency, dispersion, and association; simple linear regression. Probability: the binomial, normal, t and chi-square distributions and hypothesis testing based on them. Examples drawn from recent issues of American Sociological Review or other leading sociological journals. The Staff

Upper Division Courses

Course 1 or equivalent and upper division standing (upper division standing may be waived by permission of instructor) are prerequisites to all upper division courses in sociology.

101. Principles of Sociology. Prerequisite: upper division standing. No credit will be given for this course if course 1 has been completed. For upper division students who have not taken Sociology 1. A more intensive introduction to sociology than is given in course 1. May not be counted on the major.

102A-102B. Special Topics in Sociology. Prerequisite: upper division standing; some sections may require prior course work or permission of instructor. A study of selected current topics of sociological interest. See Schedule of Classes for topics and instructors to be offered each quarter. This course may be repeated for credit and may apply as elective units on the Sociology major. The Staff

109. Introduction to Sociological Research Methods. A systematic treatment and semiquantitative skills of use in sociological research, e.g., classification, questionnaire and schedule design, content analysis, critical analysis of studies, conceptual analysis of case materials. Field work may be required for this course.

112. Development of Sociological Theory. A comparative survey of basic concepts and theories in sociology, 1850-1920; the codification of analytic sociological thought and recent currents in sociological construction. Mr. Alexander, Mr. Bailey, Mr. Horton

113. Contemporary Sociological Theory. A critical examination of significant theoretical formulations, 1920 to the present; an analysis of the relation between theoretical development and current research emphasis. Mr. Garfinkel, Ms. Hirata, Mr. TenHouten

114. Marxist Sociology. The course will stress the fundamentals of Marxist theory and method and their historical development. Attention will be given throughout to continuing debates within the Marxist tradition and to differences between Marxism and other schools of sociological thought. This course does not meet the theory requirement for the major. Mr. Horton

115. Experimentation and Laboratory Methodology in Sociology. Prerequisites: course 1 or equivalent introductory statistics and introductory social psychology. This course provides opportunities for students to participate as observers, subjects, and experimenters in a variety of laboratory and simulations of social and political science and to use a number of computer-supported techniques as aids in conducting, analyzing, and interpreting their experiences in these settings. Mr. Shure

116. Introduction to Mathematical Sociology. Prerequisite: Mathematics 2A, 2B (a course whose content includes introductions to probability theory, matrix algebra, and differential and integral calculus) and Sociology 18 or equivalent. Mathematical treatments of several sociological phenomena, such as occupational mobility, population growth, occupational structure, and friendship patterns, each covered in some detail, including initial development and subsequent evaluation and modification, emphasizing both the descriptive and computational aspects of mathematics. Mr. McFarland

120. Social Change. A study of patterns of social change, resistance to change, and change-producing agencies and processes. Mr. Alexander, Mr. Surace

121. Organizations and Society. Sociological analysis of organizations and their social environment. An introduction to basic theories, concepts, methods, and research on the behavior of organizations in society. Mr. Kopycinski, Mr. Murphy, Mr. Tracy

122. Mass Communications. Formal organization, functions, and development of the mass media; communications as a social process; cultural patterns; audience characteristics; communications and bureaucracy. Aspects of the American media are compared with other media, e.g., Soviet, British, Arabic. Field work may be required for this course.

123. Social Stratification. An analysis of American social structure in terms of evaluational differentiation. Topics to be considered include criteria for differentiation, bases for evaluation, types of stratification, the composition of strata and status systems, mobility, consequences of stratification and problems of methodology. Mr. Lopez, Mr. McFarland, Ms. Nilson

124. Ethnic and Status Groups. The characteristics of the "visible" ethnic groups, e.g., Japanese, Mexican, and Negro; their organization, acculturation, and differentiation. The opening effects of selective immigration and population mobility. The status of the chief minorities in the continental U.S., with comparative materials drawn from Jamai- ca, Hawaii, and other areas. Mr. Levine, Mr. Kitano, Mr. Prager

125. Urban Sociology. Urban and rural cultures, the characteristics of cities in Western civilization, with emphasis on the American metropolis.

126. Social Demography. Studies of past, present, and future trends in population growth. Sociological theories of causes and consequences of population growth and distribution. Emphases on the correlates of fertility, mortality, and migration. Mr. Bailey, Ms. Oppenheiner, Mr. Sabagh

127. Sociology of Family Demographic and Economic Behavior. An examination of demographic behavior associated with the social organization of the family and its functioning in modern economic system. The first half of the course deals with American and European historical studies of family socioeconomic and demographic characteristics and behavior. The second half focuses on the U.S. experience since the 1930's.

128. Occupations and Professions. Description and analysis of representative occupations and professions, with emphasis upon the contemporary United States. Mr. Light, Ms. Nilson, Ms. Oppenheiner

129. White Racism. Verbal and metapreliminary stereotyping of whites, whites and other subordinate groups; cross-cultural comparisons; impact of media; institutional racism, educational and economic; political mobilization of black and poor communities; the study of strategies for resisting white racism. The Staff

130. Social Processes in Africa. A course in comparative sociology. A study of selected processes in African societies; primarily in the fields of urban sociology, social structure and social change, involving an interdisciplinary approach. The Staff

131. Latin American Societies. A descriptive survey of the major Latin American societies, emphasizing their historical backgrounds and their emergent characteristics, with special attention to the relations between these societies and the United States. Mr. Lopez

132. Population and Society in the Middle East. Prerequisites: upper division standing and consent of instructor. A survey of the Middle Eastern societies; their historic and environmental bases; the contemporary demographic and cultural situation. Mr. Sabagh

133. Comparative Sociology of the Middle East. Prerequisites: upper division standing and consent of instructor. A review of the unity of Middle Eastern societies in Islam and their diversity exemplified by such nomadic peoples considered throughout.

134. Comparative Social Institutions of East Asia. Analysis of selected social institutions of China, Japan, and Korea. Emphasis will be on continuity and change in East Asian societies. Ms. Hirata

136. American Society. Analysis of major institutions in the U.S. in historical and international perspective. The course will focus on topics such as industrialization, work, the state, politics, community, the family, religion, and culture. The role of dominance in American society. The Staff

137. Comparative Studies of Jewish Communities in the U.S. and Abroad. The history, distribution, structure and function of Jewish communities in the U.S. and abroad. The Staff

138. Comparative and Historical Sociology. Prerequisite: course 1 or 101. A survey of the central themes of sociology and sociological theory from their origins in sociology. The Staff

140. Political Sociology. The contributions of sociological study to the study of politics including the analysis of political aspects of social systems, the social context of action, and the social bases of power. Mr. Prager, Mr. Roy, Ms. Zeitlin

141. Economy and Sociology. The sociology of economic life with emphasis upon principal economic institutions of the United States. Mr. Light, Mr. Lo...
142. Sociology of the Family. Theory and research dealing with sequences of group conflict, with emphasis upon majority-minority relations, prejudice and discrimination. Special attention is given to alternative sociological and psychological theories of prejudice; the effects of minority status upon the individual, and the possibilities for attitude and behavior change.

Mr. Oliver, Mr. Seeman

156. Psychosocial Behavior. Sociology. Prerequisites: course 1 or 101 and 18. A course in theory (112/113) is recommended, as well as a course in social psychology. A course designed to review the models of integration, between psychosocial and sociology. This analytical perspective will be applied to selected substantive areas and social processes. The areas include but are not limited to, group development, delinquency, and deviance. The processes include socialization, identity and self formation, role taking and role making.

Mr. Rabow

157. Sociology of Mental Illness. Analysis of the major sociological and social psychological models of madness. Study of the social processes involved in the production, recognition, labeling and treatment of "mental illness."

Mr. Emerson, Mr. Goldstein, Mr. Poliner

158. Death and Suicide: Psychological and Sociological Aspects. (Same as Psychology 156.) Junior standing required. This course is offered on both a Passed/Not Passed and letter grade basis. However, the instructor prefers that students select the Passed/Not Passed option. The dimensions and taxonomy of death; the new permissiveness and taboos relating to death; the romanticization of death; the role of the individual in his own demise; the modes of death; development of ideas of deaths through the life span; ways in which ideas of death influence the conduct of lives; the impact of dying on the social structure surrounding the individual; preventive, interventive and postventive practices in relation to death and suicide; partial death; megadeath; the psychology of the psychological autopsy; the death of institutions and cultures.

Mr. Shneidman

159. The Sociology of Knowledge. Prerequisite: course 1 or equivalent. A study of the social production of modes of thought and forms of knowledge. The course includes the study of ways in which bodies of knowledge and cognitive styles are produced, used and transformed in every day, organizational, and extraordinary contexts.

Mr. Poliner, Mr. Rabow, Mr. TenHouten

160. The Demography and Sociology of Women's Economic Roles. Prerequisites: courses 1, 18 or Mathematics 50A or Psychology 41 or Economics 40 or Public Health 100A or consent of instructor. A demographic and sociological analysis of the factors affecting women's economic roles in the world of work and the family. Topics to be considered include demographic determinants of women's socioeconomic roles, women's changing place in the occupational structure, men's and women's contribution to the socioeconomic status of the family, the socioeconomic position of women without men to support them, future trends, and social policy affecting women's status.

Mr. Poliner, Mr. Rabow, Mr. TenHouten

161. The Social Organization of Psychiatric Treatment. Review of current research and theory on psychiatric treatment processes and treatment organizations, including mental hospitals and community mental health organizations. Sociology 157 is strongly recommended as a prerequisite for this course.

Mr. Emerson, Mr. Grusky

162 Sociology of Law. Prerequisite: upper division standing. The political impact of court decisions; legalization of social relations in modern institutions; social movements toward equal justice; the judiciary and its role; experience of participants in legal processes; common sense conceptions of justice.

Mr. Katz

Advanced Studies

197. Undergraduate Seminar. (Formerly numbered 181-186.) Prerequisites: upper division standing, major in Sociology and permission of instructor.

The Staff

Spanish and Portuguese

(Department Office: 5303 Rolfe Hall)
Shirley L. Arora, Ph.D., Professor of Spanish (Chairman of the Department.)
Jose R. Garcia, Lic. F. y L., Professor of Spanish.
Ruben A. Benitez, Ph.D., Professor of Spanish.
Jaquelin Gimeno, Ph.D., Professor of Spanish.
Claude L. Hulet, Ph.D., Professor of Spanish and Portuguese.
Carroll B. Johnson, Ph.D., Professor of Spanish.
C. B. Morris, Lic., Professor of Spanish.
C.P. Otero, Lic., Professor of Spanish and Romance Linguistics.
Jos Miguel Oviedo, Ph.D., Professor of Spanish.
Stanley L. Robe, Ph.D., Professor of Spanish.
John A. Crow, Ph.D., Emeritus Professor of Spanish.
John K. Engle, Ph.D., Emeritus Professor of Spanish.
Anibal Sanchez-Reulet, Ph.D., Emeritus Professor of Spanish.
Maria C. Zentin, Ph.D., Emeritus Professor of Spanish and Portuguese.
Gerardo Luzuriaga, Ph.D., Associate Professor of Spanish.
Richard M. Reeve, Ph.D., Associate Professor of Spanish.
Enrique Rodriguez-Cepeda, Ph.D., Associate Professor of Spanish.
Paul C. Smith, Ph.D., Associate Professor of Spanish.
Susan Price, Ph.D., Assistant Professor of Spanish.
A. Carlos Quicoli, Ph.D., Assistant Professor of Portuguese and Romance Linguistics.
A. John Skrius, Ph.D., Assistant Professor of Spanish.
Jose M. Cruz-Salvadores, M.A., Lecturer in Spanish.
E. Mayone Dias, Ph.D., Lecturer in Spanish and Portuguese.
George L. Voyt, J.D., Lecturer in Spanish.

The following courses are primarily designed to serve the department’s three B.A. programs: the B.A. in Spanish (Plan A), the B.A. in Spanish and Linguistics (Plan B) and the B.A. in Portuguese, as well as to prepare students for its three graduate programs: the M.A. in Spanish, the M.A. in Luso-Brazilian Language and Literatures and the Ph.D. in Hispanic Languages and Literatures. The department’s courses are also functionally supportive of such extradepartmental programs as the Teaching Credential in Spanish, the B.A. and M.A. programs in Latin American Studies, the M.A. program in Folklore and Mythology and the M.A. and Ph.D. programs in Comparative Literature and Romance Linguistics and Literature.

Spanish
All new students who wish to enroll in any course beyond Spanish 1 must take the Placement Test given each quarter during the week before classes begin. Consult the Schedule of Classes.

Preparation for the Major
Spanish 25 or equivalent as determined by the Placement Test; courses M42 and M44 or equivalent.

The Major
Linguistics 100 is prerequisite to Spanish 100 and 103. Spanish majors may take it Passed/Not Passed or for a letter grade. It is applicable to the breadth requirements (Plan A and Plan B) as a course in social sciences.

The Major, Plan A (Language and Literature)
Fifteen upper division courses distributed as follows: nine required courses: 100, 103, 105 or 109, 115 or M118, 120A, 120B, 121A, 121B, 127; six elective courses: one in Spanish literature, one in Spanish American literature and four selected from other department offerings not including 160A-160B-160C.

The Major, Plan B (Spanish and Linguistics)
In addition to the normal preparation for the major, Plan B requires completion of six quarters of work in one other foreign language or three quarters in each of two other languages. Portuguese is recommended.

The major consists of thirteen upper division courses distributed as follows: four required courses in Spanish: 100, 103, 105 or 109, 119; six required courses in Linguistics: 100, 103, 110, 120A, 120B, 140; three electives in Spanish.

General College Regulation
No credit will be allowed for completing a less advanced course after satisfactory completion of a more advanced course in grammar and/or composition.

Honors Program
To qualify for graduation with Departmental Honors, students must achieve a 3.0 overall grade-point average, a 3.5 grade-point average in the major and have completed two of the three Senior Seminars (170A, 170B, 170C) with appropriate grades.

Requirement for Teaching Credentials
Consult the UCLA Announcement of the Graduate School of Education.

Lower Division Courses
Spanish 1-4 use J.R. Barcia’s Lengua y Cultura. The method is inductive. Selected examples are given to enable the student to inductively grasp the rules and develop his own grammar. This enables the student to use language effectively and creatively. The courses are taught entirely in Spanish—the student simultaneously learns to understand, speak, read and write Spanish.

1. Elementary Spanish. Meets five hours weekly; laboratory, one hour. This course corresponds to the first year of high school Spanish. Not available for academic credit to those students who have completed more than one year of high school Spanish or equivalent. Students will, however, be credited with four units toward the minimum progress requirement.

2. Elementary Spanish. Meets five hours weekly; laboratory, one hour. Prerequisite: course 1 or equivalent as determined by the Placement Test. Not available for academic credit to those students who have completed two years of high school Spanish or equivalent. Students will, however, be credited with four units toward the minimum progress requirement.

3. Elementary Spanish. Meets five hours weekly; laboratory, one hour. Prerequisite: course 2 or equivalent as determined by the Placement Test. The main grammatical topics include: Relative clauses. Direct and indirect speech. Imperatives. Impersonal constructions. Subjective: present, imperfect. Idioms. Vocabulary of about 400 items and idioms dealing with everyday experience and some selected readings of good authors.

4. Intermediate Spanish. Meets five hours weekly: laboratory, one hour. Prerequisite: course 3 or equivalent as determined by the Placement Test. Grammar review. Also: Conditional. Imperative and conditional. Indicative vs. subjunctive. Past perfect of subjunctive. Infinitive. Vocabulary of about 400 items and idioms dealing with everyday experience and some literary pieces.

5. Intermediate Spanish. Meets five hours weekly; laboratory, one hour. Prerequisite: course 4 or equivalent as determined by the Placement Test.

6A-BB. Spanish Conversation (½ course each). Begins each quarter. Meets three hours weekly. Prerequisite: course 8A is open to those who have completed course 4 or equivalent. Students who have completed course 3 with a grade of “B” or better may be admitted.

9A-B. Advanced Conversation (½ course each). Begins each quarter. Meets three hours weekly. Prerequisite: course 8B or equivalent.

Upper Division Courses
The basic prerequisite to all upper division courses except 160A-160B-160C is Spanish 25 or equivalent as determined by the Placement Test.

100. Phonology and Pronunciation. Prerequisite: Linguistics 100. Meets four hours weekly, including one hour laboratory. Analysis of the phonetic and phonemic systems of Spanish with special emphasis on the correlation between the phonemic and graphemic systems. Interrelation of phonological and morphological phenomena. Exercises and drills directed toward individual needs. Required for major (Plan A and Plan B). Mr. Otero, Ms. Plann.


105. Intermediate Composition. Prerequisite: course 103. Paraphrasing, summarizing, and study of idiomatic expressions.

109. Advanced Composition. Prerequisite: course 103. Correction of student’s original compositions and analysis of basic stylistic elements.

115. Applied Linguistics. Prerequisite: course 100. Meets three hours weekly. Survey of the major linguistic problems faced by the teacher of Spanish.

117. The Spanish of Southern California. Prerequisite: courses 100, 103 or consent of instructor. Analysis of pronunciation, word formation, syntax, and lexicon of the Spanish of Southern California, with attention to regional features, social and age levels of speech, and inference from English.

118. History of the Portuguese and Spanish Languages. (Same as Portuguese M118.) Meets four hour weekly. Prerequisite: course 100. Major features of the development of the Portuguese and Spanish languages from their origins in Vulgar Latin to modern times. Contributions of other languages to the formation of Portuguese and Spanish.

120A-120B. Survey of Spanish Literature. Prerequisite: course M42 for Spanish majors. Begins each quarter. An introduction to the principal authors, works and movements of Spanish literature. Required for the major (Plan A).

Mr. Johnson, Mr. Rodriguez-Cepeda
121A-121B. Survey of Spanish American Literature. Prerequisite: course M44 for Spanish majors. Begins each quarter. An introduction to the principal movements, authors, works, and movements of Spanish American literature. Recommended for the major (Plan A).

Mrs. Arora, Mr. Luzuriaga, Mr. Reeve

122. Medieval and Renaissance Literature. The main manifestations of thought and literature from 700 to 1850 with emphasis on at least one representative work for each. Recommended preparation is course 120A. Mr. Gimeno

124. The Golden Age. The main genres of the Golden Age with emphasis on at least one representative work for each. Recommended preparation is course 120A. Mr. Johnson, Mr. Rodriguez-Cepeda

127. Don Quijote. Directed reading and intensive study of the novel. Required for the major (Plan A). Recommended preparation is course 120A. Mr. Johnson, Mr. Rodriguez-Cepeda

128. Neoclassicism and Romanticism in Spain. The main manifestations of thought and literature from 1700 to 1850 with emphasis on representative works. Recommended preparation is course 120B. Mr. Benitez, Mr. Rodriguez-Cepeda

130. Spanish Literature from 1850 to 1898. The development of post-Romantic literature with emphasis on representative works. Recommended preparation is course 120B. Mr. Smith

132A. Spanish Literature in the 20th Century: Poetry and Drama. A study of major 20th-century authors and works. Recommended preparation is course 120B. Mr. Barcia, Mr. Benitez

132B. Spanish Literature in the 20th Century: Fiction and the Essay. Spanish prose genres since 1898 with emphasis on representative works for each genre. Recommended preparation is course 120B. Mr. Barcia, Mr. Benitez

137. The Literature of Colonial Spanish America. A study of the most important authors and movements in the various regions of Spanish America to 1810. Recommended preparation is course 121A. Mrs. Arora

139. 19th-Century Spanish American Literature. A detailed study of the important writers and movements from 1810 to 1860. Recommended preparation is course 121A. Mr. Luzuriaga, Mr. Reeve, Mr. Skirius

141. Mexican Literature. A study of the major Mexican literary contributions to the development of a nation through time. Recommended preparation is courses 121A-121B. Mr. Reeve, Mr. Skirius

142A. Spanish American Literature in the 20th Century: Poetry and Drama. A detailed study of the important lyrical and dramatic movements in Spanish America since 1880. Recommended preparation is course 121B. Mr. Johnson, Mr. Luzuriaga, Mr. Skirius

142B. Spanish American Literature in the 20th Century: Fiction and the Essay. Spanish American prose genres since 1880 with representative novels, short stories and essays. Recommended preparation is course 121B. Mr. Reeve, Mr. Skirius

M149. Folk Literature of the Hispanic World. (Same as Folklore M149.) A study of the history and present dissemination of the principal forms of folk literature throughout the Hispanic countries.

151. Folk Song in Spain and Spanish America (½ course). Meets three times weekly. A study of the origins and development of Spanish folk music and the different types of folk songs and folk poetry peculiar to the various regions of Spain and Spanish America.

Mr. Fobe, Mr. Robe, Mr. Hulet

160A-160B-160C. Hispanic Literatures in Translation. Class readings and analysis of selected works in translation. Classroom discussion, papers and examinations will be in English. Meets three times weekly.

160A. Spain and Portugal. Mr. Johnson

160B. Spanish America and Brazil. Mr. Hulet

160C. Don Quijote in English Translation. Class reading and analysis of Cervantes' Don Quijote.

170A. Senior Seminar: Topics in Spanish Literature. Prerequisites: Spanish major, senior standing, 3.5 GPA in the major. Directed research on topics within the general area of Spanish literature. Two senior seminars are required for Departmental Honors. Given Fall Quarter only.

Mr. Barcia, Mr. Benitez

170B. Senior Seminar: Topics in Spanish American Literature. Prerequisites: Spanish major, senior standing, 3.5 GPA in the major. Directed research on topics within the general area of Spanish American literature. Two senior seminars are required for Departmental Honors. Given Winter Quarter only.

Mrs. Arora, Mr. Luzuriaga, Mr. Reeve

170C. Senior Seminar: Topics in Hispanic Linguistics. Prerequisites: Spanish major, senior standing, 3.5 GPA in the major. Directed research on topics within the general area of Hispanic linguistics. Two senior seminars are required for Departmental Honors. Given Spring Quarter only.

Mr. Otero, Mr. Robe, Mr. Smith

199. Special Studies (½ to 1 course). Prerequisite: consent of advisor and instructor. A maximum of two full courses may count toward the major.

The Staff

Graduate Courses

For complete descriptions of graduate-level courses offered by this department, please consult the UCLA Graduate Catalog.

Portuguese

Preparation for the Major

Portuguese 3, 25, M42, M44 or equivalent.

The Major in Portuguese

Thirteen upper division courses distributed as follows: seven required courses: 100, 103, M118, 120A, 120B, 121A, 121B. The remaining six courses may consist of six electives in Portuguese, or four electives in Portuguese plus two courses supportive of the student's program and approved by the department in history, philosophy, linguistics, or another language or literature.

General College Regulation

No credit will be allowed for completing a less advanced course after satisfactory completion of a more advanced course in grammar and/or composition.

Requirement for Teaching Credentials

Consult the UCLA Announcement of the Graduate School of Education.

Lower Division Courses

1. Elementary Portuguese. Meets five hours weekly; laboratory, one hour. The Staff

2. Elementary Portuguese. Meets five hours weekly; laboratory, one hour. Prerequisite: course 1 or equivalent. The Staff

3. Intermediate Portuguese. Meets five hours weekly; laboratory, one hour. Prerequisite: course 2 or equivalent. The Staff

8A-8B. Portuguese Conversation (½ course each). Meets three discussion hours weekly. Prerequisite: completion of the completion of course 4 with a grade of "B" or better. The Staff

25. Advanced Portuguese. Meets four hours weekly. Prerequisite: course 3 or equivalent. The Staff

M42. Civilization of Spain and Portugal. (Same as Spanish M42.) Highlights of the Civilization of Spain and Portugal, with emphasis on their artistic, economic, social and historical development as background for upper division courses. Conducted in English. Required for the major.

Mr. Cruz-Salvadores

M44. Civilization of Spanish America and Brazil. (Same as Spanish M44.) Highlights of the Civilization of Spanish America and Brazil with emphasis on their artistic, economic, social and historical development as background for upper division courses. Conducted in English. Required for the major.

Mr. Reeve, Mr. Skirius

*Upper Division Courses

100. Phonology and Pronunciation. Meets four hours weekly, including one hour in laboratory. Analysis of the phonological structure of Portuguese with special emphasis on the correlation between the phonemic and graphemic systems. Exercises and drills directed toward individual needs.

Mr. Dias, Mr. Quicoli

101A. Advanced Reading and Conversation. Meets three hours weekly. Reading and discussion of writings by modern Brazilian and Portuguese authors.

Mr. Hulet

101B. Advanced Composition and Style. Meets three hours weekly. Correction of student's composition and analysis of basic stylistic elements.

Mr. Hulet

102A-102B. Intensive Portuguese. Prerequisite: advanced foreign language experience (other than Portuguese) or consent of instructor. An intensive course stressing both speaking and reading skills designed to cover the equivalent of three quarters of the traditional pattern, to meet the peculiar needs of advanced (upper division and graduate) students who are specializing primarily in foreign languages, linguistics, comparative or romance literature.

The Staff

103. Syntax. Meets four hours weekly. A review of the patterns of the Portuguese language: the verb system, syntax of preposition, word pattern and word distribution.

Mr. Dias, Mr. Quicoli

M118. History of the Portuguese and Spanish Languages. (Same as Spanish M118.) Meets four hours weekly. Prerequisite: course 100. Major features of the development of the Portuguese and Spanish languages from their origins in vulgar Latin to modern times. Contributions of other languages to the formation of Portuguese and Spanish.

Mr. Otero, Mr. Quicoli, Mr. Smith

120A. Survey of Portuguese Literature. Meets four hours weekly. First half of an introduction to the principal movements, authors, and works of Portuguese Literature.

Mr. Dias

120B. Survey of Portuguese Literature. Meets four hours weekly. Second half of an introduction to the principal movements, authors, and works of Portuguese Literature.

Mr. Dias

121A. Survey of Brazilian Literature. Meets four hours weekly. First half of an introduction to the principal movements, authors and works of Brazilian Literature.

Mr. Hulet

121B. Survey of Brazilian Literature. Meets four hours weekly. Second half of an introduction to the principal movements, authors, and works of Brazilian Literature.

Mr. Hulet

*For concurrently scheduled courses ("C" prefix), activities and standards for performance and evaluation are applied separately for undergraduates and graduates.
C124. Medieval Portuguese Literature. The main genres of Medieval Portuguese and Galician literature with emphasis on at least one representative work for each. May be offered concurrently with course C242A. Mr. Dias

C126. Renaissance and Baroque Portuguese Literature. The main genres of Renaissance and Baroque literature with emphasis on at least one representative work for each. May be offered concurrently with course C242B. Mr. Dias

C127. Colonial Brazilian Literature. A study of the most important authors and literary currents to 1830. May be offered concurrently with course C243A. Mr. Hulet

C128. 18th- and 19th-Century Portuguese Literature. The main manifestations of thought and literature from 1700 to 1900 with emphasis on representative works. May be offered concurrently with course C242C. Mr. Dias

C129. Romanticism in Brazil. A study of representative trends and authors. May be offered concurrently with course C243B. Mr. Hulet

C135. Naturalism, Realism and Parnasianism in Brazil. A study of representative trends and authors. May be offered concurrently with course C243C. Mr. Hulet

C136. Contemporary Portuguese Literature. A study of representative trends and authors. May be offered concurrently with course C242D. Mr. Dias

C137. Contemporary Brazilian Literature. A study of representative trends and authors. May be offered concurrently with course C243D. Mr. Hulet

C140A-140B. Luso-Brazilian Literature in Translation. 140A. Portuguese Literature. Class reading and analysis of selected works in translation. Classroom discussion, papers and examinations will be in English. Meets three times weekly. Mr. Dias 140B. Brazilian Literature. Class reading and analysis of selected works in translation. Classroom discussion, papers and examinations will be in English. Meets three times weekly. Mr. Hulet 199. Special Studies (1/4 to 1 course). Prerequisite: consent of advisor and instructor. A maximum of two full courses may count toward the major. The Staff

Graduate Courses

For complete descriptions of graduate-level courses offered by this department, please consult the UCLA Graduate Catalog.

Speech

(Department Office: 232 Royce Hall)

Waldo Woodson Phelps, Ph.D., Professor of Speech
Walter Wilcox, Ph.D., Professor of Journalism (Chairman of the Department)
Donald Erwin Hargis, Ph.D., Emeritus Professor of Communication Studies
Harrison Manly Karr, Ph.D., Emeritus Professor of Speech
Charles Wyatt Lomas, Ph.D., Emeritus Professor of Communication Studies
Ralph Richardson, Ph.D., Associate Professor of Speech
Paul Irwin Rosenthal, Ph.D., Associate Professor of Communication Studies

Steven A. Doyle, Lecturer in Speech
Eugenie Dye, Ph.D., Lecturer in Speech

Marie S. Gregory, Lecturer in Speech
Thomas E. Miller, Lecturer in Speech
Sonya H. Packer, Lecturer in Speech

The Department of Speech is in the process of being phased out and is no longer offering degree programs. The courses listed below are offered by the faculty as a service to the general instructional program of the University.

Lower Division Courses

1. Principles of Oral Communication. Prerequisite: satisfactory subject A requirement. Theory and practice of informal public speaking, including selection of content, organization of ideas, language, and delivery; practice in extemporaneous and manuscript speaking; training in critical analysis through reading and listening to contemporary speeches. The Staff

2. Public Speaking and Discussion. Prerequisite: course 1. A continuation of course 1, with special emphasis on group discussions, panel discussions, debates, and formal public speaking. Critical analysis of speeches in both contemporary and historical settings. The Staff

Upper Division Courses

101. Introduction to Public Address. Analysis of rhetorical principles. Application to informative and persuasive speaking, to problem-solving discussion, and to the criticism of contemporary speeches. Open to upper division students who do not have credit for Speech 1 and 2. May not be counted as part of upper division major. The Staff

103. Phonetics of English. A study of the physical production and acoustic characteristics of the sounds of American English. The Staff

107. Principles of Argumentation. Analysis of propositions, tests of evidence, briefing. Study of hindrances to clear thinking, ambiguity of terms, and prejudices. The critical analysis of selected argumentative speeches. Mr. Miller


112. Oral Interpretation of Literature. A study of the literary, aesthetic, and oral bases for the analysis of non-dramatic literary works in the framework of the readers theater. Lectures, readings, reports, and performance practice. The Staff

113. Readers Theater. The concepts and practices of the oral interpretation of non-dramatic literary works within the framework of the readers theater. Lectures, readings, reports, and performance practice. The Staff

137A-137B. American Public Address. Critical study of speeches by leading American orators. Relations of speakers to issues and social movements of their day. The Staff

137A. Colonial period to 1865; 137B. 1865-1930. Mr. Richardson

138. Contemporary American Public Address. Critical study of American oratory from 1860 to the present with emphasis upon movements and issues including civil rights, Vietnam and Watergate. Mr. Phelps

144. Speech and Community Action. Consent of instructor required. An intensive laboratory-based, observation-oriented study of speech and community practices of action groups, protest groups, and public officials involved with the metropolitan Los Angeles urban crises. Mr. Richardson

170. Rhetoric of Winston Churchill. An intensive study of the speeches of Winston Churchill during the wilderness years, the 30's and during the wartime years. The background and the impact of these speeches also are examined. Mr. Phelps

171. The Rhetoric of Franklin Roosevelt. An intensive study of major speeches and fireside chats during Roosevelt's presidency. The background and the impact of these speeches also are examined. Mr. Phelps

190A-190B. Forensics (1/2 course each). Prerequisite: consent of instructor. May be repeated once for credit. The Staff

191. Analysis and Briefing (1/2 course). Intensive study of selected political or social issues; preparation of bibliography; analysis and evaluation of issues and arguments. May be repeated once for credit. The Staff

197. Proseminar in Rhetoric. A variable topic course involving intensive study of discourse associated with a single major issue or personality. Senior standing or consent of instructor. Mr. Phelps

199. Special Studies (1/4 to 1 course). Prerequisites: senior standing and consent of instructor. The Staff

Study of Religion

(Interdepartmental)

(Program Office: 341 Haines Hall)

Major in Study of Religion

The UCLA major in the Study of Religion has a twofold purpose. In the first place it is designed to give students a broad humanistic perspective. It introduces students to several religious traditions of mankind and thus to an appreciation of the very nucleus of civilization in various periods of history and various parts of the world, as well as to an understanding of fundamental human orientations. In the second place, the program asks the student to select one particular religious tradition for study at greater depth. Cohesion and integrity in the program are furthered by some courses dealing with philosophical problems in religion and with general anthropological reflections.

The program requires one year of language study which should be related to the major tradition of the student's concern. This minimum requirement will allow every student to develop some idea of the basic problems in understanding religious texts. Students contemplating graduate study will generally do more than fulfill the minimum requirement.

It is hoped that in the future a group of courses will be added to the nine groups of the present program to allow for a concentration of sociological and philosophical problems of religion.
Preparation for the Major

Anthropology 22: Philosophy 2; History 4; two courses chosen from History 1A, 1B, 1C, 9A, 9B, 9C, 9D, 10A, 10B.

The Major

The major requires a minimum of 13 upper division courses and three related courses in foreign language. These must include History 193A or 193E; Anthropology 133R or 156; two of the following: Philosophy 175, 191, 193, 195.

In addition a student is to select one of the following groups as his main area of study and is to take three courses in that main area and three related courses in foreign language as indicated below. (The language courses may be either upper or lower division. If any requirements have been satisfied prior to admission to the program, they will be honored upon the recommendation of the appropriate instructor in the program. Another language pertinent to the student’s main area may be substituted with the consent of the Committee in Charge of the Major. Among these languages are Hittite, Uguritic, Syriac, Coptic, Persian, Armenian, French, German, Irish, Welsh.)

Group 1: Ancient Near East and Eastern Europe—Three courses selected from the following: History 193D, Ancient Near East 130, 150A, 150B, 150C, 170, Indo-European Studies 131, 132, Iranian 170; three courses in one of the following languages: Ancient Egyptian or Akkadian.

Group 2: Indo-European Traditions—Three courses selected from the following: English M111D, M111E, History 193B, Classics 140, Scandinavian Literature 141, Iranian 170, Slavic M179; three courses in one of the following languages: Sanskrit, Latin, Greek.

Group 3: Greece and Rome—Three courses selected from the following: Classics 161, 162, 165A, 166B, History 197 (Roman History: Christianity and Imperial Rome); three courses in one of the following languages: Latin or Greek.


Group 5: Christianity—Three courses selected from the following: Philosophy 105, 106, English 108B, History 116A, 116B, 119, 120, 121A, 121B, 125B, 150A, 150B, 150C, Ancient Near East 170, 172, Classics M170A; three courses in one of the following languages: Latin or Greek.

Group 6: Islam—Three courses selected from the following: Philosophy 104, History 106A, 107A, 107B, Arabic 150A, 150B, Iranian 150A, 150B; three courses in Arabic.

Group 7: South Asia—Three courses selected from the following: History 188A, 193B, 193C, 197 (South Asian Religions), Oriental Languages 167, Iranian 170; three courses in Sanskrit.

Group 8: Far East—Three courses selected from the following: History 193C, Oriental Languages 172, 173, 174; three courses in one of the following languages: Sanskrit, Chinese, Japanese.

Group 9: Traditional and Nonliterate Cultures—Three courses selected from the following: Anthropology 171, 174P, 177, Folklore and Mythology M111, M123A, M125, M129, 130, Linguistics M150; three courses in a language chosen in consultation with an instructor in these areas.

The student will select six courses in traditions chosen from at least two groups outside his main area of study, excluding foreign language courses.

Honors in the Major

Honors in the interdepartmental major, Study of Religion, provides exceptional students with an opportunity to do independent research under the tutorial guidance of a faculty member associated with the program. A student admitted to Honors by the Committee in Charge of the Major should take three 199 courses under the guidance of the sponsoring professor. These courses will be taken in the student’s senior year and will count as part of the regular requirement of sixteen upper division courses. Honors culminates in an Honors Thesis which the candidate should be capable of defending before his or her sponsoring professor and at least two members of the Committee in Charge of the Major.

In order to qualify for admission, students should have a minimum grade-point average of 3.4. They should consult the sponsoring professor of their choice and with his or her approval make their desire known to the Committee in Charge of the Major. They should do so preferably before the end of their junior year, and no later than the beginning of their senior year. The 199 courses designed for the program and the thesis topic should be approved by the Committee.

For further information, contact Professor Jacques Maquet, 341 Haines Hall (825-3898).

Subject A

Every student who does not satisfy the Subject A requirement by presenting transfer credit or by passing an acceptable examination is required to take, in the quarter immediately following his admission to the University, either English A or English 1. Placement in these courses is determined by performance on the Subject A Placement Test.

Theater Arts

(Department Office: 2310 Macgowan Hall)

William B. Adams, M.A., Professor of Theater Arts.
John R. Cauble, M.A., Professor of Theater Arts.
Shirley M. Clarke, A.A., Professor of Theater Arts.
Robert F. Corrigan, M.A., Professor of Theater Arts.
Donald B. Crabs, M.A., Professor of Theater Arts (Chairman of the Department).
Arthur B. Friedman, Ph.D., Professor of Theater Arts.
Henry Goodman, Ph.D., Professor of Theater Arts.
Richard C. Hawkins, M.A., Professor of Theater Arts.
Melvyn B. Hetsiellen, Ph.D., Professor of Theater Arts.
Frank D. LaTourette, M.Litt., Professor of Theater Arts.
Carl R. Mueller, Ph.D., Professor of Theater Arts.
Louis C. Stoumen, B.A., Professor of Theater Arts.
Abe V. Wollock, Ph.D., Professor of Theater Arts.
John W. Young, M.A., Professor of Theater Arts.
Robert E. Lee, D.Litt., Adjunct Professor of Theater Arts.
Waiden P. Boyle, Ph.D., Emeritus Professor of Theater Arts.
Michael Gordon, M.F.A., Emeritus Professor of Theater Arts.
Edward Hearns, M.A., Emeritus Professor of Theater Arts.
John H. Jones, M.A., Emeritus Professor of Theater Arts.
Walter K. Kingson, Ed. D., Emeritus Professor of Theater Arts.
William W. Melnitz, Ph.D., Emeritus Professor of Theater Arts.
Darrel E. Ross, M.F.A., Emeritus Professor of Theater Arts.
Nicholas K. Browne, Ed.D., Associate Professor of Theater Arts.
William Froug, B.J., Associate Professor of Theater Arts.
Gary A. Gardner, Ph.D., Associate Professor of Theater Arts.
Robert H. Hethmon, Ph.D., Associate Professor of Theater Arts.
Dan F. McLaughlin, M.A., Associate Professor of Theater Arts.
Stephen D. Mamber, Ph.D., Associate Professor of Theater Arts.
William H. Menger, M.A., Associate Professor of Theater Arts.
Sylvia E. Moss, B.A., Associate Professor of Theater Arts.
Dela N. Salvi, Ph.D., Associate Professor of Theater Arts.
Ruth E. Schwartz, Ph.D., Associate Professor of Theater Arts.
Howard Suber, Ph.D., Associate Professor of Theater Arts.
William D. Ward, M.F.A., Associate Professor of Theater Arts.
William T. Wheatley, Ph.D., Associate Professor of Theater Arts.
Margaret L. Wilbur, M.F.A., Associate Professor of Theater Arts.
Theodore Apstein, Ph.D., Adjunct Associate Professor of Theater Arts.
Alan M. Armstrong, M.F.A., Assistant Professor of Theater Arts.
Michael J. Hackett, B.A., Assistant Professor of Theater Arts.
Patricia M. Harter, M.A., Assistant Professor of Theater Arts.
Michael S. McLain, M.F.A., Assistant Professor of Theater Arts.
Joanne T. McMaster, M.F.A., Assistant Professor of Theater Arts.
Robert A. Nakamura, M.F.A., Assistant Professor of Theater Arts.
Thomas J. Orth, M.F.A., Assistant Professor of Theater Arts.
Jorge R. Preforlan, B.A., Assistant Professor of Theater Arts.
Richard S. Rose, M.F.A., Assistant Professor of Theater Arts.
Carol J. Sorgenfrei, Ph.D., Assistant Professor of Theater Arts.
Richard Walter, M.A., Assistant Professor of Theater Arts.

John D. Boehm, M.A., Lecturer in Theater Arts.
Robert Bookman, J.D., Lecturer in Theater Arts.
Edgar L. Brokaw, B.A., Lecturer in Theater Arts.
Ivan N. Cury, M.F.A., Visiting Lecturer in Theater Arts.
Gordon Davidson, M.A., Lecturer in Theater Arts.
Anthony DeLongis, B.A., Visiting Lecturer in Theater Arts.
Beverly J. Robinson, M.A., Lecturer in Theater Arts.
Hugh M. Grauel, M.A., Lecturer in Theater Arts.
Leonard Jerome Guardino, B.S., Visiting Lecturer in Theater Arts.
H. Peter Guib, LL.M., Lecturer in Theater Arts.
John Ingle, M.A., Visiting Lecturer in Theater Arts.
Mark Mccary, M.A., Lecturer in Theater Arts.
Valerie Mancmes, M.A., Visiting Lecturer in Theater Arts.
Beverly J. Robinson, M.A., Visiting Lecturer in Theater Arts.
Robert Rose, M.A., Adjunct Lecturer in Theater Arts.
Robert Trachinger, Visiting Lecturer in Theater Arts.
Frank A. Valert, Visiting Lecturer in Theater Arts.
George Van Buren, Lecturer in Theater Arts.

The Department of Theater Arts bases its work in theater, motion pictures and television on a solid foundation in the liberal arts. The purpose of the curriculum is to develop in its students a creative and professional approach to the theater arts. The aim of the department is to train graduates who will eventually make their B.A. degree should complete the general University and College of Fine Arts requirements before entering the program.

The Major

Theater: Courses 130A, 140A, 141A, 142A, 143, 160 or 161A*, 170, 172 (repeated four times); two units chosen from 122, 144A, 146, 149A, 174, 190A, 190B; 22 units of approved upper division theater arts electives, to bring the total to 60 upper division units. Through certain required courses listed above, all students during each quarter of residence are responsible for completing specific production assignments related to production activity of the theater curriculum.

If course 161A is used to complete the requirement, 24 units of electives will be required.

Motion Picture/Television: Admission to this major is not automatic. Applicants may not apply until just prior to achieving full status as a junior at the University. They must obtain departmental permission by (1) filing a letter of intent; (2) giving evidence of creative or critical ability when requested; and (3) providing additional material as determined by the department.

No student in motion picture/television may begin the major, consisting of 60 upper division units, before the junior year and during the junior and senior years must take 108, 134, 179A (double course) and one of the following television courses: 180B, 182*, 184A, 184B, 184C, 185 plus two courses selected from 106A, 106B, 106C, 106D, 106E, 110A, 110B and one upper division course chosen from the history, theory and/or criticism course listings in theater arts. It is recommended that the majority of these required courses be completed during the junior year.

If course 182 is used to complete the television requirement, only 24 units of electives will be required.

In addition to the required courses, students must take a minimum of 28 units of upper division motion picture/television electives which may include advanced classes in the fields of filmmaking, writing, animation, television production, news and documentary and critical studies.

Students must consult with the department undergraduate counselor to plan a program. Admission to advanced classes frequently requires consent of instructor or senior standing. The student should be mindful of the exigencies inherent in filmmaking and be prepared to meet the additional demands of time and costs.

NOTE: Students are required to perform assignments on each other's projects. In addition, the Department of Theater Arts 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.

Motion Picture/Television: Students electing to specialize in motion picture/television for their B.A. degree should complete the general University and College of Fine Arts requirements before entering the program.

Check the Schedule of Classes for courses restricted to majors only.

Lower Division Courses

THEATER ARTS

5A. History and Drama of the Theater from Primit-ive Times to 1640. Lecture, three hours; discussion, one hour. Required of Theater majors. The history of the influence of different cultures, traditions and technologies on the development of theater as a social institution.

5B. History and Drama of the Theater from 1640 to 1900. Lecture, three hours; discussion, one hour. Required of Theater majors. The history of the influence of different cultures, traditions and technologies on the development of theater as a social institution.

5C. History and Drama of the Theater from 1900 to the Present. Lecture, three hours; discussion, one hour. Required of Theater majors. The history of the influence of different cultures, traditions and technologies on the development of theater as a social institution.

10. Fundamentals of Theater Production. Lecture, three hours; laboratory, three hours. Required in the first quarter of residence for Theater Arts majors specializing in theater. A basic study of the relationship of acting, stage management, scenery, lighting, costume and sound to the production of the play. Emphasis will be placed on the planning, procedures, materials, equipment and disciplines of theater production.

20. Acting Fundamentals. Lecture/laboratory, four hours. Required of Theater majors. An introduction to the interpretation of drama through the act of the actor. Development of individual insights, skills, and disciplines in the presentation of dramatic material to an audience.

Upper Division Courses

THEATER AND GENERAL SECONDARY CREDENTIAL AREAS

100. The Teaching of Theater. Lecture, three hours. Prerequisites: courses 160 or 161A and 162A or consent of instructor. Study of current methods and problems of production as related to the secondary level. Highly recommended for students pursuing a secondary teaching credential.

101. Introduction to Theater Arts (½ course). Lecture, two hours; laboratory, two hours. Not open for credit to Theater Arts majors. A survey of theater, motion pictures, television and radio, together with critical analysis of their roles in contemporary culture, leading to an appreciation and understanding of the theater arts. A non-technical presentation for the general student. To be taken on a Passed/Not Passed basis only.

102A. Selected Topics on the History of the Euro-pean Theater. Lecture, three hours. Prerequisites: course 5B or equivalent and/or consent of instructor. An investigation in depth of a selected area of study in theater history from the Greeks through the Renais-sance. May be repeated for a maximum of 12 units of credit.

102B. Selected Topics on the History of the Euro-pean Theater. Lecture, three hours. Prerequisites: course 5B or equivalent and/or consent of instructor. An investigation in depth of a selected area of study in theater history from the Baroque to the present. May be repeated for a maximum of 12 units of credit.

*For concurrently scheduled courses (C*) prefix, activities and/or standards for performance and evaluation are applied separately for undergraduates and graduates.
102D. History of the European Theater. Lecture, three hours. Prerequisite: consent of instructor. A survey of the history of theater from the Greeks to the present. May not be taken for credit by students who have had more than one course from the 5A, 5B, 5C series.

102E. Theater of the Non-European World. Lecture, three hours. Prerequisite: 102D. A survey of theater forms of the non-European world in which primary attention will be concentrated on an examination and analysis of the traditional dance-drama and puppet theaters of East Asia, Southeast Asia, South Asia, the Middle East, and Africa. Analogous forms from European theater will be included for comparative purposes.

103A. Black People's Theater in America, Slavery to 1930. Lecture, three hours. An exploration of all extant materials on the history and literature of the theater developed and performed by Black artists in America from Slavery to 1930.

103B. Black People's Theater in America, 1930 to the Present. Lecture, three hours. An exploration of all extant materials on the history and literature of the theater as developed and performed by Black artists in America from 1930 to the present.

104A. History of the American Theater. Lecture, three hours. The history of the American theater from the Revolutionary War to WWI.

104B. History of the American Theater. Lecture, three hours. The history of the American theater from WWI to the present.

105. Main Currents in Theater. Lecture, three hours. Prerequisite: consent of instructor. Critical examination of the leading theories of theater from 1857 to the present. Study and discussion of modern styles of production.

117. The Puppet Theater (½ course). Lecture/laboratory, four hours. Prerequisite: consent of instructor. Study of the history and practice of the art of puppetry. An examination of the techniques and methods of construction. Staging of puppet productions as laboratory practice. May be repeated for a maximum of six units of credit.

118A. Creative Dramatics. Lecture/laboratory, four hours. Studies of the principles and procedures of the improvisational approach to drama as done with children from nursery school to junior high.

118B. Advanced Creative Dramatics (½ course). Discussion, one hour; laboratory, two hours. Prerequisite: consent of instructor. Study of the history and practice of the art of puppetry. An examination of the techniques and methods of construction. Staging of puppet productions as laboratory practice. May be repeated for a maximum of six units of credit.


121. Acting Workshop (½ course). Laboratory, to be arranged. Prerequisites: course 20 and consent of instructor. A workshop which provides students with an opportunity to rehearse, perform and criticize scenes. Offered concurrently only with courses 160 and 161A, 161B, 161C. May be repeated for credit (4 units). Not open for credit to those who have had course 198J.


123. Intermediate Acting for the Stage. Lecture/laboratory, four hours. Prerequisites: course 20 and consent of instructor. Study and practice of the art of acting through the perfecting of techniques and application of those techniques to acting problems. Not open for credit to students who have received credit for former course 120.

124. Voice for the Stage. Lecture/laboratory, four hours. Prerequisites: course 20 and consent of instructor. Development of voice techniques for the stage. Includes work on relaxation, limbering, breathing, articulation, and resonators.

125A. Movement for the Actor. (Formerly numbered 125.) Lecture/laboratory, four hours. Prerequisites: courses 10 and consent of instructor. Physical awareness for the actor, concentrating on warming up the body, relaxation, control, stunts and gymnastics. Not open for credit to students who have received credit for courses 125A and 125B.

125B. Advanced Movement for the Actor. Lecture/laboratory, four hours. Prerequisites: course 125A and consent of instructor. An advanced and comprehensive introduction to classical and modern movement for the stage actor. Not open for credit to students who have received credit for former course 125.

130A. Fundamentals of Playwriting I. Lecture, three hours. Required of Theater majors. Course designed to stimulate the student's critical and creative faculties through the preparation of original material for the theater. Guidance in the completion of a one-act play.

130B. Fundamentals of Playwriting II. Lecture, three hours plus conference. Prerequisites: course 130A and consent of writing staff. Study in original material for the theater, its preparation and development. The course is designed to give further insight into the critical and creative aspects of the short and full-length play and guidance in the completion of the one-act and full-length play. May be repeated for a maximum of six units.

132. Manuscript Evaluation for Theater. Lecture, three hours. Prerequisites: course 130A and consent of instructor. May be repeated for a maximum of eight units. Principles and practices in the evaluation of manuscripts for theater.

136. Advanced Acting for the Stage. Lecture/laboratory, four hours. Prerequisites: courses 123, 124, 125A and consent of instructor. Study and practice of the art of acting through a progression to more advanced acting problems. May be repeated for a maximum of twelve units of credit. Concurrent enrollment with the same instructor is not permitted. The total number of units for courses 136, 137A-137B-137C and former course 120 may not exceed 12 units.

137A-137B-137C. Continuum Study in Acting for the Stage. Lecture/laboratory, four hours. Prerequisites: courses 123, 124, 125A and consent of instructor. The technique of characterization and performance in advanced and complex acting styles. The total number of units from courses 136, 137A-137B-137C and former course 120 may not exceed 12 units. Students having taken former course 120 once prior to the institution of this change may take this course for repeat units.

138. Special Problems in Performance Techniques. Lecture/laboratory, four hours. Prerequisites: courses 123, 124, 125A and consent of instructor. Study of complex problems in voice, movement and acting. May be repeated for a maximum of 12 units.

140A. Scenic Techniques for the Stage. Lecture, three hours; laboratory, six hours. Prerequisites: course 10 and consent of instructor. Required of Theater majors. An intensive study of scenic materials, construction, lighting organization and the rigging of scenery. (Courses 140A, 141A and 142A may be taken in any sequence, but not concurrently.)

140B. Advanced Scenery for the Stage. Lecture/laboratory, four hours. Prerequisite: course 140A. Advanced study of scenic production techniques in staging theater productions, including design analysis and planning related to rigging, lighting and construction techniques.

141A. Lighting Techniques for the Stage. Lecture, three hours; laboratory, six hours. Prerequisites: course 10 and consent of instructor. Required of Theater majors. An intensive study of theater lighting with an emphasis on the relationship of lighting instruments and their application to the interpretation of a script or score through the control of light and color in relation to actor and audience.

142A. Theater Costuming Techniques. Lecture, three hours; laboratory, four hours. Prerequisite: course 10 and consent of instructor. Required of Theater majors. The study of costumes analysis and the interpretation of theatrical costume design through the use of patterns and color in relation to costuming materials. (Courses 142A, 140A and 141A may be taken in any sequence, but not concurrently.)

142B. Advanced Costuming for the Stage. Lecture, three hours; laboratory, four hours. Prerequisite: course 142A or consent of instructor. Special problems in the procuring, designing, construction and management of costumes used in theatrical productions.

143. Scenic Design for the Theater. Lecture, four hours. Prerequisites: course 10 and consent of instructor. Required of Theater majors. Basic principles of design as applied to the interpretation and presentation of the visual aspects of dramatic art. Study of styles, techniques and methods of design for the theater. The student will be given ideas into visual forms. Not open for credit to students who have received credit for former course 143A.

144A. Theater Sound Techniques (½ course). Lecture, two hours; laboratory, two hours. Prerequisite: course 10 or approved equivalent. A study of the equipment and techniques utilized in the recording and reproduction of sound for the theater.

144B. Advanced Theater Sound. Lecture, three hours; laboratory, four hours. Prerequisite: course 144A or consent of instructor. A detailed study of the equipment and techniques utilized in the recording and execution of theater sound tracks, recording techniques, and acoustic reinforcement.

145. Costume Design for the Theater. Lecture/laboratory, four hours. Prerequisite: consent of instructor. Design of costumes for theatrical presentations. The study of the use of silhouette, fabrics, color, and decoration as related to theatrical characterization.

146. Scene Painting Techniques (½ course). (Formerly numbered 146B.) Lecture/laboratory, three hours. Prerequisites: course 10 or approved equivalent. A study of the techniques of scene painting and materials utilized in the recording and reproduction of sound for the theater.

149A. Basic Drafting Techniques for the Stage (½ course). Lecture/laboratory, four hours. Prerequisite: course 10 or consent of instructor. Studies of the basic drafting techniques and methods of drafting for the stage, through the execution of floor plans and elevation drawings.

149B. Advanced Drafting for Theater Arts. Lecture/laboratory, four hours. Prerequisite: course 149A or consent of instructor. An advanced course in the technical drafting and design of working drawings essential in the development of the design of sets and properties for theater, television and motion picture productions.

160. Fundamentals of Play Direction. (Formerly numbered 160A.) Lecture/laboratory, four hours. Required of Theater majors. Course 161A may be substituted, but not concurrently. Basic theoretical approaches to play direction and their application through the preparation of scenes under rehearshal conditions. Course 121 may be offered concurrently with this course. (If course 161A is substituted, an additional two upper division units will be required.)
161A. Continuum in Directing for the Stage (1/2 course). Lecture/laboratory, six hours. Prerequisites: consent of instructor. The intensive development of primary directing skills and process, including text analysis and the exploration of craft fundamentals as a basis for director-actor communication and effective staging. The student will work in proscenium configuration with scenes drawn from plays of American Realism. The course requires a full departmental majority in directing. Course 121 may be offered concurrently with this course.

161B. Continuum in Directing for the Stage. Lecture/laboratory, six hours. Prerequisites: consent of instructor and course 161A. Working in three-quarter and environmental configurations, the student director will explore problems of style in production by staging scenes drawn from period plays (16th, 17th and 18th centuries) and from contemporary, non-realistic plays. Course 121 may be offered concurrently with this course.

161C. Continuum in Directing for the Stage (1/2 courses). Lecture/laboratory, six hours. Prerequisites: consent of instructor and course 161B. Working in three-quarter and environmental configurations, the student director will explore problems of style in production by staging scenes drawn from period plays (16th, 17th, 18th centuries) and from contemporary, non-realistic plays. Course 121 may be offered concurrently with this course.

162A. Intermediate Play Direction. (Formerly numbered 160B.) Lecture/discussion, two hours; laboratory, eight hours. Prerequisites: course 160 or 161A and consent of instructor. Course 160, 161A and consent of instructor. Special problems in the direction of original one-act plays under production conditions. May be repeated for a maximum of eight units of credit with consent of instructor.

170. Theater Laboratory. Lecture, four hours; laboratory, eight hours. Prerequisites: courses 140A, 141A, 142A, 143A. Required of Theater majors. Laboratory in theater production, under supervision. The translation of ideas and concepts into the dramatic form.

171A. Advanced Theater Laboratory (1/2 or 1 course). Hours to be arranged. Prerequisite: consent of instructor. May be taken for a maximum of one course. Creative participation as an actor or stage manager in the public presentation of departmental productions.

171B. Advanced Theater Laboratory (1/2 or 1 course). Hours to be arranged. Prerequisite: consent of instructor. May be taken for a maximum of one course. Creative participation in the realization of production elements related to the public presentation of departmental productions.

C172. Technical Theater Laboratory (1/2 course). Hours to be arranged. Prerequisite: consent of instructor. Required of Theater majors. A laboratory in various aspects of theater production. The student must repeat the course for a total of 8 units. No assignment may be repeated more than once. Maximum 8 units. Concurrent scheduling with courses C272A, C272B, C272C, C421A.


190A. The Role of the Producer in the Professional Theater (1/2 course). Lecture, two hours. A study of the structure governing the economic and artistic decision-making processes in the professional theater of America.

190B. The Role of Management in the Educational and Community Theater (1/2 course). Lecture, two hours. A study of the artistic, social and economic conditions in the administration of educational and community theaters.

191. The Touring Company (2 or 3 courses). Lecture, 20 hours; laboratory, 22 hours. Prerequisite: consent of instructor. Rehearsal and technical preparation of a theatrical work for touring, and the performance of that work on tour.

MOTION PICTURE/TELEVISION AREAS

**106A. History of the American Motion Picture. Lecture/screenings, eight hours; discussion, one hour. An historical and critical survey of the development of the American motion picture both as a developing art form and as a medium of mass communication. May be repeated for credit (maximum 2 courses) with departmental consent (determined on basis of change in course content).**

**106B. History of the European Motion Picture. Lecture/screenings, eight hours; discussion, one hour. An historical and critical survey, with examples, of the European motion picture both as a developing art form and as a medium of mass communication. May be repeated for credit (maximum 2 courses) with departmental consent (determined on basis of change in course content).**

106C. History of African, Asian and Latin American Film. Lecture/screenings, eight hours; discussion, one hour. A critical, historical, aesthetic and social study— together with an exploration of the ethnic significance— of African, Asian, Latin American and Mexican films.

106D. The Development of Film in Europe and the United States: From WWI through the Depression. Lecture/screenings, eight hours; discussion, one hour. An interdisciplinary and comparative approach to the development of film in Europe from the silent era through the Depression. Particular stress will be given to the interrelationships of film with its historical context and to the social dimensions of film structure, aesthetics, and language. (Part 2 of one or two-quarter sequence, including course 106E, that can be taken jointly or separately.)

106E. The Development of Film in Europe and the United States: From WWII to the Present. Lecture/screenings, eight hours; discussion, one hour. An interdisciplinary and comparative approach to the development of film in Europe and the United States from the end of the 30's through the present. Particular stress will be given to the interrelationship of film with its historical context and to the social dimensions of film structure, aesthetics, and language. (Part 2 of one or two-quarter sequence, including course 106D, but may be taken separately.)

107. Experimental Film. Lecture/screenings, eight hours; discussion, one hour. A study and analysis of unconventional developments in the motion picture.

108. History of Documentary Film. Lecture/screenings, eight hours; discussion, one hour. Prerequisite: consent of instructor. The philosophy of the documentary approach in the motion picture. The development of the documentary film in relation to the techniques of teaching and persuasion used in selected documentary, educational, and propaganda films.

110A. History of Broadcasting. Lecture/viewing, six hours; discussion, one hour. Prerequisite: consent of instructor. An in-depth study of a specific film genre, e.g., the Western, the gangster cycle, the musical, the silent epic, the comedy, the social drama. May be repeated for credit (maximum 2 courses) with departmental consent (determined on basis of change in course content).

110B. Broadcast Speech. Lecture/laboratory, six hours. Field visits as required. Prerequisite: consent of instructor. Intensive study of effective speech for the performer in Television and Radio. Audio and television recordings of selected individual and group readings. May be repeated for credit (maximum 2 courses) with departmental consent (determined on basis of change in course content).

126A. Advanced Acting for Television and Motion Pictures. Lecture/screenings, eight hours; discussion, one hour. Prerequisite: consent of instructor. Projects in acting for television and motion pictures. Videotape recording of selected acting exercises and readings. May be repeated for credit for a maximum of 12 units.

126B. Broadcast Speech. Lecture/laboratory, six hours. Field visits as required. Prerequisite: consent of instructor. Intensive study of effective speech for the performer in Television and Radio. Audio and television recordings of selected individual and group readings. May be repeated for credit for a maximum of 12 units.

126C. Sportscasting. Lecture, two hours; laboratory, four hours. Prerequisite: consent of instructor. Intensive study of Sportscasting; laboratory emphasis on radio and television reporting and play-by-play of selected games; may be repeated for credit (maximum 2 courses) with departmental consent (determined on basis of change in course content).

126D. Advanced Acting for Television and Motion Pictures. Lecture/screenings, eight hours; discussion, one hour. Prerequisite: consent of instructor. Projects in acting for television and motion pictures. Videotape recording of selected acting exercises and readings. May be repeated for credit for a maximum of 12 units.

129A. Advanced Acting for Television and Motion Pictures. Lecture/screenings, eight hours; discussion, one hour. Prerequisite: consent of instructor. Projects in acting for television and motion pictures. Videotape recording of selected acting exercises and readings. May be repeated for credit for a maximum of 12 units.

129B. Broadcast Speech. Lecture/laboratory, six hours. Field visits as required. Prerequisite: consent of instructor. Intensive study of effective speech for the performer in Television and Radio. Audio and television recordings of selected individual and group readings. May be repeated for credit for a maximum of 12 units.

129C. Sportscasting. Lecture, two hours; laboratory, four hours. Prerequisite: consent of instructor. Intensive study of Sportscasting; laboratory emphasis on radio and television reporting and play-by-play of selected games; may be repeated for credit (maximum 2 courses) with departmental consent (determined on basis of change in course content).

130. Nontheatrical Motion Picture/Television Writing. Discussion, three hours. Prerequisites: course 179A and consent of instructor. Perspective in the writing of nontheatrical motion pictures and television scripts. May be repeated for a maximum of three courses.

134. Motion Picture/Television Writing. Discussion, three hours. Prerequisites: restricted to Motion Picture/Television majors and consent of instructor. Introduces students to problems in motion picture/television writing.
135. Advanced Motion Picture/Television Writing (2 courses). Discussion, three hours. Prerequisites: courses 154A, 154B; consent of instructor. A survey of the techniques and procedures used in manipulation of the visual image for both dynamic and continuity effects.

145A. Motion Picture/Television Editing. Lecture, three hours; laboratory, to be arranged. Prerequisites: course 179A; restricted to Motion Picture/Television majors. A study of the role of editing the fictional and nonfictional production with emphasis on the techniques and procedures used in manipulation of the visual image for both dynamic and continuity effects.

145B. Motion Picture/Television Editing. Lecture, three hours; laboratory, to be arranged. Prerequisites: course 179A; restricted to Motion Picture/Television majors. A study of the role of editing the fictional and nonfictional production with emphasis on the techniques and procedures used in manipulation of the visual image for both dynamic and continuity effects.

154C. Motion Picture/Television Editing. Lecture, three hours; laboratory, to be arranged. Prerequisites: courses 179A, 185, 186A. Instruction and supervised exercises in techniques involved in production and editing of film and video. Emphasis will be on editing for motion picture and television programming. Exercises may be repeated for credit: maximum of four courses (16 units).

181C. Animation Workshop (1 or 2 courses). Lecture, six hours; laboratory, to be arranged. Prerequisites: course 181A, consent of instructor. Organization and integration of the various creative arts used in animation to form a complete study of a selected topic. May be repeated for credit: maximum of four courses (16 units).

182. Introduction to Video Production (2 courses). Lecture, four hours; discussion, four hours; laboratory, to be arranged. Prerequisites: restricted to Motion Picture/Television majors and consent of instructor. An introduction to the techniques, processes and equipment used in video production culminating in a short project each student originates.

183A. Location Video Production (2 courses). Laboratory, sixteen hours. Prerequisites: restricted to Motion Picture/Television majors, course 182 and consent of instructor. Production of original video project, documentary or dramatic, done on location under workshop conditions.

183B. Experimental Video Production (2 courses). Laboratory, sixteen hours. Prerequisites: restricted to Motion Picture/Television majors, course 182 and consent of instructor. After developing and preparing an original script, the student will collect the appropriate material and produce an original video.

183C. Experimental Video Production (2 courses). Laboratory, sixteen hours. Prerequisites: restricted to Motion Picture/Television majors, course 182 and consent of instructor. A laboratory of various motion picture/television sound and music and sound effects cutting, including off-screen narration, dialogue substitution and playback tracks.

184A-184B. Community Television Programming and Management. Laboratory, eight hours. Prerequisite: consent of instructor. Supervised operation and programming of a community television station. Class participation in semi-weekly campus broadcasts.

185. Television Production. Laboratory, eight hours. Prerequisite: consent of instructor. Instructed in basic production and supervised exercises in the basic technique of using cameras, lighting, and sound in the production of television programs.

186A-186B-186C. Television Laboratory (1 or 2 or 3 courses). Lecture, three hours; laboratory, three hours; laboratory, four hours. Prerequisites: courses 181A, consent of instructor. Instruction and supervised exercises in the planning and production of remote on-location television programs.
Urban Studies or Organizational Studies (Interdepartmental)

Special Program in Urban Studies or Organizational Studies

Students may elect to combine one of these programs with a departmental major and may petition to have the area of specialization recognized with the bachelor's degree.

The option of completing an individual major in Urban Studies or Organizational Studies is also open to qualified students.

Students with departmental majors should seek advising in the appropriate department. Students interested in the individual major should consult a counselor in the College of Letters and Science.

The requirements for the specializations (courses within the two specializations must be taken for a letter grade) to be taken in conjunction with the major in the division of social sciences are:

Preparation for the Programs

At least five of the following courses appropriate to the courses to be taken in the specialization: Economics 1 and 2; Sociology 18 and 109 or the equivalent; Political Science 1; Psychology 10; Sociology 1 or 101; Geography 4.

Urban Studies Specialization

(1) At least three courses outside the major department chosen from: Political Science 182A, Sociology 125, Economics 120, Geography 150, Anthropology 167, Psychology 168; (2) one of the following suites of courses, outside the major department: Political Science 180, 182B, 188B; Economics 121, 130, 131, 133; Sociology 124, 154, 155; Geography 145, 146, 152, 156; History 15A-A154D; Psychology 127, 135, 137A; (3) internship experience in an urban governmental or community service organization.

Organizational Studies Specialization

(1) At least three courses outside the major department chosen from: Political Science 181, 190, Sociology 121, 141, Management 190, Psychology 149; (2) one of the following suites of courses, outside the major department: Political Science 142, 145, 146; Economics 131, 170, 171; Sociology 124, 140, 152, 154; Geography 146, 148, 149; Psychology 135, 148, 149; (3) internship experience in a governmental or service organization.

For further information, contact Professor Robert Fried, 4289 Bunche Hall (825-4331).
Upper Division Core Courses

10. Introduction to Women's Studies. Lecture, three hours. This one-quarter course introduces students to the interdisciplinary and cross-cultural study of women in preparation for further investigation within traditional disciplines. Intended for sophomores and first-quarter juniors, it is required for students who wish to graduate with a "Specialization in Women's Studies." Ms. Henley

185. Special Topics in Women's Studies. Prerequisites: upper division standing and one prior course in women's studies. This course is designed to allow specialized or advanced study in an area within women's studies. The Staff

197. Senior Seminar in Women's Studies. Seminar, three hours. Prerequisite: course 100. The Senior Seminar in Women's Studies, which is required for students who wish to receive a "Specialization in Women's Studies," offers the opportunity for directed research on a topic concerning women. Ms. Henley

Supporting Upper Division Courses

M107. Women in Literature. (Same as English M107.) Prerequisite: satisfaction of Subject A requirement. A survey of literary works by and about women, the course examines the delineation of women in English and American literature, studies in historical and contemporary themes, and the evolution of forms and techniques in poetry, fiction and biography. Ms. Rowe, Ms. Yeazeil

M137E. Work Behavior of Women and Men. (Same as Psychology M137E.) Prerequisites: course 100 or Psychology 10 and junior or senior standing. Examination of work behavior of men, and especially women. Covers such topics as antecedents of career choice, job finding, leadership, performance evaluation, discrimination and evaluation bias, job satisfaction and interdependence of work and family roles. Ms. Gutek

M148. Women in Higher Education. (Same as Education M148.) Prerequisite: upper division standing. The course examines the education and career development of women in higher education. Specifically, it focuses on undergraduate and graduate women; women faculty and administrators; curricula, programs and counseling services designed to enhance women's educational and career development, affirmative action and other recent legislation. Ms. Astin

M158. Women in Italy. (Same as Italian M158.) This course is designed with the intent of examining the role that women have played in Italian society. It will concentrate alternatively on the world of the Medieval and Renaissance "Matriarch" and on the "liberated" women of our times. Historical and political documents and social and religious taboos will be presented and discussed together with other data derived from literature and art. Mrs. Cottino-Jones

M165. The Psychology of Sex Differences. (Same as Psychology M165.) This course considers psychological literature relevant to understanding contemporary sex differences. Some topics included are sex-role development and role conflict, physiologic and personality differences between men and women, sex differences in intellectual abilities and achievement and the impact of gender on social interaction. Ms. Peplau

Supporting Upper Division Courses in Other Departments


Zoology

See the Department of Biology

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Mike Curb Lieutenant Governor of California
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Lois Weston Weeth (1982) Vice President of the Alumni Association of the University of California +
David S. Saxon President of the University

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+ Terms of Regents appointed by the Governor expire March 1 of the year named in parentheses, with names arranged in order of original accession to the Board. The Student Regent (David A. Neuman) and Alumni Regents serve a one-year term beginning July 1 and ending June 30 of the year listed.

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Glenn Campbell (1984)
William French Smith (1986)
Robert O. Reynolds (1986)
Dean A. Watkins (1984)
Joseph A. Moore (1990)
John H. Lawrence, M.D. (1988)
Vioma S. Martinez (1990)
John F. Henning (1989)
Yori Wada (1992)
Willie L. Brown, Jr. (1992)
Frank W. Clark, Jr. (1988)
David Geffen (1990)
Willis W. Harman (1990)
David A. Neuman (1982) +

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Benjamin Aaron (September 1, 1979 to August 31, 1981)
Oliver A. Johnson, Jr. (September 1, 1980 to August 31, 1982)

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