# USC College of Letters, Arts and Sciences



Undergraduate education at USC College encourages students to pursue an education that is rich in experience, both inside and outside the classroom. Rivka Katz (left), an international relations major, is V.P. of Hillel's SC Tzedek and alternative spring break coordinator; Chad Agy is in the Baccalaureate/MD program; and psychology major Patricia Gonzalez is a Readers Plus tutor and notetaker for Disability Services and Programs.

SC College is the liberal arts center of the University of Southern California, teaching more than 10,000 undergraduates. It offers instruction in the humanities, the natural sciences and the social sciences, leading to bachelor of arts and bachelor of science degrees. The programs of the college provide both a broad liberal arts education and a thorough grounding in an academic discipline. Breadth is supplied by the general education program and electives. Departmental majors, interdisciplinary majors, and special programs and minors provide depth.

USC College combines two "worlds" — the world of the self-contained liberal arts school, with small classes and close working relationships between students and faculty, and the larger world of the research university, where new ventures and new ideas are being explored by internationally known scholars. This combination makes the college a supportive and exciting place to learn.

USC College offers many opportunities for post-baccalaureate study. Graduate programs within the college leading to master's degrees and doctor of philosophy degrees are administered through the USC Graduate School.

### Administration

Joseph Aoun, Ph.D., Dean, College of Letters, Arts and Sciences

Roger D. Stewart, Ph.D., Senior Associate Dean of Administration and Planning

Beth E. Meyerowitz, Ph.D., Dean of Faculty

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Margo Steurbaut, C.P.A., M.S.T., Senior Associate Dean of Business and Finance

Jane Armstrong, M.B.A., *Director, College Admissions* 

Richard Fliegel, Ph.D., Assistant Dean of Academic Programs

Robin Romans, Ph.D., Director, Thematic Option and College Honors Programs

### **Departments and Programs**

American Language Institute American Studies and Ethnicity Anthropology Art History Biological Sciences

Center for Feminist Studies

Chemistry Classics

Comparative Literature

Earth Sciences

East Asian Languages and Cultures

East Asian Studies Center

Economics

English

**Environmental Studies** 

French and Italian

Gender Studies

Geography

German

Health and Humanity

History

Interdisciplinary Major

International Relations

Jesse M. Unruh Institute of Politics

Judaic Studies

Kinesiology

Law and Society

Learner Centered Curriculum

Linguistics

Mathematics

Ocean Sciences

Peace and Conflict Studies

Philosophy

Physics and Astronomy

Political Economy and Public Policy

Political Science

Psychobiology

Psychology

Religion

Slavic Languages and Literatures

Sociology

Spanish and Portuguese

Writing Program

# Additional Programs Administered by the College

Freshman Seminars General Education Joint Educational Project Learning Communities Overseas Studies Resident Honors Program Supplemental Instruction

Thematic Option

### Graduate Studies in Letters, Arts and Sciences

Graduate studies leading to the Master's and Ph.D. degrees are available within most departments of the College of Letters, Arts and Sciences. Candidates for graduate degrees must complete both the departmental requirements listed for each degree and the general requirements set by the Graduate School.



### Undergraduate Programs

The College of Letters, Arts and Sciences awards the Bachelor of Arts (B.A.) and the Bachelor of Science (B.S.) in a number of disciplines. Each degree requires a minimum of 128 units.

#### Majors

Students in the college may major in a single discipline or combine several interests in an interdisciplinary program.

### Selecting a Major

A major may be chosen because the student is especially interested in a subject, because of particular abilities in certain areas, or because it is an especially fitting preparation for a profession. The choice of a major may thus become part of planning for a career. But a choice in the college does not limit the student to a single career or line of work. Liberal arts majors are unusually adaptable; they are suitable preparations for many careers.

A student may declare a major at any time, but is expected to record his or her major in the Office of Academic Records and Registrar at or before the beginning of the junior year or completion of 64 units. This allows sufficient time to fulfill the course requirements of the major in the student's third and fourth years. For some majors, however, and especially for a major in one of the natural sciences aiming for the B.S. degree, it is advantageous to declare the major sooner, so the program can be spaced over the full four years.

### Changing a Major

If, after a major has been declared, the student wishes to change to a different field (or add another field of study to the existing one), a Change of Major form must be filed. The form may be obtained in the College Academic Services Office or the Student Administrative Services Building. The form must be completed and returned to the Office of Academic Records and Registrar. When a major is changed, the current department advisor and the new department advisor must both sign the form.

### Types of Majors and Major Requirements

Departmental Major (B.A. or B.S. Degree)
A departmental major for the B.A. degree consists of specified lower division courses and, generally, not less than 24 or more than 32 upper division units in a single department or discipline. A greater concentration of units in a single discipline is usually required in majors for the B.S. degree than in majors for the B.A. degree.

The specific requirements for each department major will be found in the departmental sections of this catalogue.

### Interdepartmental Majors

Humanities or Social Sciences Major (B.A. Degree) A Humanities or Social Sciences major consists of not less than 32 upper division units within departments in the humanities or departments in the social sciences. Of the 32 required upper division units for the interdepartmental major, 20 are typically taken in one department, and the additional 12 units are taken from applicable courses in the area in which the department of concentration is housed. See the departmental listing for more specific requirements for the interdepartmental major, including lower division requirements.

Physical Sciences Major (B.S. Degree) The departments of chemistry, earth sciences, and physics and astronomy, cooperating with one another, offer a physical sciences major in the natural sciences and mathematics. The major requires specific lower division courses in chemistry, earth sciences, mathematics, physics and astronomy and 28 upper division units of major courses in the four departments. Of the 28 required upper division units, at least four units must be taken in each of the four cooperating departments.

Program Major (B.A. or B.S. Degree) A program major consists of designated courses and not less than 24 upper division units chosen from the list of courses which make up the program. The college has a number of special programs, many of which offer majors.

Because programs are often organized around the study of a region or a topic, and hence are not specific to any single discipline, or because two or more disciplines have joined to deal with a common problem, most program majors are interdisciplinary. An interdisciplinary major offers unusual range to students who have topical interests. Specific requirements for all program majors are listed under the program titles.

Double Major (B.A./B.A. or B.S./B.S.) A double major consists of two majors which allow the student to earn the same degree, either a B.A. or B.S. degree, within the college. The student must complete the requirements for both majors and whatever other course work is needed to complete 128 units. Combinations of interdepartmental and department majors are also possible. See page 64 for rules governing the overlap of courses allowed for a double major.

#### Dual Degree

A dual degree is one that has course work from two schools or two different degree programs within the same school which has been organized into a single program. Listings of accelerated dual degrees and graduate dual degrees can be found on page 67. The student receives two diplomas.

### Second Bachelor's Degree

A second bachelor's degree requires a minimum of 32 additional units. In some degrees more than the 32 additional units may be needed because all requirements of both degrees must be met. Also, the residence requirement for a second bachelor's degree requires 32 units applicable to the degree beyond the number of units required for the first USC bachelor's degree to be completed in residence (see the policy on residence requirement for a second bachelor's degree). The student receives a separate diploma for each degree upon completion.

### Substitution for Major Requirements

If a student wishes an adjustment to the major requirements in his or her department or program, the department advisor may, with the support of the department, substitute a comparable upper division course for a required one. Substitutions and waivers of USC or transfer courses for upper division requirements for programs are to be limited to a combination of 25%. Lower division courses cannot be substituted for upper division requirements.

### Unit Limitation

There is an established limit of 40 upper division units in any major. A student wishing to exceed the limit must obtain the approval of the department with the final endorsement of the dean of academic programs.

### Minors

The college offers a wide array of minors that can provide unique breadth and complement or enhance the major field of study. Many of the college minors themselves are interdisciplinary and combine classes in two or more college departments or work in college departments with classes or internships in one of USC's professional schools.

Basic Requirement for a Degree from the College For those undergraduate students earning a degree in the College of Letters, Arts and Sciences, a minimum of 104 units applicable to the degree must be earned in college academic departments. For students graduating with a minor or a second bachelor's degree, this minimum is reduced to 96 units. Other exceptions will be considered by the dean of academic programs in the college.

Students who are completing major degree programs in a professional school, but whose degree is conferred by the college, are exempt from this policy.

This policy also applies to transferable courses (see page 57).

### Units Required Each Semester

The student is expected to complete about 16 units each semester; 18 units are generally considered to be the maximum number in a manageable program. If the student wants to enroll in more than 18 units, he or she may do so, but should consult first with the academic advisor.

### **Grade Point Average Requirement**

A grade point average of at least C (2.0) on all units attempted at USC is required for undergraduate degrees. The college requires a minimum 2.0 grade point average in upper division major courses. Some departments require grades of C or higher in specified courses. A grade point average of at least 3.0 on all units attempted at USC is required for master's degrees. A grade point average of at least B (3.0) on all units attempted at USC is required for doctoral degrees.

### Advising and Academic Services

Office of College Advising College Academic Services Building 120 (213) 740-2534 FAX: (213) 740-3664 Email: cas@usc.edu www.usc.edu/dept/LAS/cas

The Office of College Advising provides a wide range of advising services and programs that integrate students, faculty, staff, academic disciplines and curriculum into a meaningful educational experience. Academic advisors work closely with students to help orient them to the academic life of the college, choose or change their majors and fulfill core requirements so they can graduate in a timely manner.

Academic advising is mandatory for all students entering the college until they have completed 24 units at USC. Students without declared majors are required to receive academic advising every semester. All students in the college are strongly urged to seek individual academic advisement at least once each semester until graduation. Guidance regarding academic requirements, policies and program planning is available in the Office of College Advising by appointment or on a walk-in basis. Advising in major course requirements is available within the department of the student's major.

The services of a college ombudsman are available to students who have academic concerns that cannot be adequately addressed by the usual mechanisms of consulting instructors, department chairs or other university offices. The ombudsman can be particularly helpful in the case of grade appeals that are complex in nature. The ombudsman functions as an intermediary between the student, the faculty and other offices on campus.

### **Advising for Pre-Health Programs**

Pre-health advisors help students determine the most advantageous academic and extracurricular program to prepare for the health professions (medicine, dentistry, pharmacy, biokinesiology and physical therapy, occupational science and occupational therapy and other allied health professions). Pre-health students receive academic advice about general education courses, majors, minors and the optimal use of electives. They will also be guided through the admission process in their chosen field, including how to write an effective personal statement, how to gain clinical or research experience, how to request appropriate letters of recommendation and how to complete the application. The Office of College Advising also maintains a resource library, an email list-serve and web pages for pre-health students. Referrals will be made to advisors in undergraduate and graduate health-related programs throughout the university.

### **Advising for Pre-Law Programs**

Students who are interested in going to law school consult one-on-one with academic advisors in the Office of College Advising who specialize in this area. Advisors will help craft an undergraduate academic program designed to lead to law school admission and success. Pre-law students receive guidance in the law school application process, including how to write an effective personal statement and how to request appropriate letters of recommendation.

Pre-law advisors also help students target the most appropriate law school, put students in contact with pre-law societies and notify students of relevant pre-law and law-related events. Pre-law students are also invited to subscribe to an email listserve and to use the pre-law resource library housed in the Office of College Advising.

### **Pre-Graduate School Advising**

The pre-graduate school advisor will assist USC undergraduates and alumni interested in applying to all graduate programs other than law and medicine. The advisor will help students decide if graduate school is for them, advise them on researching and choosing appropriate schools and programs, and guide them through the admissions process. Students can expect help in areas such as writing statements of purpose, requesting letters of recommendation, exploring test preparation and sources of funding.

### **Studying Abroad**

The Office of Overseas Studies provides opportunities for students to study in other countries. Eligible students can choose between 46 academic programs in 27 countries and study for one or two semesters or the summer. The Office of Overseas Studies is located in the College Advising offices.

### **Other Programs**

The Office of College Advising provides and coordinates other special services for students. Learning Communities help freshmen without majors acclimate to the academic life of the university by giving them a shared experience, special access to faculty and staff advisors and co-curricular activities. The Office of College Advising also works closely with the staff and faculty of the professional schools and with the Career Planning and Placement Center to help students who find themselves inadmissible to their first-choice major. Advisors help such students find alternative majors and acquire other experiences to prepare them well for their chosen careers.

### **Postbaccalaureate Premedical Program**

Office of College Advising College Academic Services Building, Room 120 (213) 740-2534

Director: Larry Singer, Professor of Chemistry

This program allows postbaccalaureate students to complete the science and mathematics core requirements for medical school admission in a supportive environment. It is directed toward students with demonstrated academic achievement in their baccalaureate work, but with little or no prior college-level science and mathematics in their background. The typical student accepted into the program will have a liberal arts baccalaureate degree.

#### **Admission Procedures and Requirements**

To be eligible for the Postbaccalaureate Premedical Program, a student must have a baccalaureate degree from an accredited college or university with an overall undergraduate GPA of 3.0 or better. The following are required for admission consideration: (a) a completed application form; (b) transcripts from all colleges and universities attended by the student; (c) two letters of recommendation from professors familiar with the student's academic credentials and motivation for undertaking an intensive program of study in the science/mathematics core; (d) the student's scores on one of the following standardized tests: ACT, SAT, GRE, GMAT, LSAT.

Admitted students may begin the program at the start of any term, fall, spring or summer. However, all course work must be completed within a 24-month period from the date of entry into the program.

All students admitted into the program should discuss with the coordinator their readiness to begin the science/mathematics core. Occasionally, background course work in science and/or mathematics may be recommended before a student begins the program.

### Requirements

Students must complete the following nine course core of science/mathematics courses. Up to two upper division electives may be substituted for courses in the core. Two courses (8 units) must be at the upper division level (numbered 300 and above).

CORE COURSES		UNITS
BISC 120L	General Biology:	
	Organismal Biology and	
	Evolution	4
BISC 220L	General Biology: Cell	
	Biology and Physiology	4
CHEM 105aLbL	General Chemistry	4-4
CHEM 322abL	Organic Chemistry	4-4
MATH 125	Calculus I	4
PHYS 135abL	Physics for the Life	
	Sciences	4-4

#### UPPER DIVISION ELECTIVES

UNITS

Either or both of the following two upper division courses may be substituted for core courses:

BISC 320L	Molecular Biology	4
BISC 330L	Biochemistry	4

Up to three of the above courses completed with grades of B or better and taken at USC or another accredited college or university prior to entry into the program may be accepted for credit towards the core requirements.

An overall GPA of 3.0 or better must be maintained in all attempted courses, including the two allowed substitute courses BISC 320L and BISC 330L.

Students in the Postbaccalaureate Premedical Program may use the pre-health counseling services of the Office of College Advising. These students are eligible for a letter of recommendation from the Pre-Health Committee to help with their medical school application, providing they meet the requirements for such a letter.

### **General Education Program**

College Academic Services Building, Room 200 (213) 740-2961 FAX: (213) 740-4839 www.usc.edu/ge

Director: Richard Fliegel, Ph.D.

The university's general education program is structured to provide a coherent, integrated introduction to the breadth of knowledge you will need to consider yourself (and to be considered by other people) a generally well-educated person.

In thinking over what is necessary, the faculty identified two principal goals: to help you (1) locate yourself in your own moment of cultural and intellectual history; and (2) think critically about the books you read, the arguments you confront and the evidence offered for and against theories in the humanities, the social sciences and the natural sciences.

To achieve these two goals, the program is divided into two parts: the first part, called "Foundations," presents courses that give you the "big picture" about (I) the development of western European and American culture, as well as (II) alternative cultural traditions and (III) the basic principles animating scientific inquiry. The second part, called "Case Studies," provides particular opportunities for you to sharpen your critical intelligence by

considering specific (IV) applications of science and technology, (V) works of literature, philosophy and art, and (VI) contemporary social issues of urgency and importance. In addition, all students must satisfy writing and diversity requirements to complete the USC core.

The freshman year semester of the writing requirement is co-registered with classes in the Social Issues category and a speaker series, helping to build intellectual community among students and faculty in the general education program.

As you look through the courses in each category, try to reach beyond the disciplines with which you are most familiar and comfortable. Draw broadly from the range of academic expertise and choose a thoughtful, provocative selection of "g" courses as your personal general education program. This academic background will serve you well in the future, as a basis for lifelong learning.

#### **General Education Requirements**

Students in all programs are required to take one course that satisfies each of the following categories.

### Foundations:

V.

VI.

I.	Cultures and	
	Civilizations I	one course
II.	Cultures and	
	Civilizations II	one course
III.	Scientific	
	Principles	one course
Case Si	tudies:	
IV.	Investigations in	
	Science and	
	Technology	one course

one course

one course

Arts and Letters

Social Issues

### General Education Categories

#### Part One: Foundations

Courses in these categories help students locate themselves culturally and intellectually. The foundations categories are intended to give students a broad conceptual base for their further studies and their role as informed citizens in a scientifically and culturally complex world. Because their goal is to provide context, these courses emphasize a wide sweep of knowledge and require active intellectual engagement with scientific principles and with primary works of culture and civilization.

### I. Cultures and Civilizations I

Courses in this category introduce students to the norms and patterns of civilizations associated with the Greco-Roman and European traditions and the legacy of those traditions in North America. Courses may focus on particular aspects of those traditions, or on particular historical periods, provided that the perspective is construed broadly enough to establish a foundation on which students may build, grounding themselves and their subsequent studies in some understanding of this legacy. Comparative insights may also be offered between cultural traditions studied in Categories I and II.

In this category students learn about an area of academic inquiry traditionally perceived as core to an excellent general education. Courses are distinguished by their sweep, which must be broad enough for students to understand the continuing legacies in contemporary culture of the patterns of civilization these courses present and critique.

### II. Cultures and Civilizations II

Courses in this category introduce students to cultural norms and patterns of civilizations associated with Africa, Asia, Latin America, the Middle East, Native America and elsewhere, alternative to those of the Greco-Roman and European traditions. Each course

examines distinctive properties of the cultures and civilizations studied and seeks to engage and explain those properties on their own terms. Comparative insights may also be offered between the cultural traditions studied in Categories I and II.

In this category students prepare to participate in an increasingly internationalized economic and political landscape. Courses teach students to understand the historical development of cultures which interact in the contemporary geopolitical scene. In addition, courses in this category help students to understand the role otherness plays in self-definition and self-delineation. Like courses in Category I, courses in this category are distinguished by their breadth of perspective over a substantial period of time.

### III. Scientific Principles

Courses in this category study fundamental principles underlying a body of scientific knowledge, examining how those principles were developed through gradual evolution, the elimination of competing ideas, and scientific revolution or paradigm shift. These courses also focus on the nature of scientific inquiry by educating students as to how scientific knowledge is obtained and evaluated; they give a strong appreciation of how we arrived at our present understanding and a sense of how present ideas might evolve. Field experience or a practical component is required.

In this category students acquire the vocabulary and modes of thought of a dominant perspective in contemporary culture. This category includes courses designed for students with majors outside the natural sciences.

#### Part Two: Case Studies

Courses in these categories help students learn to think critically through a focused inquiry into a particular area of knowledge. Analytic techniques and methodologies are demonstrated as they illuminate specific topics in the natural and social sciences, the arts and humanities.

IV. Investigations in Science and Technology
An examination of the nature of science and technology, based on a closer, more focused study of a single area of research or a small set of related areas. The perspectives of several scientific disciplines are brought to bear on a theme, illustrating the relevant scientific principles, their technological applications and the societal significance and consequences of the topic. Field experience or a practical component is required.

In this category students deepen their understanding of a particular area of scientific research, its applications and social impact.

### V. Arts and Letters

In this category students develop their abilities for critical analysis through intense engagement with works of literature, philosophy, visual arts, music and/or film. Subject matter for these courses will be significant works associated with one or more geographical areas, time periods, genres or themes. Designed also to develop knowledge of analytical techniques in the humanities and practice in argumentative methods, courses in this category will demand intensive reading and writing and be capped at 30 students.

### VI. Social Issues

Courses in this category prepare students for informed citizenship, by teaching them to analyze compelling local, national and/or international issues or problems. Analytical tools are examined systematically, so that students may fruitfully redeploy them in understanding a broad range of social phenomena.

In this category students develop the analytical and critical skills that enable them to make sense of complex questions about human beings and societies.

#### Limitations

Advanced Placement Credit
Students may satisfy the requirements for
Categories I or III with scores of 4 or 5 on
specified Advanced Placement Examinations,
but no such credit will satisfy the requirements

of Categories II, IV, V or VI, or the writing requirement.

#### Transfer Credit

Students may satisfy the requirements for Categories I, II, III or V with transfer course work completed before the student has enrolled at USC, but no transfer credit will satisfy the requirements for Categories IV or VI. The first semester of the writing requirement may also be satisfied with transfer course work, if it is completed before the student has transferred to USC. However, no transfer course work may be used to satisfy any general education requirements or the writing requirement if those courses are taken after a student has enrolled at USC.

Courses Taken on a Pass/No Pass Basis
No more than four units of credit (or
one course) counting toward the general
education categories may be taken on a

pass/no pass basis. The writing courses cannot be taken on a pass/no pass basis.

#### **Exceptions**

A very restricted number of exceptions to the rules governing the general education program has been allowed by the Provost for certain cohorts of students whose programs of study in the major discipline require such exceptions. For more information, see the listings under the individual schools.

### **Transitional General Education Requirements** Students who began college before fall 1997

and entered USC before fall 2000 should speak to an academic advisor.

### **Course Listing**

For a complete list of general education courses, see The USC Core section, page 61.

### Other Requirements

In addition, all students at USC must complete a two-course writing requirement and a diversity requirement. All students in the College of Letters, Arts and Sciences and some in the professional schools (see listing for each school's requirements) must also satisfy the foreign language requirement.

### **Writing Requirement**

In their writing classes students learn to think critically, to build sound arguments and to express their ideas with clarity. The writing requirement comprises two courses (which cannot be taken on a pass/no pass basis). The first, taken during the freshman year, is linked to a course in the Social Issues category of the General Education program. The second, an advanced writing course taken in the junior year, is geared toward students' areas of special interest, such as the arts and humanities, science, law, engineering or business. In this course, students learn to integrate more complex information and construct more sophisticated arguments.

Lower Division Writing Requirement
Most undergraduates take WRIT 140 Writing
and Critical Reasoning as their first writing
course. WRIT 140 is offered in affiliation with
courses from the Social Issues category of the
General Education Program (Category VI).
Students enroll in this writing course either in
the fall or spring of their freshman year.

Certain groups of students from the Schools of Architecture, Engineering, and Music whose schedules do not permit them to register in an affiliated writing class satisfy their first writing requirement by taking WRIT 130 Analytical Writing. Students may not

enroll in this alternative course unless expressly permitted to do so by the academic advisors in the specified schools. Students in the Thematic Option program satisfy this requirement with CORE 111.

Some students are better served by taking a preparatory course before they enroll in WRIT 140. Entering freshmen who score below a specified level on the verbal portion of the SAT take the University Writing Examination. Based on the result of this examination, certain students enroll in WRIT 120 Introduction to College Writing or WRIT 121 Introduction to College Writing in a Second Language during their first semester at USC. Clearance to register for these preparatory courses may be obtained at the Writing Program Office.

International students take the University Writing Examination after having completed any course work required by the American Language Institute.

### Advanced Writing Requirement

All students at USC (with the exception of Thematic Option students who satisfy the second writing requirement with CORE 112), must complete WRIT 340, a course that will help them write on topics related to their disciplinary or professional interests. Students usually enroll in WRIT 340 Advanced Writing in their junior year and may not take the course earlier than their sophomore year. Different schools at the university offer sections of this course. Students should consult their major department to learn which section of WRIT 340 best complements their program of study.

All sections of WRIT 340 teach students to write clear, grammatical, well-structured prose; to discover and convey complex ideas critically; and to appreciate the nuances of effective argumentation. The principal aim of the requirement is to develop a student's capacity to formulate thoughtful, informed arguments for specific academic, professional and public audiences.

### **Diversity Requirement**

The diversity requirement is designed to provide undergraduate students with the background knowledge and analytical skills to enable them to understand and respect differences between groups of people and to understand the potential resources and conflicts arising from human differences on the contemporary American and international scene. Students will increasingly need to grapple with issues arising from different dimensions of human diversity such as age, disability, ethnicity, gender, language, race, religion, sexual orientation and social class. These dimensions and their social and cultural consequences will have important ramifications for students' personal, professional and intellectual lives, both for the time they are students and in later life. Students will gain exposure to analytical frameworks within which these issues are to be understood and addressed, including social, political, cultural, ethical and public policy analysis. It is the university's goal to prepare students through the study of human differences for responsible citizenship in an increasingly pluralistic and diverse society.

### Course Requirement

The diversity requirement must be met by all students who began college at USC or elsewhere fall 1993 or later. It can be met by passing any one course from the following list of courses carrying the designation "m" for multiculturalism. In addition to fulfilling the diversity requirement, some of the courses on the list also meet general education requirements; others also meet major requirements; still others meet only the diversity requirement but count for elective unit credit.

### Foreign Language Requirement

The foreign language requirement may be satisfied only by (1) earning a passing grade in Course III of a foreign language sequence at USC or its equivalent elsewhere or (2) scoring on the placement examination at a level considered by the department as equivalent to the completion of Course III or (3) scoring on a national or statewide examination at a level set by the department and approved by the College of Letters, Arts and Sciences. Students who can supply proof of at least two years of full-time secondary

schooling beyond the age of 14 taught in a foreign language may request exemption from the foreign language requirement.

All students earning degrees granted by or under the jurisdiction of the College of Letters, Arts and Sciences or earning degrees in programs of other schools that require three semesters of foreign language who do not meet the criteria of (1) must take a placement examination to determine their level of language proficiency. Placement in elementary and intermediate foreign language courses is made by the appropriate placement examination. Transfer courses equivalent to a USC elementary or intermediate language course fulfill the prerequisite for the next course in the sequence, but students may be advised, although not required, to repeat without additional credit a semester or semesters of instruction if their skills are judged insufficient at the time of testing.

It is strongly recommended that all students who as freshmen are enrolled in degree programs that have a language requirement fulfill that requirement by the time they have completed 64 units. All other students for whom it is a requirement should fulfill it before they have completed 96 units.

International students whose native language is not English are exempt from the foreign language requirement. Students with advanced skills in languages other than those taught at USC may request exemption from the foreign language requirement if (1) they can supply proof of at least two years of fulltime secondary schooling taught in a foreign language beyond the age of 14, or (2) if they can pass a competency exam testing for advanced language skills and administered at USC subject to the availability of suitable academic examiners; the competency exam will test proficiency in speaking, reading and writing skills. Students with documented learning disabilities or physical impairments inhibiting language acquisition may petition for substitution.

### **Course Listing**

For a complete list of diversity courses, see The USC Core section, page 63.

### **College-Wide Courses**

### Courses of Instruction

The terms indicated are *expected* but are not *guaranteed*. For the courses offered during any given term, consult the *Schedule of Classes*.

### ARTS AND LETTERS (ARLT)

**100g** Arts and Letters (4, FaSp) Critical analysis of significant works of literature, philosophy, visual arts, music and/or film; intensive reading and writing to develop knowledge of analytical techniques in the humanities. Limited to freshmen and sophomores. (Duplicates credit in ARLT 101 and in former LTA 100 and in former LTA 101.)

### 101g Studies in Arts and Letters (4, FaSp)

Critical analysis of significant works of literature, philosophy, visual arts, music and/or film; intensive reading and writing to develop knowledge of analytical techniques in the humanities. Limited to students with sophomore status or higher. (Duplicates credit in ARLT 100 and in former LTA 100 and in former LTA 101.)

### SOCIAL SCIENCES (SSC)

**190 Community Service (2)** The nature and societal context of community service and voluntarism. Direct participation in service-providing community-based nonprofit organizations. Lecture and discussion. Graded CR/NC.

# UNIVERSITY OF SOUTHERN CALIFORNIA (USC)

### 101 Honors Research Apprenticeship

(1, max 2) Students work directly with faculty on faculty research projects, gain experience in the process of research and thereby contribute to new scholarship.

**250** The Academic Culture (2, FaSp) Study the meaning of culture in society, experience the culture of learning on campus, and examine the relationship between the two. Topics will vary. Graded CR/NC. Not open to freshmen.

### **American Language Institute**

Humanities and Social Sciences Building 100 (213) 740-0079 FAX: (213) 740-8549 Email: jrcunnin@usc.edu www.usc.edu/dept/LAS/ALI

Director: James Valentine, Ph.D.

#### **Purpose of the Program**

The American Language Institute provides instruction in English as a Second Language for international students who need to improve their English language skills in order to participate successfully in their degree programs. Before beginning studies with ALI, all students must be admitted to the university for a degree objective. The institute also provides student advisement.

### Placement in the Program

Most international students entering USC must take the International Student English Examination (ISE). The examination is

offered approximately two weeks before the beginning of classes each semester. The purpose of this examination is to evaluate the level of a student's proficiency in English and to determine how well prepared the student is to undertake his or her degree studies in English. On the basis of the scores achieved, students are placed at the appropriate levels of instruction or are exempted from having to receive English language instruction.

#### **Elective Credit**

Undergraduates may earn up to 12 units of credit toward their degree for ALI courses numbered 100 or above. Some departmental restrictions may apply.

#### Limitation on Enrollment

International students placed into ALI classes must commence their ALI course work in their first semester at USC, and must register

in ALI courses each fall and spring semester until their ALI requirements are satisfied. Students must successfully complete their ALI required courses within four semesters in order to remain academically eligible to pursue a degree program. Students who receive a final grade of "No Credit" more than once in any of their ALI required classes will not be allowed to continue to complete their ALI requirement.

Students not meeting the ALI requirement will not be allowed to continue at USC. The Committee on Academic Policies and Procedures will consider appeals if submitted within 10 working days of being dropped from ALI. Contact the Academic Review Department (SAS 113) for details.

### Courses of Instruction

## AMERICAN LANGUAGE INSTITUTE (ALI)

The terms indicated are *expected* but are not *guaranteed*. For the courses offered during any given term, consult the *Schedule of Classes*.

# 090x Beginning English as a Second Language for International Students (12)

Required for international students assessed to have no proficiency in English by the International Student English Examination (ISE). Not available for degree credit. Graded CR/NC.

**103x Elective Courses in English as a Second Language for International Students (2-8, FaSpSm)** Specialized tutorial classes in listening, speaking, reading, or writing. A maximum of 4 units may be counted toward a degree. Graded CR/NC.

200 Elementary English as a Second Language for International Students (12, FaSpSm) Required for international students assessed to be at the beginning level by the International Student English Examination (ISE) or by the completion of a lower level ALI course. Graded CR/NC.

**210** Low Intermediate ESL (I) for International Students (8, FaSpSm) Required for international students assessed to be at the low intermediate level by the International Student English Examination (ISE) or by the completion of a lower level ALI course. Graded CR/NC.

**211** Low Intermediate ESL (II) for International Students (6, FaSpSm) Required for international students assessed to have intermediate level writing skills, but preintermediate level oral skills or by completion of a lower level ALI course. Graded CR/NC.

**220** High Intermediate ESL for International Students (6, FaSpSm) Required for international students assessed to be at the high intermediate level by the International Student English Examination (ISE) or by the completion of a lower level ALI course. Graded CR/NC.

# 230 Oral Skills for International Graduate Students in Science and Technology

**(3, FaSpSm)** Required for international students assessed to be at the intermediate level in oral skills by the International Student English Examination (ISE) or by the completion of a lower level ALI course. Graded CR/NC.

231 Writing Skills for International Graduate Students in Science and Technology (3, FaSpSm) Required for international students assessed to be at the intermediate level in writing skills by the International Student English Examination (ISE) or by the completion of a lower level ALI course. Graded CR/NC.

# 240 Advanced English as a Second Language for International Students (4, FaSpSm)

Required for students assessed to be at the advanced level by the International Student English Examination (ISE) or by the completion of a lower level ALI course. Graded CR/NC.

### 258 Writing Workshop (2, FaSpSm)

Required for international students assessed by the International Student English Examination (ISE) or by completion of a lower level ALI course to be at the post-advanced level in all skills except writing. Graded CR/NC. **259 Oral Skills (2, FaSpSm)** Required for international students assessed by the International Student English Examination (ISE) or by completion of a lower level ALI course to be at the post-advanced level in all skills except speaking. Graded CR/NC.

**262** English for International Business Undergraduates (2, FaSpSm) Post-advanced, business-related writing and speaking skills, emphasizing argumentation and language awareness and accuracy. Preparation for BUAD 302. Required for international business undergraduates. Graded CR/NC.

**270** Oral Skills for International Teaching Assistants (3, FaSp) Classroom interaction skills for international teaching assistants, with a focus on the language needed to lead discussions and make presentations. Open to international teaching assistants only.

**271 Language Tutorial for International Teaching Assistants (2, FaSp)** Individualized tutorial on the language and oral skills used by international teaching assistants in the performance of his or her duties. Based on observation and feedback. Open to international teaching assistants only.

### **American Studies and Ethnicity**

3740 Trousdale Parkway, WPH 303 Los Angeles, CA 90089-4033 (213) 740-2426 (213) 821-0409 (FAX) Email: aseinfo@usc.edu www.usc.edu/dept/LAS/pase

Director: George Sanchez, Ph.D.

Director, American Studies: George Sanchez, Ph.D.

*Director, African American Studies:* Judith Jackson Fossett, Ph.D.

Director, Asian American Studies: Leland Saito, Ph.D.

Director, Chicano/Latino Studies: Teresa McKenna, Ph.D.

*Professors:* Karen Halttunen, Ph.D.; Dorinne Kondo, Ph.D.; David Roman, Ph.D.; John Carlos Rowe, Ph.D.

Associate Professors: Alice Echols, Ph.D.; Judith Jackson Fossett, Ph.D.; Ruth Gilmore, Ph.D.; Lon Kurashige, Ph.D.; Teresa McKenna, Ph.D.; Fred Moten, Ph.D.; Viet Nguyen, Ph.D.; Laura Pulido, Ph.D.; Leland Saito, Ph.D.; George Sanchez, Ph.D.; Marita Sturken, Ph.D.

Assistant Professors: Macarena Gomez-Barris, Ph.D.; Camara Holloway, Ph.D.; Stanley Huey, Ph.D.; Jane Iwamura, Ph.D.; Lanita Jacobs-Huey, Ph.D.; Roberto Lint-Sagarena, Ph.D.; Ricardo Ramirez, Ph.D.; Ula Taylor, Ph.D.; Janelle Wong, Ph.D; Cynthia Young, Ph.D.

The program in American Studies and Ethnicity integrates humanistic and social scientific perspectives and brings them to bear on an examination of the United States with a particular emphasis on comparative study of the peoples, cultures, history and social issues of the Western United States. The program offers four separate majors and minors in American Studies, African American

Studies, Asian American Studies, and Chicano/Latino Studies and a minor in Jewish American Studies. The graduate program offers a Ph.D. for students interested in broad interdisciplinary training at an advanced level to study the peoples, cultures and institutions of the United States in courses that integrate modes of inquiry from the humanities and the social sciences.

Drawing upon the cultural resources of a cosmopolitan city on the Pacific Rim and upon the strength and diversity of its professional schools as well as departments in the College of Letters, Arts and Sciences, these degree programs provide a richly interdisciplinary curriculum that is unique for its constitution of American Studies and Ethnic Studies as a comparative and interethnic program that takes as its focus a region — Los Angeles, California and the West — marked by challenging social and cultural changes.

### Undergraduate Degrees

### **American Studies and Ethnicity**

American Studies and Ethnicity offers challenging and diverse opportunities to study the peoples, cultures and institutions of the United States in interdisciplinary courses. Combining the study of history with literature, the arts and the social sciences, American Studies seeks to bring together these various disciplines and modes of inquiry in a common project: the effort to understand the diverse peoples and cultures that have composed the United States and to

provide critical perspectives on the words, deeds, myths and material practices that have shaped this country in its full regional, ethnic, class and gender diversity. An education in American Studies will be particularly appropriate for students interested in pursuing careers in law, journalism, government, foreign service, social work, international business, public administration and education.

The program in American Studies and Ethnicity is administered by an Advisory Committee comprising a director and two other faculty members, one from the social sciences and the other from the humanities. These faculty members serve as advisors to majors and minors, thus providing, in conjunction with the sequence of courses, a unique opportunity for students to undertake an interdisciplinary concentration under close faculty supervision.

American Studies	CTCS 469	Film and/or Television		POSC 320	Urban Politics
Degree: B.A., American Studies and		Style Analysis	4	POSC 333	Stigma and Society:
thnicity (American Studies)	ENGL 440	American Literature to			Physical Disability in
		1865	4		America
ogram Major Requirements	ENGL 441	American Literature,		POSC 334	Interest Groups and
en courses in American Studies or courses		1865 to 1920	4		Elite Behavior
rtified for American Studies credit are	ENGL 442	American Literature,		POSC 422	Political Attitudes
quired. The required courses include:		1920 to the Present	4		and Behavior
NGL 263 American Literature; HIST 200	ENGL 446	African-American Poetry		POSC 423	Presidents and the
ne American Experience; AMST 301	D2.107	and Drama	4	D000 144	Presidency
merica, the Frontier and the New West;	ENGL 447	African-American		POSC 425	Legislative Process
MST 498 Senior Seminar in American	DNGI 440	Narrative	4	POSC 435	Politics and the Econom
udies.	ENGL 448	Chicano and Latino	4	POSC 437	Mass Media and Politics
	ENIOL 451	Literature	4	REL 469	Black Religion in
sudents must choose the remaining six	ENGL 451	Periods and Genres in	4	DEL 401	America
ourses required for the major from the	ENCL 470	American Literature	4	REL 481	History of Religion in America
oproved list of American Studies courses and in terms of an area of concentration.	ENGL 470	Women in English and		COCI 221	in America Cities
oncentrations include: (1) American		American Literature after 1800	4	SOCI 331 SOCI 345	Social Institutions
ultural and Intellectual Life; (2) American	HIST 346	American Intellectual	+	SOCI 345 SOCI 360	
ocial and Intellectual Life; (2) American	11131 340		4	2001 200	Social Inequality: Class, Status, and Power
d Ethnicity in America. Only one of the six	JOUR 461	History Literature of Journalism	4	SOCI 369	The Family in a
oncentration courses can be taken below the	LING 115	Language, Society, and	7	30C1 309	Changing Society
00 level. Of the six concentration courses.	LINO 113	Culture	4	SOCI 435	Women in Society
o more than three can be taken in one	MUJZ 100x	Jazz, Ragtime, and Blues	4	5001 455	women in society
epartment.	MUJZ 486	Jazz Masters from	•	GENDER AND ETH	NICITY IN AMERICA
-partitione.	Mej2 100	World War II to the			
n choosing a major in American Studies,		Present	2	AMST 357	Latino Social Movement
e student must consult with the program	PHIL 425	American Philosophy	4	ANTH 315	North American Indians
air about the assigned advisor, whom the	POSC 375	American Political		ENGL 446	African-American
udent will be expected to consult in choos-		Thought	4	ENGL 447	Poetry and Drama African-American
g a series of courses with intellectual coher-	REL 341	Ethics in a Technological		ENGL 44/	African-American Narrative
ice and sufficient range and depth. In		Society	4	ENGL 448	Chicano and Latino
acceptional cases, a student has the option of	REL 461	Business and Society	4	ENGL 440	Literature
ructuring his or her own concentration. The	REL 469	Black Religion in America	4	ENGL 470	Women in English and
tionale for and content of such an individ-	REL 481	History of Religion in		ENGL 4/0	American Literature
al program must be submitted in writing to		America	4		after 1800
e program chair for approval by the pro-				GEOG 350	Race and
am chair and the steering committee.	AMERICAN SOCIAL A	ND		GEOG 550	Environmentalism
	INSTITUTIONAL LIFE	UN	IITS	HIST 355	The African-American
merican Studies Minor	AMST 357	Latino Social Movements	4	11151 555	Experience
ourse Requirements	ANTH 105	Culture, Medicine and		JOUR 466	People of Color and
or the minor in American Studies, 24 units		Politics	4	,	the News Media
American Studies and related fields are	ECON 348	Current Problems of the	•	JOUR 467	Gender and the
quired. These units must be distributed as	200110.0	American Economy	4	joon .o.	News Media
ollows: ENGL 263; HIST 200; AMST 301	ENGL 441	American Literature,	-	LING 375	Sociolinguistics
nd AMST 498; and two additional courses.		1865 to 1920	4	POSC 333	Stigma and Society:
hese additional courses must be chosen	ENGL 442	American Literature,			Physical Disability in
om the courses certified in American		1920 to the Present	4		America
udies, at the 300 level or above.	GEOG 331	Geography of the United		POSC 381	Sex, Power, and Politics
1		States and Canada	4	POSC 421	Ethnic Politics
udents will be required to follow general	GEOG 425	Historical Geography		POSC 427	Black Politics in the
lucation requirements.		of the United States	4		American Political
	HIST 341	American Social History	4		System
oncentrations	HIST 356	The Old South	4	REL 469	Black Religion in
MERICAN CULTURAL AND	HIST 357	The New South	4		America
	HIST 457	The American West	4	SOCI 342	Race Relations
TELLECTUAL LIFE UNITS		The American West History of the	4	SOCI 342 SOCI 360	Race Relations Social Inequality: Class,
TELLECTUAL LIFE UNITS	HIST 457		4		

ARCH 409

CTCS 392

CTCS 393

CTCS 464

American Architecture

History of the American

History of the American

Film and/or Television

and Urbanism

Film, 1925-1950

Film, 1946-1975

Genres

JOUR 466

**JOUR 467** 

POSC 300

4

4

People of Color and

Principles, Institutions,

and Great Issues of

American Democracy

the News Media

Gender and the

News Media

SOCI 435

**SWMS 301** 

**SWMS 364** 

4

4

Women in Society

Racial and Ethnic

Women in America

Introduction to Feminist

Theory and the Women's

and Men's Movements

4

4

4

### **African American Studies**

African American Studies is a multidisciplinary program designed to provide students with a critical understanding of the historical, cultural, social and political experience of African Americans, with a particular emphasis on the development and culture of the African American communities in California and the West as well as on both historical and contemporary effects of global issues on African American communities. By drawing upon courses in American Studies and by emphasizing comparative as well as interdisciplinary study, this program offers training in the analytic tools and methods of interpretation appropriate for studying the African American experience in its particularity and ethnic and cultural study in general. The program is particularly appropriate for students interested in integrating studies in the humanities and social sciences and for students preparing to work and interact with diverse communities and cultures in the United States and abroad in such fields as education, human services, business, journalism and public administration.

The program in African American Studies is administered by an advisory committee comprising a director and two other faculty members, one from the social sciences and one from the humanities. These faculty members serve as advisors to majors and minors, providing, in conjunction with the sequence of courses, a unique opportunity for students to undertake an interdisciplinary concentration under close faculty supervision.

African American Studies Major Degree: B.A., American Studies and Ethnicity (African American Studies)

NTS	UNITS
Interethnic Diversity	
in the West	4
America, the Frontier,	
and the New West	4
Seminar in Ethnic	
Studies: Theories	
and Methods	4
REQUIRED COURSES	UNITS
n each of the following	
The African-American	
Experience	4
Advanced Topics in	
African-American	
History	
	Interethnic Diversity in the West America, the Frontier, and the New West Seminar in Ethnic Studies: Theories and Methods  REQUIRED COURSES  The each of the following  The African-American Experience Advanced Topics in

Literature and Cul	ture		UPPER DIVISION ELE	CTIVES	UNITS
ENGL 446	African-American		Two courses from	1:	
	Poetry and Drama	4	CTCS 407	African American Cinem	a 4
ENGL 447	African-American		ENGL 446	African-American	
	Narrative	4		Poetry and Drama	4
			ENGL 447	African-American	
Social and Politica				Narrative	4
POSC 427	Black Politics in		HIST 356	The Old South	4
	the American		HIST 455	Advanced Topics in	
	Political System	4		African-American	
				History	4
California and the			MUJZ 486	Jazz Masters from World	
HIST 457	The American West	4	•	War II to the Present	2
HIST 458	History of California	4	REL 469	Black Religion in	
PPD 352a	Los Angeles Mini			America	4
	Semester	4			
PPD 353a	Los Angeles Semester	4	African American		
			CORE REQUIREMENT	S	UNITS
	ative Ethnicities and/or Gender		AMST 202	Interethnic Diversity	
AMST 357	Latino Social Movements	4		in the West	4
ANTH 315	North American Indians	4	AMST 301	America, the Frontier,	
ANTH 316	North American Indians			and the New West	4
	in American Public Life	4	AMST 350	Seminar in Ethnic	
ANTH 328	Culture Change and the			Studies: Theories	
	Mexican People	4		and Methods	4
ANTH 371	Cross-Cultural Research				
DNIGH 445	on Urban Gangs	4	200/300/400-LEVEL F	REQUIRED COURSES	UNITS
ENGL 445	The Literatures of		One course from	each category:	
	America: Cross-Cultural	4	History		
ENICL 440	Perspectives	4	HIST 355	The African-American	
ENGL 448	Chicano and Latino	4		Experience	4
ENICL 440	Literature	4	HIST 455	Advanced Topics in	
ENGL 449	Asian-American Literature	4		African-American	
ENGL 470	Women in English and American Literature			History	4
	after 1800	4			
ENGL 476	Images of Women in	4	Literature and Cul	ture	
ENGL 470	Contemporary Culture	4	ENGL 446	African-American	
GEOG 350	Race and	7		Poetry and Drama	4
GEOG 550	Environmentalism	4	ENGL 447	African-American	
HIST 245	Gender and Sexualities in	'		Narrative	4
11101 213	American History	4			
HIST 354	Mexican Migration to	•	Social and Politica		
11101 00.	the United States	4	POSC 427	Black Politics in the	
HIST 378	Introduction to Asian			American Political	
11101 0,0	American History	4		System	4
HIST 472	History of the	-	UPPER DIVISION ELE	CTIVE	UNITS
	Mexican-American	4			
JOUR 466	People of Color and	-	One course from:		
,	the News Media	4	CTCS 407	African American	
LING 375	Sociolinguistics	4	ENICL 446	Cinema	4
POSC 421	Ethnic Politics	4	ENGL 446	African-American	4
POSC 441	Cultural Diversity and		DNIOL 445	Poetry and Drama African-American	4
	the Law	4	ENGL 447	African-American Narrative	4
SOCI 342	Race Relations	4	HIST 455		4
SOCI 356	Mexican Immigrants in		П15 1 455	Advanced Topics in	
	a Diverse Society	4		African-American	4
SOCI 366	Chicana and Latina		MIII7 404	History Jazz Masters from World	
	Experiences	4	MUJZ 486	War II to the Present	2
SOCI 375	Asian Americans:		REL 469	Black Religion in	4
	Ethnic Identity	4	KEL 707	America	4
SWMS 364	Racial and Ethnic			AHICHCa	4
	Women in America	4			
SWMS 384	Overcoming Prejudice	4			

Contemporary Issues

Immigrants in the

Women in America

Overcoming Prejudice

Seminar in Dramatic

Literature

4

SWMS 384

THTR 526

### **Asian American Studies**

Asian American Studies is a multidisciplinary program designed to provide students with a critical understanding of the historical, cultural, social and political experience of Asian Pacific Americans, with a particular emphasis on the development and culture of the Asian American communities in California and the West as well as on both historical and contemporary effects of global issues on Asian American communities. By drawing upon courses in American Studies and by emphasizing comparative as well as interdisciplinary study, this program offers training in the analytic tools and methods of interpretation appropriate for studying the Asian American experience in its particularity and ethnic and cultural study in general. The program is particularly appropriate for students interested in integrating studies in the humanities and social sciences and for students preparing to work and interact with diverse communities and cultures in the United States and abroad in such fields as education, human services, business, journalism and public administration.

The program in Asian American Studies is administered by an advisory committee comprising a director and two other faculty members, one from the social sciences and one from the humanities. These faculty members serve as advisors to majors and minors, providing, in conjunction with the sequence of courses, a unique opportunity for students to undertake an interdisciplinary concentration under close faculty supervision.

Asian American Studies Major Degree: B.A., American Studies and Ethnicity (Asian American Studies)

Ethnicity (Asian American Studies)			HIST 245	Gender and Sexualities	
				in American History	4
CORE REQUIREME	NTS	UNITS	HIST 354	Mexican Migration to	
AMST 202	Interethnic Diversity			the United States	4
111101 202	in the West	4	HIST 378	Introduction to Asian	
AMST 220	The Making of Asian	•		American History	4
	America	4	HIST 455	Advanced Topics in	
AMST 301	America, the Frontier,	•		African-American	
111101 001	and the New West	4		History	4
AMST 350	Seminar in Ethnic	•	HIST 472	History of the	
111101 000	Studies: Theories			Mexican-American	4
	and Methods	4	JOUR 466	People of Color and	
	and Methods	•		the News Media	4
200/300/400-LEVE	L REQUIRED COURSES	UNITS	LING 375	Sociolinguistics	4
One course fro	m each of the		MUJZ 486	Jazz Masters from	
following six ca				World War II to the	
History	itegories.			Present	2
HIST 378	Introduction to Asian		POSC 421	Ethnic Politics	4
11101 070	American History	4	POSC 427	Black Politics in the	
	7 Interican Tristory			American Political System	4
Literature and C	Culture		POSC 441	Cultural Diversity	
ENGL 449	Asian-American			and the Law	4
ENGE III	Literature	4	REL 469	Black Religion in	
	Literature	7		America	4
Social and Polit	ical Issues		SOCI 342	Race Relations	4
SOCI 375	Asian Americans:				
	Ethnic Identity	4			

Comemporary 13.			50GI 555	minigrants in the	
SOCI 376	Contemporary Issues in			United States	4
	Asian American		SOCI 356	Mexican Immigrants	
	Communities	4		in a Diverse Society	4
			SOCI 366	Chicana and Latina	
California and th	he West			Experiences	4
HIST 457	The American West	4	SOCI 375	Asian Americans:	
HIST 458	History of California	4		Ethnic Identity	4
PPD 352a	Los Angeles Mini		SWMS 364	Racial and Ethnic	
	Semester	4		Women in America	4
PPD 353a	Los Angeles Semester	4	SWMS 384	Overcoming Prejudice	4
American Compa	rative Ethnicities and/or Gender		Asian American	Studies Minor	
AMST 357	Latino Social Movements	4	CORE REQUIREMEN		UNITS
ANTH 315	North American Indians	4			
ANTH 316	North American Indians		AMST 202	Interethnic Diversity	
ALVIII 310	in American Public Life	4		in the West	4
ANITH 220		4	AMST 301	America, the Frontier,	
ANTH 328	Culture Change and the	4		and the New West	4
A N WENT 271	Mexican People	4	AMST 350	Seminar in Ethnic	
ANTH 371	Cross-Cultural Research			Studies: Theories	
	on Urban Gangs	4		and Methods	4
CTCS 407	African American				
	Cinema	4	200/300/400-LEVE	L REQUIRED COURSES	UNITS
ENGL 445	The Literatures of		One course from	n each category:	
	America: Cross-Cultural		History	g,-	
	Perspectives	4	HIST 378	Introduction to Asian	
ENGL 446	African-American		11151 370	American History	4
	Poetry and Drama	4		7 Hileffeati Thistory	
ENGL 447	African-American		Literature and C	a Ituma	
	Narrative	4	ENGL 449	Asian-American	
ENGL 448	Chicano and Latino		ENGL 449		4
	Literature	4		Literature	4
ENGL 470	Women in English and		G : 1 1D 1::		
	American Literature		Social and Politi		
	after 1800	4	SOCI 375	Asian Americans:	
ENGL 476	Images of Women in	•		Ethnic Identity	4
ENGL 470	Contemporary Culture	4	UPPER DIVISION E	LECTIVE	UNITS
GEOG 350	Race and	7	OFFER DIVISION E	LECTIVE	UNITS
GEOG 550	Environmentalism	4	One course from	n:	
HIST 245		4	ANTH 371	Cross-Cultural Research	ı
HIST 245	Gender and Sexualities	4		on Urban Gangs	4
THOSE AS A	in American History	4	ENGL 445	The Literatures of	
HIST 354	Mexican Migration to			America: Cross-Cultura	1
	the United States	4		Perspectives	4
HIST 378	Introduction to Asian		HIST 457	The American West	4
	American History	4	HIST 458	History of California	4
HIST 455	Advanced Topics in		JOUR 466	People of Color and	
	African-American		,0011.00	the News Media	4
	History	4	LING 375	Sociolinguistics	4
HIST 472	History of the		POSC 421	Ethnic Politics	4
	Mexican-American	4	POSC 421 POSC 441	Cultural Diversity	4
JOUR 466	People of Color and		FUSC 441	,	1
-	the News Media	4	COCI 242	and the Law	4
LING 375	Sociolinguistics	4	SOCI 342	Race Relations	4
MUJZ 486	Jazz Masters from		SOCI 355	Immigrants in the	
	World War II to the			United States	4
	Present	2	SWMS 364	Racial and Ethnic	
	1 1030111	4		XX7	

SOCI 355

Latino Social Movements 4

Culture Change and

Social and Political Issues

AMST 357

**ANTH 328** 

### **Chicano/Latino Studies**

Chicano/Latino Studies is a multidisciplinary program designed to provide students with a critical understanding of the historical, cultural, social and political experience of Chicanos and Latinos, with a particular emphasis on the development and culture of the Chicano/ Latino communities in California and the West as well as on both historical and contemporary effects of global issues on Chicano/ Latino communities. By drawing upon courses in American Studies and by emphasizing comparative as well as interdisciplinary study, this program offers training in the analytic tools and methods of interpretation appropriate for studying the Chicano/Latino experience in its particularity and ethnic and cultural study in general. The program is particularly appropriate for students interested in integrating studies in the humanities and social sciences and for students preparing to work and interact with diverse communities and cultures in the United States and abroad in such fields as education, human services, business, journalism and public administration.

The program in Chicano/Latino Studies is administered by an advisory committee comprising a director and two other faculty members, one from the social sciences and one from the humanities. These faculty members serve as advisors to majors and minors, providing, in conjunction with the sequence of courses, a unique opportunity for students to undertake an interdisciplinary concentration under close faculty supervision.

Chicano/Latino Studies Major
Degree: B.A., American Studies and
Ethnicity (Chicano/Latino Studies)

CORE REQUIREMEN	NTS	UNITS
AMST 202	Interethnic Diversity	
A. A. A. GOTTO 201	in the West	4
AMST 301	America, the Frontier,	4
AN 407E 250	and the New West	4
AMST 350	Seminar in Ethnic	
	Studies: Theories	
	and Methods	4
200/300/400-LEVEL	REQUIRED COURSES	UNITS
One course from five categories: <i>History</i>	n each of the following	
HIST 472	History of the	
	Mexican-American	4
Literature and Ca	ulture	
ENGL 448	Chicano and Latino	
	Literature	4

ANTH 328	Culture Change and		SWMS 364	Racial and Ethnic	
	the Mexican People	4		Women in America	4
SOCI 356	Mexican Immigrants		SWMS 384	Overcoming Prejudice	4
	in a Diverse Society	4			
SOCI 366	Chicana and Latina		UPPER DIVISION E	LECTIVES	UNITS
	Experiences	4	Two courses fro	m:	
0 1:0 : 1.1	ш.		ANTH 328	Culture Change and	
California and the		4		the Mexican People	4
GEOG 340	Latino L.A.	4	ANTH 371	Cross-Cultural Research	h
HIST 457	The American West	4		on Urban Gangs	4
HIST 458	History of California	4	COLT 388	U.S. Latino Fiction	
PPD 352a	Los Angeles Mini Semester	4		and the Literature	
DDD 252.		4		of the Americas	4
PPD 353a	Los Angeles Semester	4	HIST 354	Mexican Migration to	
1				the United States	4
AMERICAN Compar ANTH 315	rative Ethnicities and/or Gender North American Indians	4	HIST 457	The American West	4
ANTH 316	North American Indians  North American Indians	4	HIST 458	History of California	4
AIN I II 310	in American Public Life	4	LING 375	Sociolinguistics	4
ANTH 371	Cross-Cultural Research	4	SOCI 342	Race Relations	4
AN I II 3/1	on Urban Gangs	4	SOCI 355	Immigrants in the	
CTCS 407	African American	4		United States	4
C1C5 407	Cinema	4	SOCI 356	Mexican Immigrants	
ENGL 445	The Literatures of	4		in a Diverse Society	4
ENGL 445			SOCI 366	Chicana and Latina	
	America: Cross-Cultural	4		Experiences	4
ENICL 446	Perspectives African-American	4	SPAN 413	Social and Geographic	
ENGL 446		4		Varieties of Spanish	4
ENGL 447	Poetry and Drama	4			
ENGL 447	African-American Narrative	4		C. P. W.	
ENGL 440		4	Chicano/Latino		
ENGL 448	Chicano and Latino Literature	4	CORE REQUIREMEN	VITS	UNITS
ENGL 449	Asian-American	4	AMST 202	Interethnic Diversity	
ENGL 449	Asian-American Literature	4		in the West	4
ENGL 470	Women in English and	4	AMST 301	America, the Frontier,	
ENGL 4/0	American Literature			and the New West	4
	after 1800	4	AMST 350	Seminar in Ethnic	
ENGL 476	Images of Women in	+		Studies: Theories	
ENGL 470	Contemporary Culture	4		and Methods	4
GEOG 350	Race and	7	200/200/400 LEVEL	REQUIRED COURSES	UNITS
GEOG 550	Environmentalism	4			UNITS
HIST 245	Gender and Sexualities	7		n each category:	
11131 443	in American History	4	History		
HIST 378	Introduction to Asian	7	HIST 472	History of the	
11131 370	American History	4		Mexican-American	4
HIST 455	Advanced Topics in	7			
11151 455	African-American		Literature and Ca		
	History	4	ENGL 448	Chicano and Latino	
JOUR 466	People of Color and	7		Literature	4
JOUR 400	the News Media	4			
LING 375	Sociolinguistics	4	Social and Politi		
MUJZ 486	Jazz Masters from World	7	AMST 357	Latino Social	
W10JZ 400	War II to the Present	2		Movements	4
POSC 421	Ethnic Politics	4	ANTH 328	Culture Change and	
POSC 427	Black Politics in	7		the Mexican People	4
1 050 447	the American		SOCI 356	Mexican Immigrants	
	Political System	4		in a Diverse Society	4
POSC 441	Cultural Diversity	7	SOCI 366	Chicana and Latina	
1030 441	and the Law	4		Experiences	4
DEI 460		4			
REL 469	Black Religion in America	4			
SOCI 342 SOCI 355	Race Relations Immigrants in the	4			
30GI 333	United States	4			
	Office States	+			

SOCI 375

**SWMS 364** 

Asian Americans:

Racial and Ethnic

Ethnic Identity

UNITS

UPPER DIVISION ELEC	TIVE	UNITS	
One course from:			
ANTH 328	Culture Change and		
	the Mexican People	4	
ANTH 371	Cross-Cultural Research		
	on Urban Gangs	4	
COLT 388	U.S. Latino Fiction and		
	the Literature of the		
	Americas	4	
HIST 354	Mexican Migration to		
	the United States	4	
HIST 457	The American West	4	
HIST 458	History of California	4	
LING 375	Sociolinguistics	4	
POSC 421	Ethnic Politics	4	
SOCI 342	Race Relations	4	
SOCI 355	Immigrants in the		
	United States	4	
SOCI 356	Mexican Immigrants		
	in a Diverse Society	4	
SOCI 366	Chicana and Latina		
	Experiences	4	
SPAN 413	Social and Geographic		
	Varieties of Spanish	4	

### Minor in American Popular Culture

The interdisciplinary minor in American Popular Culture helps students to assess from a variety of perspectives the icons and ideas they encounter every day, to think critically about the images and assertions of the mass media and commercial culture, and to see the experience of popular culture as it interacts with questions of gender and ethnicity in the American context. Students choose five classes, including one upper-division elective, from a curriculum organized to explore: critical approaches to popular culture; gender and ethnicity in American popular culture; and popular culture in the arts. Twenty units are required, four at the lower-division and 16 at the upper-division level.

LOWER DIVISION	REQUIREMENTS	UNITS
Choose one co	urse (4 units)	
AMST 206	The Politics and Cultur	e
	of the 1960s	4
AMST 285	African American	
	Popular Culture	4

#### UPPER DIVISION REQUIREMENTS

Choose four courses (16 units), at least one from each of the groups below.

UNITS

4

4

# Critical Approaches to Popular Culture: choose one (4 units)

AMST 301	America, the Frontier,
	and the New West
COLT 365	Literature and Popular
	Culture
COMM 384	Interpreting Popular
	Culture
ENGL 392	Visual and Popular
	Culture
HIST 380	American Popular
	Culture

# Gender and Ethnicity in American Popular Culture: choose one (4 units)

AMST 357	Latino Social Movements	4
AMST 365	Leadership in the	
	Community — Internship	4
AMST 385	African American Culture	
	and Society	4
AMST 395	African American Humor	
	and Culture	4
ENGL 448	Chicano and Latino	
	Literature	4
ENGL 449	Asian-American Literature	4
ENGL 476	Images of Women in	
	Contemporary Culture	4

### Popular Culture in the Arts: choose one (4 units)

AHIS 363	Race, Gender, and	
	Sexuality in Contemporary	
	Art	4
AHIS 370	Modern Art III: 1940	
	to the Present	4
CTCS 392	History of the American	
	Film, 1925-50	4
CTCS 393	History of the American	
	Film, 1946-75	4
CTCS 394	History of the American	
	Film, 1977-Present	4
ENGL 375	Science Fiction	4
ENGL 471	Literary Genres and Film	4
ENGL 481	Narrative Forms in	
	Literature and Film	4
HIST 481	Producing Film Histories	4
MUJZ 419	The Jazz Experience:	
	Myths and Culture	4
MUSC 400	The Broadway Musical:	
	Reflection of American	
	Diversity, Issues and	
	Experiences	4
MUSC 422	The Beatles: Their Music	
	and Their Times	4
MUSC 450	The Music of Black	
	Americans	4
PAS 400	Contemporary Public Art	4

### Electives (4 units)

Choose one additional upper-division course from the lists above, in a department you have not already chosen for the minor.

### Minor in Jewish American Studies

Jewish American Studies is a multidisciplinary program designed to provide students with a critical understanding of the historical, cultural, social, political and religious experience of Jewish Americans, with a particular emphasis on the development and culture of Jewish communities in California and the West as well as on both historical and contemporary effects of global issues on American Jewish communities. By drawing upon courses in American Studies and by emphasizing comparative as well as interdisciplinary study, this program offers training in the analytical tools and methods of interpretation appropriate for studying the American Jewish experience in its particularity and ethnic and cultural study in general. The program is particularly appropriate for students interested in integrating studies in the humanities and social sciences and for students preparing to work and interact with diverse communities and cultures in the United States and abroad in such fields as education, human services, business, journalism and public administration.

Successful completion of 20 units in American Studies and Judaic Studies are required to qualify for the minor.

### CORE REQUIREMENTS

AMST 202	Interethnic Diversity in	4
JS 300	the West American Jewish History	4
Three courses fi	rom the following:	
AMST 301	America, the Frontier, and the New West	4
AMST 350	Seminar in Ethnic	
	Studies: Theories and Methods	
JS 330	Jewish Power, Powerlessness, and Politics	
	in the Modern Era	4
JS 381	The Jew in American	
	Society	4
JS 382	Judaism as an American	
	Religion	4
JS 383	Jews in American Popular	
	Culture	4
JS 415	The American Jewish	
	Experience in Film	4
JS 428	Blacks and Jews: Conflicts	
	and Alliances	4

### Minor in Critical Approaches to Leadership

See the Department of Interdisciplinary Studies, page 339.

### Minor in Race, Ethnicity and Politics

See the Department of Political Science, page 395.

### Graduate Degrees

The major objective of the graduate program in American Studies and Ethnicity is to prepare future faculty with the research and teaching abilities to understand and communicate the diversity of American society and culture. This is accomplished by stressing the importance of an interdisciplinary perspective which integrates social analysis with cultural approaches. The program's most significant areas of specialization are: (1) the theoretical study of race and ethnicity, particularly as it is constructed through gender, class, sexuality and the state; (2) a regional focus on Los Angeles and the American West; and (3) an emphasis on the study of cultural production in the United States, with particular attention on the theoretical directions and methodological innovations in the interdisciplinary study of American culture.

### **Admission Requirements**

Requirements for admission include: scores satisfactory to the program in the verbal, quantitative and analytical General Test of the Graduate Record Examinations; evidence of competence in writing English and analytical abilities; a satisfactory written statement by the applicant of aims and interests in pursuing interdisciplinary graduate work; letters of recommendation from at least three college instructors; and grades satisfactory to the department earned by the applicant at other institutions.

All applicants are required to take the GREs and submit their complete undergraduate record; at least three letters of recommendation and a statement of purpose should be sent to the director of the program. Applicants are urged to submit written materials as supportive evidence.

### **Degree Requirements**

These degrees are under the jurisdiction of the USC Graduate School. Refer to the Graduate School section of this catalogue (page 91) for general regulations. All courses applied toward the degrees must be courses accepted by the Graduate School.

### **Masters of Arts**

The program does not accept applicants for a Master of Arts degree. All graduate work in American Studies and Ethnicity at USC is taken as part of a Ph.D. program, and the M.A. in American Studies and Ethnicity is intended only as a transitional degree in the process of completing requirements for the Ph.D.

A student admitted to the graduate program may choose later to earn a terminal M.A. degree or may be invited by the department to attempt a terminal degree. The terminal M.A. in American Studies and Ethnicity may be earned by completing 30 units (normally eight courses) of graduate study in American Studies and Ethnicity or in other departments at USC (as approved by the graduate director) with an accumulated GPA of at least 3.0, and by passing a comprehensive examination designed by the graduate studies committee for each student at the end of his or her last semester. A maximum of four units of 590 Directed Research and four transfer units may count toward the 30 units minimum required for the M.A. degree.

# **Doctor of Philosophy in American Studies** and Ethnicity

Students may earn the Ph.D. in American Studies and Ethnicity by successfully completing the following requirements:

### Total Units Required

The student's course work must total at least 64 units. No more than eight units of 794 Doctoral Dissertation and no more than four units of 790 Research may count toward the 64 units.

### Course Requirements

AMST 500 Introduction to American Studies and Ethnicity is required of all doctoral students, and it is highly recommended that students complete this course in the first year of residence. Two 600-level graduate seminars are required for the degree, and at least one of these must be an interdisciplinary seminar offered by the program in American Studies and Ethnicity.

### Foreign Language Requirement

Ph.D. students are required to demonstrate proficiency in one foreign language. This requirement must be met before a student is eligible to take the qualifying examination. Competency may be demonstrated by completing a course in the literature of that language at the 400 or 500 level (with a grade of B [3.0] or better), or by passing a foreign language exam that tests proficiency in reading comprehension and translation.

### Methods Requirement

Students are required to show competency in two theoretical methodologies from a list approved by the program in American Studies and Ethnicity. In most cases, competency is established by successfully completing one course concentrating in a specific method offered by a department or school, although more advanced courses in that

method may be suggested by a guidance committee. The following methodologies fulfill the methods requirement: literary/textual analysis; historical/archival analysis; ethnography; cultural/visual analysis; spatial practices and analysis; and, quantitative analysis.

### Disciplinary Requirement

The program in American Studies and Ethnicity believes that the strongest interdisciplinary research is conducted alongside a strong background in at least one disciplinary field by successfully completing at least four graduate courses in one discipline. These four courses must include at least one methodology course, one 600-level or above advanced seminar and two graduate reading courses at the 500- or 600-level. Each of these courses can also fulfill other requirements in the Ph.D. program, particularly the methods requirement and the course requirements listed above.

### Screening Procedures

The performance of every first-year doctoral student is formally assessed by the director of the program and the student's assigned advisor at the end of the spring semester and before a student has completed 24 units toward the degree. Unsatisfactory progress toward the degree requires either remedy of the deficiencies or termination of the student's graduate program. After successfully passing the assessment procedures, each student will be encouraged to establish a guidance committee.

At the end of the second year, student progress will be evaluated and each student will formally establish the members of his or her interdisciplinary examination committee from faculty he or she has worked with during the first two years. A meeting of the director of the program, guidance committee members and potential members of this examination committee will take place directly after the second year to identify remaining deficiencies in a student's training and identify solutions before the qualifying examination process begins.

### Qualifying Examination

Following completion of course work, the student must sit for a qualifying examination at a time mutually agreed upon by the student and the guidance committee. Students seeking the Ph.D. will select four fields for examination. Every student must be examined by faculty from at least two different disciplines, as well as having one outside member on his or her examination committee.

This five-person examination committee will direct the student toward his or her qualifying examination, which will consist of both written and oral parts, in the third year. Examinations are graded honors, pass, low-pass or fail. The qualifying examination has two phases: written examinations in each field followed by a single oral examination on all four fields. Students with one fail, a low-pass in their dissertation field or more than two low-pass grades will not be permitted to enter the oral phase of the examination process. The guidance committee determines whether the candidate may retake any exam graded low-pass or fail.

### Dissertation

After the qualifying examination has been passed, an interdisciplinary dissertation committee of at least three faculty members from the examination committee must approve a dissertation prospectus before full-time research commences. Only at this point is a student admitted to candidacy for the Ph.D. degree and will thereafter concentrate on the dissertation. After students become candidates for the Ph.D. degree, they must register for 794 Doctoral Dissertation each semester thereafter until the dissertation is completed.

The final state of the program is the submission of a dissertation that makes an original and substantial contribution to its field of study. The final copy of the dissertation must conform to the regulations of the Graduate School.

#### Advisement

Upon entering the program, each student will be assigned an academic advisor from among the faculty closest to the student's own academic interests. Students should seek advice on their program of studies from this academic advisor, the director of the program and the director of graduate and professional studies.

Once a student formally establishes an interdisciplinary examination committee, the chair of this committee becomes the student's main academic advisor, along with other members of this guidance committee. The committee must be in place and approved by the Graduate School at the time the student schedules a qualifying examination.

The dissertation committee becomes the student's main advising unit after the qualifying examination, with the chair having the principal responsibility of advisement. At all stages of the student's progress through the program, the director of the program and the director of graduate and professional studies will be available for advisement and counsel as well.

### Transfer of Credit

A transfer of credit statement is prepared by the Degree Progress Department for students admitted to full graduate standing. The application of any available transfer credit is contingent on successful completion of the screening exam and is determined by the director of the program no later than the end of the second year according to the following guidelines: credit will only be allowed for courses (1) from accredited graduate schools; (2) of grade B (3.0 on a four-point scale); (3) constituting a fair and reasonable equivalent to current USC course work at the graduate level and fitting into the program for the degree; and (4) approved by the Graduate School. Graduate transfer credit will not be granted for life experience, credit by examination, non-credit extension courses, correspondence courses, thesis course supervision or creative writing courses.

The maximum number of transfer credits which may be applied toward the M.A. degree is four units, and a maximum of 24 units of transfer credits may be applied toward the Ph.D. degree. The Graduate School stipulates that transfer units must have been completed within 10 years of admission for the doctoral program to be applied toward the degree.

### Courses of Instruction

# AMERICAN STUDIES AND ETHNICITY (AMST)

The terms indicated are *expected* but are not *guaranteed*. For the courses offered during any given term, consult the *Schedule of Classes*.

### 101gm Race and Class in Los Angeles (4, Fa)

Analysis of race and the economic, political, gender, and social dimensions of contemporary Los Angeles including topics such as residential segregation, economic inequality, and city politics.

**105 Asian American Theatre (4, Fa)** Critical, theoretically and politically informed analysis of plays and performances by and about Asian Americans through readings, discussion, and field trips to the theatre. *Recommended preparation:* an introductory course in American Studies.

**133g Religions of Latin America (4)** (Enroll in REL 133*g*)

**200** Introduction to American Studies and Ethnicity (4, FaSp) Introduction to American studies and ethnic studies. Provides an overview of major theories, concepts, and issues.

### 202m Interethnic Diversity in the West (4)

Introduction to community, culture, and ethnicity within the Western United States with emphasis on African American, Asian American, and Chicano/Latino cultures and social patterns.

### 206m The Politics and Culture of the 1960s

**(4, Sp)** Examines political and cultural change in the United States during the decade of the 1960s.

### 220m The Making of Asian America (4, FaSp)

Historical, social, and cultural analysis of (East, South, and Southeast) Asians in the United States. Themes examined: immigration, race and gender relations, ethnic culture, community and identity.

240gm Collective Identity and Political Violence: Representing 9/11 (4, FaSp) (Enroll in ANTH 240gm)

### 285m African American Popular Culture

**(4, Sp)** Examines history of popular cultural forms such as literature, music, dance, theatre, and visual arts produced by and about African Americans.

# **301g America, the Frontier, and the New West (4, FaSp)** Introduction to the interdisciplinary study of American political, cul-

tural, and social life with a particular emphasis on the Western United States as a region. *Recommended preparation:* HIST 200, ENGL 263.

# **320** Social Construction of Race and Citizenship (4, FaSp) Comparative perspective on the social construction of race and citizenship. Social, economic and political experiences of

selected groups in the U.S. are examined.

**328** Asian American Politics (4, FaSp) (Enroll in POSC 328)

**336 Re-Viewing Religion in Asian America (4)** (Enroll in REL 336)

**350** Seminar in Ethnic Studies: Theories and Methods (4) Advanced study in theories and methods for analyzing ethnicities in the United States with particular attention to comparative study of colonization, immigration, racism, and class. *Prerequisite:* AMST 202 or departmental approval.

357m Latino Social Movements (4, FaSp)

Focuses on the political experience of Latinos in the U.S. Comparative analysis of their political experiences and perspectives, their histories of identity formation, and their political organizations.

**364** African American Art (4, FaSp) (Enroll in AHIS 365)

**365** Leadership in the Community — Internship (4, FaSp) Eight to 10 hours per week in a community-based internship plus two hour lecture. Theoretical and practical issues associated with community leadership.

**366m Chicana and Latina Experiences (4)** (Enroll in SOCI 366*m*)

**375**m Asian Americans: Ethnic Identity **(4, FaSp)** (Enroll in SOCI *375*m)

376m Contemporary Issues in Asian American Communities (4, FaSp) (Enroll in SOCI 376m)

**377** Legacies of Viet Nam (4, Fa) Examination of 20th century Viet Nam, the country, and "Vietnam," the American war, through the literature, film, and visual culture that have been produced by Americans, Vietnamese, and overseas Vietnamese.

**380** American Popular Culture (4, FaSp) (Enroll in HIST 380)

**385** African American Culture and Society **(4, Sp)** Examines social and cultural issues affecting the past and present lives of African Americans in the United States.

**390 Special Problems (1-4)** Supervised, individual studies. No more than one registration; by petition only.

**395m** African American Humor and Culture **(4, FaSp)** Examination of one of several traditions of African American humor for insights into shifting notions of race, culture, language and identity in and beyond Black America.

**424**m Political Participation and American Diversity (4, Fa) (Enroll in POSC 424m)

**428** Latino Politics (4, Fa) (Enroll in POSC 428)

432m Racial and Ethnic Relations in a Global Society (4, Fa) (Enroll in SOCI 432m)

**442** American Literature, 1920 to the Present (4, FaSp) (Enroll in ENGL 442)

458 Race and Ethnicity in Entertainment and the Arts (4, FaSp)  $(Enroll\ in\ COMM\ 458)$ 

**465 Studies in American Art (4, max 8, FaSp)** (Enroll in AHIS 465)

**475m Blackness in American Visual Culture (4, FaSp)** (Enroll in AHIS 475m)

**490x Directed Research (2-8, max 8)** Individual research and readings. Not available for graduate credit. *Prerequisite:* departmental approval.

**498** Senior Seminar in American Studies **(4, Sp)** Method and theory in American Studies. *Prerequisite:* AMST 301g or departmental approval.

**499** Special Topics (2-4, max 8) Special topics in the earth sciences. Field trip required when appropriate to the topic. Departmental approval required.

**500** Introduction to American Studies and Ethnicity (4, Fa) An exploration of themes, theoretical influences, and methodological approaches current in American Studies and Ethnic Studies. Open to first year graduate students in American Studies and Ethnicity only.

**510 Readings in Chicano/Latino Studies (4, FaSp)** Perspectives from the major debates that have driven the development of the field of Chicano/Latino/a studies across the disciplines.

**520 Readings in Asian American Studies (4, FaSp)** Graduate seminar covering critical themes in the interdisciplinary field of Asian American Studies, including perspectives from anthropology, literature, sociology, history, political science, religious studies, cultural studies, women/gender studies and psychology.

**525 Seminar in American Art (4, FaSp)** (Enroll in AHIS 525)

**560 Readings on Race and Ethnicity (4, FaSp)** Exploration of research on race and ethnicity in the United States as it pertains to political, social, economic, cultural and historical issues.

**562** The Practice of Ethnography (4) (Enroll in ANTH 562)

**570 Readings on Los Angeles and Urban Culture (4, FaSp)** Exploration of some of the leading scholarship from a variety of disciplines writing about Los Angeles and the Southern California area. Particular emphasis is placed on the intersections of historical, contemporary and cultural issues that inform recent scholarship on Los Angeles.

**580 Readings in Cultural Studies (4, FaSp)** Seminar in theoretical approaches to cultural studies, with an emphasis on the analysis of race, gender, sexuality, and class in the U.S.

**590 Directed Research (1-12, FaSpSm)** Research leading to the master's degree. Maximum units which may be applied to the degree to be determined by the program.

**599** Special Topics (2-4, max 8) Seminar in selected topics in American studies and ethnicity.

**660** Interdisciplinary Research Seminar in Race and Ethnicity (4) Explores issues of conducting interdisciplinary research in race and ethnicity and guides students through the design and completion of a journal-quality research paper. *Recommended preparation:* graduate reading course in race and ethnicity.

**670** Interdisciplinary Research Seminar on Los Angeles (4) Introduces students to issues of urban-based research concerning Los Angeles and guides students through the design and completion of a journal-quality research paper. *Recommended preparation:* graduate reading course on Los Angeles.

**680** Interdisciplinary Research Seminar in Cultural Studies (4) Explores theoretical approaches to cultural studies as an interdisciplinary field and guides students through the design and completion of a journal-quality research paper. *Recommended preparation:* graduate reading course in cultural studies.

**700** Theories and Practices of Professional Development (2, FaSpSm) Offers students a structured environment in which to write their dissertation proposals and focuses on professional development. Graded CR/NC. *Prerequisite:* completion of qualifying exam.

**790 Research (1-12, FaSpSm)** Research leading to the doctorate. Maximum units which may be applied to the degree to be determined by the program. Graded CR/NC.

**794abcdz Doctoral Dissertation (2, 2, 2, 2, 0)** Credit on acceptance of dissertation. Graded IP/CR/NC.

Anthropology 233

### **Anthropology**

Grace Ford Salvatori 120 (213) 740-1900 (213) 747-8571 (FAX)

Chair: Craig Stanford, Ph.D.

#### Faculty

University Professor and Adjunct Professor: Stephen E. Toulmin, Ph.D.

Professors: Christopher Boehm, Ph.D.; Eugene Cooper, Ph.D.; Janet Hoskins, Ph.D.; Dorinne Kondo, Ph.D.; Cheryl Mattingly, Ph.D.; G. Alexander Moore, Ph.D.; Andrei Simic, Ph.D.; Craig Stanford, Ph.D.; Walter Williams, Ph.D.

Associate Professors: Nancy Lutkehaus, Ph.D.; Gary Seaman, Ph.D.; Joan Weibel-Orlando, Ph.D.

Assistant Professor: Lanita Jacobs-Huey, Ph.D.

Distinguished Adjunct Professor: Jane Goodall Bryceson, Ph.D.

Lecturers: Joseph Hawkins, Ph.D.; Erin Moore, Ph.D.; Amy Parish, Ph.D.; Thomas Ward, Ph.D.

Associated Faculty: Caleb E. Finch, Ph.D.; Peter Mancall, Ph.D.; Nayuta Yamashita, Ph.D.

The Department of Anthropology offers a B.A. in Anthropology, a minor in cultural anthropology, minors in medical anthropology and cultural anthropology, an M.A. in anthropology, a Certificate in Visual Anthropology and a Ph.D. in Anthropology.

The Department of Anthropology encourages students to become involved in ethnographic research and fieldwork while gaining a firm theoretical foundation in anthropology. Special areas of emphasis in the department are provided by programs in visual anthropology and primate ethology at both the undergraduate and graduate levels. Undergraduates may take a number of courses in visual anthropology that focus on the analysis and understanding of human behavior and are encouraged to include visual media in their senior field methods practicum. Undergraduates may also elect to complete an emphasis in Visual Anthropology or a major in Urban Applied Anthropology.

### Bachelor of Arts

### **Anthropology Major Requirements**

In addition to the general education requirements, the following courses are required.

REQUIRED COURSES,	LOWER DIVISION	UNITS
ANTH 200L	The Origins of Humanit	y 4
ANTH 201	Introduction to Social	•
	Anthropology, or	
ANTH 263	Exploring Culture	
	Through Film	4
REQUIRED COURSES,	UPPER DIVISION	UNITS
ANTH 410ab	Ethnographic Field	
	Methods and Practicum	4-4
ANTH 440	History of	
	Anthropological Theory	4
TWO COURSES TO BE	SELECTED FROM:	UNITS
ANTH 345	Politics, Social	
	Organization, and Law	4
ANTH 360	Symbolic Anthropology	4
ANTH 370	Family and Kinship in	
	Cross-Cultural Perspecti	ve 4
ANTH 460	Economic Anthropology	4
One area specializ	ation course	4
Electives	two courses	8
Total upper divisi	on units	32

### Major in Anthropology (Visual Anthropology) Requirements

REQUIRED COURSES, LOWER DIVISION

In addition to the general education requirements, the following courses are required.

UNITS

mademan coomses	, 2011211 211131011	0
ANTH 200L	The Origins of Humanity	4
ANTH 263	Exploring Culture Through Film	4
	i mough i min	7
REQUIRED COURSES	, UPPER DIVISION	UNITS
ANTH 410ab	Ethnographic Field	
	Methods and Practicum	4-4
ANTH 440	History of	
	Anthropological Theory	4
ANTH 475	Ethnographic Film	
	Analysis	4
ANTH 476	Ethnographic Film The	ory
	from an Historical	
	Perspective	4
ONE COURSE TO BE SELECTED FROM:		
ANTH 470	Multidisciplinary	
	Seminar in Visual	
	Anthropology	4
ANTH 472	Visual Techniques in	
	Anthropology: Stills	4
	- 0,	

TWO COURSES TO BE SELECTED FROM:	UNITS
Two 300- or 400-level	
anthropology courses not listed	
among the required courses	8
Total upper division units	32

# Major in Anthropology (Urban Applied Anthropology) Requirements

In addition to the general education requirements, the following courses are required.

UNITS	S, LOWER DIVISION	REQUIRED COURSES
y 4	The Origins of Humanit	ANTH 200L
	Exploring Culture	ANTH 263
	Through Film, or	
	Introduction to Social	ANTH 201
4	Anthropology	
UNITS	S, UPPER DIVISION	REQUIRED COURSES
4	Urban Anthropology	ANTH 355
	Cross-Cultural Research	ANTH 371
4	on Urban Gangs	
	Ethnographic Field	ANTH 410ab
4-4	Methods and Practicum	
	History of	ANTH 440
4	Anthropological Theory	

TWO COURSES TO	BE SELECTED FROM:	UNITS
ANTH 345	Politics, Social	
	Organization and Law	4
ANTH 360	Symbolic Anthropology	4
ANTH 370	Family and Kinship	
	in Cross-Cultural	
	Perspective	4
ANTH 375	Applied Anthropology	4
ANTH 407	Peasant Society	4
ANTH 460	Economic Anthropology	4
One world area	specialization course	4
773 1 1°		
Total upper div	ision units	32
	ural Anthropology	32
Minor in Cultu		32 UNITS
Minor in Cultu	ıral Anthropology	
Minor in Cultu	ural Anthropology ES, LOWER DIVISION	
Minor in Cultu	ural Anthropology es, LOWER DIVISION  Introduction to Social	
Minor in Culturequired course	Introduction to Social Anthropology, or	
Minor in Culturequired coursi ANTH 201 ANTH 263	Introduction to Social Anthropology, or Exploring Culture	UNITS
Minor in Culturequired coursi ANTH 201 ANTH 263	Irral Anthropology ES, LOWER DIVISION  Introduction to Social Anthropology, or Exploring Culture Through Film	UNITS

ANTH 345	Politics, Social	
	Organization, and Law	4
ANTH 360	Symbolic Anthropology	4
ANTH 370	Family and Kinship in	
	Cross-Cultural	
	Perspective	4
ANTH 460	Economic Anthropology	

### Minor in Medical Anthropology

Medical anthropology examines the body, illness and healing from a cultural perspective, including comparative studies of folk healing systems, curing rituals and Western biomedical practices.

REQUIRED COURSE	U	INITS
ANTH 101	Body, Mind and Healing	4
ONE COURSE (4 UNIT	S) TO BE SELECTED FROM: U	INITS
ANTH 105	Culture, Medicine and	
	Politics	4
ANTH 125	Social Issues in Human	
	Sexuality and	
	Reproduction	4
ANTH 200L	The Origins of Humanity	4
ANTH 201	Introduction to Social	
	Anthropology	4

	Ancestors: Non-Western	
	Religious Traditions	4
UPPER DIVISION C	OURSES: FOUR OF THE	
FOLLOWING (16 U	NITS):	UNITS
ANTH 305	Childhood, Birth and	
	Reproduction	4
ANTH 360	Symbolic Anthropology	4
ANTH 373	Magic, Witchcraft	
	and Healing	4
ANTH 375	Applied Anthropology	4
ANTH 380	Sex and Gender in	
	Anthropological	
	Perspective	4
ANTH 405	<b>Evolutionary Medicine</b>	4
ANTH 440	History of Anthro-	
	pological Theory	4
OT 375	The Narrative Structure	
	of Social Action: Narrativ	e,
	Healing and Occupation	4
SWMS 336	Health, Gender and	
	Ethnicity	4
SWMS 420	Woman, Nature, Culture	:
	The Behavioral Ecology	

Shamans, Spirits and

ANTH 273

# **Interdisciplinary Law and Society Minor** See the Department of Political Science, page 396.

of Women

4

### Master of Arts in Anthropology

### **Degree Requirements**

Applications for graduate study in the doctoral program can be obtained from the Department of Anthropology, University of Southern California, Los Angeles, CA 90089-0032. Students are not accepted for the M.A. in Anthropology alone, but the M.A. in Anthropology can be granted after two years of course work and satisfactory completion of the screening exams.

REQUIRED COURSES	U	NITS
ANTH 501	History and Foundations	
	of Anthropology	4
ANTH 502	Contemporary Theory	
	in Anthropology	4
ANTH 503	Regional Ethnography, or	
ANTH 506	Primate Behavior and	
	Sociobiology	4
ANTH 562	The Practice of	
	Ethnography (or another	
	methods course approved	
	by the supervisor for	
	primatologists)	4
Four 4-unit gradu	ate-level courses in	
anthropology		16
	_	22

A screening examination must be taken before a student has completed more than 24 units of course work and should be submitted in the third year of residence. The exam consists of three written field statements, a working bibliography and an oral defense.

### The Center for Visual Anthropology

The primary goals of the Center for Visual Anthropology (CVA) are: to promote the incorporation of visual modes of expression into the academic discipline of anthropology; to promote mutual understanding and collaboration between professionals in the visual media and in anthropology; to create an awareness of the anthropological perspective in documentaries produced for mass audiences; to improve the materials and techniques available for using film in teaching anthropology; to encourage the collection, archiving and analysis of visual documentation for anthropological research. The Ethnographics laboratory is a part of the Center for Visual Anthropology which provides archival and computer facilities for students and faculty who work with nonlinear editing systems and interactive media in

anthropology. The primary mission of the Ethnographics Lab is to promote the integration of all forms of information, whether text, graphics of time-based media, into a new synthesis of anthropological knowledge. It provides support for research and representation in multimedia formats carried out in a new laboratory facility based on computer AV technologies and software.

The Jane Goodall Research Center is the designated repository of field data from Jane Goodall's work among the primates of Gombe National Park in Tanzania. A computer interactive multimedia archive of these materials is being implemented to make them available to students, faculty and other interested scholars.

### Facilities

The CVA housed at the Social Science Building on the USC campus and at the C-Lab, is equipped with broadcast-quality production and editing facilities in video. Anthropology 235

These include Super 8 systems and highband 3/4" as well as 1/2" videos. Editing facilities include Super 8 editors, JVC 1/2" editing systems, a Sony 3/4" time code system, an on-line editing system and an AVID system. Editing and viewing facilities are also located in the School of Cinema-Television. The CVA maintains a complete still photography lab and darkroom.

Policy on Films and Videos Produced by Students All films and videos produced with school equipment, funding or facilities are the property of USC. Any income from distribution of student-produced films and videos will be used for the benefit of CVA students through production budgets, equipment purchases or scholarships.

### Certificate in Visual Anthropology

Students can be admitted to the certificate program in visual anthropology after they have completed their Ph.D. qualifying examinations. The certificate is an interdisciplinary program, with training in digital video production provided by the USC School of Cinema-Television. Professional skills in video production are designed to help students present their research results to a wider audience and to use visual media effectively in communicating ideas about anthropology. After completing fieldwork, students take a year-long editing sequence and practicum (ANTH 576 and ANTH 577) to finish a visual project, which will complement the written dissertation.) A total of 16 units is required.

REQUIRED COURSES	UN	NITS
ANTH 575	Seminar in Ethnographic	
	Film	4
ANTH 576	Anthropological Media	
	Seminar	3
ANTH 577	Advanced Anthropological	
	Media Seminar	3
CTPR 507x	Production I	6

Students may begin to take course work required for the certificate in their first year, but they cannot complete their project until they have satisfied other requirements for doctoral candidacy. The Certificate in Visual Anthropology is received at the same time as the Ph.D.

### Doctor of Philosophy in Anthropology

Applications for the doctoral program may be obtained from the Department of Anthropology, University of Southern California, Los Angeles, CA 90089-0032.

The Ph.D. requires 60 units of course work. These include the 32 units required for the M.A. (16 units of required courses and 16 of graduate electives), 4 additional graduate units, plus a sequence of two graduate courses in an outside field. The additional required units for the Ph.D. are ANTH 790 Research (8 units) and ANTH 794ab Doctoral Dissertation (2-2 units). Before being admitted to Ph.D. candidacy, the student must fulfill the language requirement, present an expanded version of the field statements at a qualifying examination, write a dissertation prospectus and pass the

qualifying examination. Having completed this work, the student will conduct fieldwork and write the doctoral dissertation.

### **Degree Requirements**

REQUIRED COURSES		UNITS
ANTH 501	History and Foundation	s
	of Anthropology	4
ANTH 502	Contemporary Theory	
	in Anthropology	4
ANTH 562	The Practice of	
	Ethnography	4
ANTH 790	Research (minimum	
	8 units required)	8
ANTH 794ab	Doctoral Dissertation	2-2
4 anthropology gra	aduate electives	20
Completion of the	e program requires 60 uni	ts.

### Foreign Language Requirement

A reading knowledge of a scholarly language (normally chosen from among Arabic, Chinese, French, German, Italian, Japanese, Portuguese, Russian or Spanish) is required before admission to candidacy. If some other field language is required for the dissertation research to be successfully completed (for example, Maya, Hebrew, Javanese, etc.), this will be communicated to the student upon submission of the field project required for admission to candidacy.

### Courses of Instruction

### ANTHROPOLOGY (ANTH)

The terms indicated are *expected* but are not *guaranteed*. For the courses offered during any given term, consult the *Schedule of Classes*.

### 090x Seminar in Digital Editing (2, FaSp)

Teaches visual anthropology graduate students how to edit digitally ethnographic video materials from their fieldwork. Open to graduate visual anthropology students only. Not available for degree credit. Graded CR/NC. *Prerequisite:* ANTH 501, ANTH 562, ANTH 575.

100g Principles of Human Organization: Non-Western Societies (4, FaSp) Universal social organizational themes and their culture-specific variations are explored across five non-western societies.

**101 Body, Mind and Healing (4)** The body, illness and healing from a cultural perspective, including comparative studies of folk healing systems, curing rituals and Western biomedical practices.

### 105g Culture, Medicine and Politics (4, Fa)

Survey of the impact of public institutions, the private sector, and cultural practices on health and the delivery of health care in the United States. *Concurrent registration:* WRIT 140.

**125g Social Issues in Human Sexuality and Reproduction (4, FaSp)** Examination of the "natural" (biological) and "unnatural" (social and cultural) dimensions of human sexuality and reproduction. *Concurrent registration:* WRIT 140.

**140g Native Peoples of Mexico and Central America (4, Sp)** An exploration of the nature and contributions of pre-Columbian high civilizations (Maya, Aztecs, etc.) and their descendants as they resist and assimilate to the modern world.

### 200Lg The Origins of Humanity (4, FaSp)

Foundations of the human species. Examination of scientific evidence from Darwinian theory, primate behavior, fossils, and the behavior of modern people.

**201** Introduction to Social Anthropology **(4, FaSpSm)** Major culture types, nomadic hunters and herders, peasant and tribal societies, sophisticated kingdoms; social, political, economic, and religious institutions.

# **202** Introduction to Archaeology (4, Sp) How archaeological research is conceived,

How archaeological research is conceived, planned, and carried out, from survey and excavation to analysis of finds and final reconstruction of ancient cultural systems.

225 Sex Similarities and Differences: A Multidisciplinary Approach (4, FaSp) (Enroll in SWMS 225)

# 235g The Changing Pacific: Culture, History and Politics in the New South Seas (4, Fa)

Current social and political developments in the South Pacific analyzed from the perspective of the historical relationship between indigenous cultures and the West.

240gm Collective Identity and Political Violence: Representing 9/11 (4, FaSp) Critically examines visual, textual, and performative representations of culture and identity, with the terrorist attacks of 9/11 serving as a topical anchor. *Recommended preparation:* ANTH 263.

### 250g Race and Sexual Politics in Southeast

**Asia (4)** Southeast Asia is studied as a meeting place of different races and cultural traditions, with emphasis on the precolonial heritage of sexual equality and postcolonial reinterpretations of men's and women's worlds.

### 263g Exploring Culture Through Film

**(4, FaSpSm)** Concepts of social anthropology using filmic representations of societies throughout the world in contrast to written ethnography.

# 273g Shamans, Spirits and Ancestors: Non-Western Religious Traditions (4, Fa) $\rm An\,$

intensive study of local systems of belief and knowledge in selected societies in the Pacific, Asia, Africa, the Caribbean and Latin America with emphasis on ideas of the spirit world.

### 300 Evolution, Ecology, and Culture (4, Sp)

The roles of biology, culture, and the environment in shaping human society, integrating evolutionary biology and cultural theory.

### 305 Childhood, Birth and Reproduction

**(4, Fa)** Cross-cultural analysis and comparison of the experience and cultural conception of birth, maternity, parenthood, and childhood in western and non-western societies.

**306 Primate Social Behavior (4)** Social behavior of living nonhuman primates, with an emphasis on field studies of apes and monkeys. Topics include aggression, communication, reproduction, cognition and ecology.

**308** Origins and Evolution of Human Behavior (4) Examination of the evidence for and against evolutionary bases of a range of human behaviors. Topics include sex differences, human reproductive strategies, race,

### 310 Archaeology of the Americas

IQ, human ecology.

**(4, Irregular)** Pre-Columbian culture from early hunters to the Spanish conquest in major geographical areas of Mexico, Central America, Peru, or the United States.

### 311 Old World Archaeology (4, Irregular)

Neolithic revolution and origins of civilization in major culture centers such as Mesopotamia, Egypt, India, or China.

### 314 The Nature of Maya Civilization (4)

A seminar forum on Maya culture from the earliest form to present; problems of origins, classic florescence, systems collapse, conquests, persistence, and transformation today.

# **315g North American Indians (4, Fa)** North American Indian societies, their major cultural themes, ethnological significance, and compa-

themes, ethnological significance, and comparability with Western European cultural forms; lectures, visuals, and indigene demonstrations.

**316gm North American Indians in American Public Life (4, Sp)** Role of American Indians in American public life from colonial times to the present; native American forms of government; relations between tribes and the U.S.

**317** Imaging Indians: From Warriors to Windtalkers (4, Fa) An historical and anthropological overview of 500 years of the presentation of differing and, often, contradictory perceptions of Native American life and character in popular and academic media.

### 320 Male and Female in Pacific Society

**(4, 5p)** Cultural variations in gender systems and historical changes due to colonialism and development in Polynesia, Melanesia, Indonesia, and other Pacific Rim cultures.

**322** Anthropology of Bali (4, Sp) An introduction to the methodology of social anthropology, focusing on the culture of the Indonesian island of Bali.

**323** Regional Ethnology: Southeast Asia **(4, Irregular)** Peoples and cultures of southeast Asia, from the late Pleistocene to the present.

**324 Regional Ethnology: China (4, 2 years, Sp)** Anthropological perspective of the ordinary citizens of the Peoples' Republic of China: peasants, workers, bureaucrats, stu-

### 326 Ethnography of European Culture

dents, and women.

**(4, Irregular)** Europe as a geographic area in terms of its linguistic, ethnic, racial, and cultural diversity; particular focus on peasant society and the Little Tradition.

**327** Anthropology of the Middle East and Islam (4, Sp) Explores written and visual ethnography for study of Middle East com-

ethnography for study of Middle East community, sociopolitical forms and religious life. Examines scriptural and living Islam and dynamics of contemporary Islamic revival.

328m Culture Change and the Mexican

**People (4, Irregular)** Culture change theories and methods (archaeology, community studies, participant-observation) used to examine the varied experiences of peoples in Mexico and the U.S. Southwest.

### 330 Culture, Gender and Politics in South Asia: Afghanistan, India, Pakistan, Nepal

**(4, Fa)** Examination of violence, identity, law, religion, nationalism, development, caste, kinship, gender, and the South Asian diaspora.

**331** Asian Americans: Migration and Culture Change (4, Fa) Introduction to ethnographic methods, focusing on culture change among Asian immigrant groups in the United States. Emphasis on Los Angeles and the American West.

### 335 Comparative Muslim Societies

**(4, Irregular)** Examines issues of nationality, religion, and culture among Muslim peoples in the Middle East, Africa, East Asia, and the Soviet Union from an anthropological perspective.

**336 Health, Gender and Ethnicity (4, Sp)** (Enroll in SWMS 336)

**345** Politics, Social Organization, and Law **(4, 2 years, Sp)** Political and legal systems of primitive societies, social control, and structure.

### 355 Urban Anthropology (4, Irregular)

Exploration of empirical and analytical approaches employed by anthropologists in studying urban phenomena cross-culturally; urban origins, structure, and social processes.

**360 Symbolic Anthropology (4, Fa)** The role of symbols in the evolution of culture; symbolic aspects of myth, ritual, and social life. *Prerequisite*: sophomore standing.

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- **365** Life History in Anthropological Perspective (4, Irregular) Examination of one's life within its sociocultural context; study of family history, autobiography, diary, journal, and film; research and writing of a life history.
- **370** Family and Kinship in Cross-Cultural Perspective (4, 2 years, Sp) Comparative examination of family and kinship in tribal, peasant, and complex societies, emphasizing non-Western cultures, societal and normative consequences of forms and functions in family.
- **371m Cross-Cultural Research on Urban Gangs (4)** Youth gang dynamics and their effects on institutions. Comparative analysis of Asian-, African-, and Mexican-American gangs.
- **372** Interpretation of Myth and Narrative **(4, Fa)** Oral narratives from non-Western cultures; communications about deeply-held beliefs, psychological tensions, social problems, and the structure of the mind.
- **373** Magic, Witchcraft and Healing (4) Analysis of the practices of witches and witch doctors, priests, diviners and traditional healers in Western and non-Western societies, relating their practices to religion and medicine.
- **374** Asian Americans: Ethnic Identity **(4, FaSp)** (Enroll in SOCI 375)
- **375 Applied Anthropology (4, 2 years, Sp)** Evaluation of cultural impact of policy and program designed to stimulate change in traditional communities. Field work assignments in education, health, and development.
- **380 Sex and Gender in Anthropological Perspective (4)** Cultural construction of gender in a number of non-Western societies is compared to ideas of sex and sexual differences in American society.
- **385m Men and Masculinity (4)** (Enroll in SWMS 385*m*)
- **390** Special Problems (1-4, Irregular) Supervised, individual studies. No more than one registration permitted. Enrollment by petition only.
- **395**m African American Humor and Culture **(4)** (Enroll in AMST 395*m*)
- **405 Evolutionary Medicine (4, Sp)** Evolutionary, cultural and environmental factors in the emergence and existence of diseases; a Darwinian examination of illness in the human species.

- **406** Theory and Method in Biological Anthropology **(4)** Historical and theoretical approaches to major issues in the field of biological anthropology. Includes human evolution, primatology, origins of culture, human biology.
- **407 Peasant Society (4, Sp)** Comparative study of the social, economic, political, and religious characteristics of peasant societies as they have existed and continue to exist in Asia, Africa, and Latin America.
- **410ab Ethnographic Field Methods and Practicum (4-4, FaSp)** Survey of anthropological methods for acquiring and analyzing data. *a:* Ethnographic research methods and modes of analysis; development of a field research project. *b:* Implementation of the field project. *Prerequisite:* ANTH 201g.
- 420 Woman, Nature, Culture: The Behavioral Ecology of Women (4, FaSp) ( $Enroll\ in\ SWMS\ 420$ )
- **425** Peoples and Cultures of Latin America **(4, Irregular)** Cultures of the indigenous peoples of South America; results of Spanish conquest and colonization; present folk societies and their cultures.
- **435x Ethnic Diversity in China/Inner Asia (4)** Tibetans, Mongols, Muslims and other minorities on the China and Inner Asian frontier will be surveyed through ethnohistories, lectures, films and guest lectures.
- **440 History of Anthropological Theory (4, Sp)** Ideas about man, culture, and society which have formed the field of anthropology as a research discipline; present trends and problems.
- **455 Cultural Ecology (4, Irregular)** Ecological adaptation of human cultures, emphasizing the development of values in the context of constraints and incentives stemming from the environment.
- **460 Economic Anthropology (4, Fa)** Comparative study of human systems of production, distribution, and consumption; anthropological approaches to study of economic behavior; economic systems of primitive, peasant, and developing societies.
- **470** Multidisciplinary Seminar in Visual Anthropology (2 or 4, Irregular) Application of broadcast journalism, cinema, and anthropology to ethnographic film making.
- **472** Visual Techniques in Anthropology: Stills (4, Fa) Visual techniques for data collection and analysis in anthropological research. Visual anthropology research using 35 mm. photography skills, fieldwork procedures, data analysis, and presentation formats.

- **475** Ethnographic Film Analysis (4, Irregular) Analysis of film as a tool for investigating primitive and modern cultures and societies.
- **476** Ethnographic Film Theory from an Historical Perspective (4) Technologies and uses of, theoretical frameworks for, and the presentation styles of ethnographic materials are examined from an historical perspective.
- **490x Directed Research (2-8, max 8, FaSpSm)** Individual research and readings. Not available for graduate credit. *Prerequisite:* departmental approval.
- **491 Directed Research for Honors (4, Irregular)** Individually guided research and readings culminating in the production of an honors thesis. *Prerequisite*: 3.0 GPA; ANTH 201*g* plus 8 units of upper division anthropology courses.
- **499** Special Topics (2-4, max 8, Irregular)
  Current literature: social change, comparative institutions, urbanization, ideology.
- **501 History and Foundations of Anthropology (4, Fa)** An historical survey of the development of theory and methods in social anthropology.
- **502** Contemporary Theory in Anthropology **(4, Sp)** Continuation of ANTH 501, focusing on current models, methods, and issues in social anthropology.
- **503 Regional Ethnography (4, Sp)** An intensive analysis of the anthropology of a major culture area.
- **506 Primate Behavior and Sociobiology (4)** Advanced course on the behavior, ecology and sociobiology of living primates. Takes a Darwinian approach to behaviors such as parenting, mating, diet and feeding, competition, and demography.
- **510 Urban Anthropology (4, Fa)** Intensive ethnographic analysis of specialized urban niches, microsettings, ethnicity, community studies.
- **554** Women in Global Perspective **(4)** (Enroll in SWMS 554)
- **562** The Practice of Ethnography (4, Sp) Major approaches to ethnographic fieldwork are explored in classic cases.
- **575 Seminar in Ethnographic Film (4, Fa)** A survey of ethnographic film using both the dimensions of natural history descriptions and process, contrasted with naturalism and structuralism as tools of controlled comparison and analysis.

### 576 Anthropological Media Seminar

(3, max 9) An overview of a "visual anthropology" subfield within the academic discipline of anthropology. Consideration of the ways in which visual anthropology relates to some other anthropological specializations, to other academic disciplines, and to "the media" in a more general sense. *Prerequisite*: graduate standing.

**577** Advanced Anthropological Media Seminar (3, max 9) An advanced overview and practicum of the development of a "visual anthropology" subfield within the academic discipline of anthropology. Special consideration of how ethnography is incorporated into multimedia presentations. Students will also make an interactive ethnographic film or video. *Prerequisite:* graduate standing; *corequisite:* ANTH 576.

### 590 Directed Research (1-12, FaSpSm)

Research leading to the master's degree. Maximum units which may be applied to the degree to be determined by the department. Graded CR/NC.

**594abz Master's Thesis (2-2-0, FaSpSm)** Credit on acceptance of thesis. Graded IP/CR/NC.

### 599 Special Topics (2-4, max 8, Fa)

**601 Feminist Issues in Anthropology (4, FaSpSm)** Feminist concerns in both Western and Non-Western societies are examined in relation to globalization; the practice of ethnography and issues of power.

**602** The Anthropology of Popular Culture **(4, FaSpSm)** The relationship between anthropology and popular culture is explored through a critical examination of the category "popular culture."

**603** Experiments in Ethnographic Writing **(4, FaSpSm)** The problems of representation involved in rendering experience into narrative are examined in a number of contemporary "experiments."

**604 Bodies and Practices (4, FaSpSm)** The cultural construction of body image, embodied practice, race, sexuality and healing.

**605** Race: Performance, Politics, Cultural Production (4, FaSpSm) Focuses on the performance and social construction of race and its intersection with gender, sexuality, class, place, nation and empire.

**606 Seminar on Nationalism and Ethnicity (4)** Cross-cultural analysis of nationalism and ethnicity from an ethnographic perspective.

Graduate standing.

**650** Seminar in Ethnography and Interpretation **(4)** A seminar where issues in contemporary ethnography and interpretation are discussed, grouped around a theme of current concern, such as power and resistance, colonialism, Marxist approaches, feminism, etc. *Prerequisite:* ANTH 501.

**790 Research (1-12, FaSpSm)** Research leading to the doctorate. Minimum 8 units, maximum number of units which may be applied to the degree to be determined by the department. Graded CR/NC.

**794abcdz Doctoral Dissertation (2-2-2-0, FaSpSm)** Credit on acceptance of dissertation. Graded IP/CR/NC.

### **Art History**

Von KleinSmid Center 351 (213) 740-4552 FAX: (213) 740-8971 Email: arthist@usc.edu www.usc.edu/dept/LAS/Art\_History

### Administration

Malcolm Baker, Ph.D., Chair

### Faculty

Professors: Malcolm Baker, Ph.D.; Thomas Crow, Ph.D.; Selma Holo, Ph.D.; Eunice Howe, Ph.D.\*; John Pollini, Ph.D.; Nancy Troy, Ph.D.

Associate Professors: Carolyn M. Malone, Ph.D.; Richard Meyer, Ph.D.; Jonathan Reynolds, Ph.D.

Assistant Professors: Insoo Cho, Ph.D.; Camara Holloway, Ph.D.; Karen Lang, Ph.D.; Sonya Lee, Ph.D.; Todd Olson, Ph.D.; Anne Porter, Ph.D.

\*Recipient of university-wide or school teaching award.

Art history combines the study of art with the study of culture. The undergraduate major not only receives sound training in the history of art but also a basis in other humanistic disciplines. The curriculum is designed to guarantee students a general knowledge of both western and eastern art, and to offer a variety of upper division courses in specialized areas. Majors are exposed to a diversity of theoretical approaches and encouraged to sharpen their critical and conceptual thinking. This foundation has enabled many art history graduates to pursue advanced degrees in nationally recognized programs, to enter diverse fields, including law or business, and to pursue careers in the arts.

A special feature of the undergraduate program is the apprenticeship, which affords upper-division students the opportunity to work in the professional art world in return for academic credit. Students gain valuable job skills in local museums, galleries, auction houses, and art foundations. Apprenticeship placement is also available during the summer months throughout the United States.

Graduate students in art history pursue a wide range of subject matter, using a variety of methodologies and techniques. Graduates may also pursue parallel interests by taking courses in outside departments such as history, classics, East Asian languages and cultures, Slavic languages and literatures, French, German, Italian and others.

Graduate students are encouraged to participate in annual conferences and symposia. Travel grants are available through the department. In addition to an excellent slide library, electronic mail access to university library catalogues from home or office, courtesy privileges and cross-registration of course work at UCLA, our graduate students have access to numerous research opportunities in and around Southern California at institutions such as the Los Angeles County Museum, the Huntington Museum, the Archives of American Art, the Institute for Modern Russian Culture, the J. Paul Getty Museum and the Getty Research Institute for the History of Art and the Humanities.

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### Undergraduate Degree

#### **Bachelor of Arts**

In art history, undergraduates are provided with a sound, broad foundation in art from a variety of offerings. On this basis, exploration of the art of many eras and cultures proceeds in a program designed to develop an awareness of the integral role played by art as an expression of man and society throughout history. A grade of C or higher is required in departmental courses for all undergraduate majors.

#### Curriculum Requirements

The Bachelor of Arts in Art History requires 128 units, distributed as follows.

### General Education Requirements

Candidates for the Bachelor of Arts in Art History must complete the general education requirements of the College of Letters, Arts and Sciences.

#### Major Requirements

The major requires 48 units as follows.

REQUIRED COUR	SES, LOWER DIVISION U	NITS
AHIS 120	Foundations of Western Art	4
AHIS 121	Art and Society:	
	Renaissance to Modern	4
AHIS 125	Arts of Asia: Antiquity	
	to 1300, or	
AHIS 126	Introduction to Asian	
	Art: 1300 to the Present	4
	_	12

### Distribution Requirements (16 units)

Four courses to include one in each of four out of the following five areas of study, only one of which may be at the 200-level (400-level courses do not satisfy the distribution requirement): Greek and Roman art and archaeology - AHIS 201, AHIS 321, AHIS 322; Medieval art - AHIS 220, AHIS 330; Renaissance and Baroque art - AHIS 230, AHIS 304, AHIS 343, AHIS 344; modern and contemporary art - AHIS 250, AHIS 255, AHIS 270, AHIS 361, AHIS 363, AHIS 364, AHIS 365, AHIS 368, AHIS 369, AHIS 370, AHIS 373; non-European traditions -AHIS 282, AHIS 319, AHIS 376, AHIS 377, AHIS 384, AHIS 385, AHIS 386, AHIS 387, AHIS 388, AHIS 389.

*Upper Division Requirements (20 units)* Five courses, three of which must be at the 400-level, including AHIS 494.

The following courses may be enrolled in with written permission of the chair of art history: AHIS 495ab Undergraduate Honors Thesis (2-2) and AHIS 499 Special Topics (2-4, max 8).

#### **Electives**

The remaining 36 units of the required 128 unit total may be taken as electives.

### **Art History Honors Program**

Candidates for the B.A. and the B.A./M.A. in the Department of Art History may receive a designation on their transcripts of departmental honors. Admission to the Honors Program is required.

Prerequisites: 3.5 overall GPA, 3.5 major GPA or better, completion of at least three upperdivision art history courses at the time of admission, submission of an application form to the undergraduate faculty advisor.

Required for departmental honors: maintain GPA requirements stated above and complete AHIS 495ab Undergraduate Honors Thesis.

#### Minor in Art History

Art history combines the study of art with the study of culture broadly conceived. The art history minor offers a concentrated course of study that includes a variety of objects from different historical periods and cultures in relation to their makers, patrons, viewers and critics. Students in the minor are trained to analyze visual images and information through a process of intensive looking, reading, research and writing.

## Lower Division Curriculum (8 units) CHOOSE TWO LOWER DIVISION COURSES;

ONLY ONE MAY BE	AT THE 200 LEVEL UN	ITS
AHIS 120	Foundations of Western Art	4
AHIS 121	Art and Society: Renaissance	
	to Modern	4
AHIS 125	Arts of Asia: Antiquity	
	to 1300	4
AHIS 126	Introduction to Asian	
	Art: 1300 to the Present	4
AHIS 201	Digging into the Past:	
	Material Culture and the	
	Civilizations of the Ancient	
	Mediterranean	4
AHIS 220	Medieval Visual Culture	4
AHIS 230	Art and Culture in Early	
	Modern Europe	4
AHIS 250	Modernity and Difference:	
	Critical Approaches to	
	Modern Art	4
AHIS 255	Cultural Wars: Art and	
	Social Conflict in the USA,	
	1900-Present	4
AHIS 270	L.A. Now: Contemporary	
	Art in Los Angeles	4
AHIS 282	Korean Art	4

*Upper Division Requirement (16 units)*Choose from 300- and 400-level AHIS courses. At least one course must be at the 400 level.

#### Minor in Visual Culture

A critical approach to art history is the departure point for the minor in visual culture, which is dedicated to the analysis of the visual arts, broadly defined to include fine art, film and television, photography and video, illustrated books, advertising, architecture and design. Students are required to take two introductory courses in the history and theory of art. These courses will prepare them for focused study in one of three concentrations: (1) photography, film and the reproduction of images, (2) popular culture or (3) gender and sexuality.

REQUIRED COURSES		UNITS
AHIS 100	Introduction to Visual	
	Culture	4
COMM 306	The Communication	
	Revolution and the Arts, o	or
AHIS 250	Modernity and Difference	:
	Critical Approaches to	
	Modern Art	
	(Gateway Course)	4

Four courses to be selected from **one** of the following three tracks:

# (1) Photography, Film and the Reproduction of Images

AHIS 373	History of Photography	4
AHIS 469	Critical Approaches to	
	Photography	4
ANTH 263	Exploring Culture	
	Through Film	4
COLT 452	Representation and	
	Cognition in Photography	4
COLT 480	Dada and Surrealism	4
CTCS 392	History of the American	
	Film, 1925-1950	4
CTCS 393	History of the American	
	Film, 1946-1975	4
CTCS 394	History of the American	
	Film, 1976-Present	4
CTCS 400	Non-fiction Film and	
	Television	4
ENGL 471	Literary Genres and Film	4
ENGL 481	Narrative Forms in	
	Literature and Film	4
FA 309*	Advanced Photography	4
FA 310	Digital Photo Studio	4
FA 311	Printmaking	4
FREN 320	French Cinema and	
	French Society:	
	1900 to the Present	4
HIST 225	Film, Power, and	
	American History	4
HIST 381	Cinema and History	4
HIST 481	Producing Film Histories	4
PHIL 446	Aesthetics and the Film	4
(2) Popular Cultur	e	
A T T T C 2 7 C	3.6 1 A TIT	

AHIS 3/0	Modern Art III:	
	1940-present	4
COLT 365	Literature and Popular	
	Culture	4

COMM 384	Interpreting Popular		ENGL 471	Literary Genres and		COLT 480	Dada and Surrealism	4
	Culture	4		Film	4	COMM 395	Gender, Media and	
COMM 450	Visual Culture and		ENGL 481	Narrative Forms in			Communication	4
	Communication	4		Literature and Film	4	COMM 465	Gender in Media	
COMM 455	Advertising and Society	4	HIST 380	American Popular Culture	4		Industries and Products	4
COMM 458	Race and Ethnicity in		PAS 400	Contemporary Public		CTCS 192	Race, Class, and Gender	
	Entertainment and			Art	4		in American Film	4
	the Arts (prerequisite:		PHIL 446	Aesthetics and the Film	4	CTCS 412	Gender, Sexuality and	
	COMM 300)	4					Media	4
CTCS 392	History of the American		(3) Gender and S	Sexuality		ENGL 476	Images of Women in	
	Film, 1925-1950	4	AHIS 304	Italian Renaissance Art:			Contemporary Culture	4
CTCS 393	History of the American			Old Masters and Old		ENGL 478	Sexual/Textual Diversity	4
	Film, 1946-1975	4		Mistresses	4	HIST 245	Gender and Sexualities	
CTCS 394	History of the American		AHIS 363	Race, Gender, and Sexualit	ty		in American History	4
	Film, 1977-Present	4		in Contemporary Art	4	SOCI 437	Sexuality and Society	4
CTCS 404	Television Criticism and		ARCH 442	Women's Space in History:		Trest		24
	Theory	4		"Hussies," "Harems" and		Total units requi	ired	44
ENGL 392	Visual and Popular			"Housewives"	4	*22		al-
	Culture	4	COLT 376	Women in Contemporary			its select FA 309 Photography wi	נוו
				Literature and the Arts	4	8 units of prerequi	SITG2	

Literature and the Arts

### Accelerated Degree

# B.A., Art History/M.A., Art History (Museum Studies)

This five-year program culminating in the B.A. and M.A. degrees is offered in collaboration with the College of Letters, Arts and Sciences. Students take courses in a broad range of visual arts media and museum studies. The department offers a concentrated course of study addressing different periods and cultures focusing on such issues as art production, patronage, collecting, display, criticism and visuality in general.

### Curriculum Requirements

The Bachelor of Arts/Master of Arts, Art History (Museum Studies) requires 151 units distributed as follows.

### **Bachelor of Arts Requirements**

General Education Requirements

Candidates for the Bachelor of Arts must complete the general education requirements for the College of Letters, Arts and Sciences. This program requires six courses in different categories, plus writing, foreign language and diversity requirements.

### Curriculum Requirements

The art history major requires 48 units as follows.

REQUIRED COURSES, LOWER DIVISION UN		
AHIS 120	Foundations of	
	Western Art	4
AHIS 121	Art and Society:	
	Renaissance to Modern	4
AHIS 125	Arts of Asia: Antiquity to	
	1300, or	
AHIS 126	Introduction to Asian Art	:
	1300 to the Present	4

### Distribution requirements (16 units)

Four courses to include one in each of four of the following five areas of study, only one of which may be at the 200 level (400level courses do not satisfy the distribution requirement): Greek and Roman art and archaeology — AHIS 201, AHIS 321, AHIS 322; Medieval art — AHIS 220, AHIS 330; Renaissance and Baroque art - AHIS 230, AHIS 304, AHIS 343, AHIS 344; modern and contemporary art — AHIS 250, AHIS 270, AHIS 361, AHIS 363, AHIS 364, AHIS 365, AHIS 368, AHIS 369, AHIS 370, AHIS 373; non-European traditions - AHIS 282, AHIS 319, AHIS 376, AHIS 377, AHIS 384, AHIS 385, AHIS 386, AHIS 387, AHIS 388, AHIS 389.

Upper-division requirements (20 units)
Five courses, three of which satisfy requirements for both the Bachelor of Arts and
Master of Arts degrees. Of these, 12 units are
fulfilled by both AHIS 500 and two electives/required courses: AHIS 495b (2 units),
AHIS 494 (4 units) and 4 additional units
taken at the 400 or 500 level.

### **Master of Arts Requirements**

Course Distribution

Courses will be at the 400 and 500 level. No seminars with the same course number can be taken for credit toward the Master of Arts.

REQUIRED COURSES	UNI	ΓS
AHIS 500	Methods and Theory of	
	Art History	4
AHIS 501	Problems in the History	
	and Theory of Collecting	
	and Display	4
AHIS 530*	Museum Studies:	
	Institutions and Collections	4

AHIS 541ab	Museum Studies	
	Exhibition	4-4
AHIS 550	Art, Business and the Law	4
AHIS 630	Museum Internship	1
Additional 400 and	d 500 level Art History	
seminars* (AHIS	495ab may be taken	
to satisfy 4 units o	f this requirement.)	8
		33

\*These courses satisfy requirements for both the Bachelor of Arts and Master of Arts degrees up to a maximum of 10 units (AHIS 530, AHIS 400 or 500 level, AHIS 495b). AHIS 495a satisfies requirements for the B.A.

The museum internship (AHIS 630) requires a full-time summer internship prior to the student's final year of study in the program.

The Master of Arts component consists of four parts: courses in art history, the museum studies courses, production of an exhibition and accompanying catalogue and an internship in a museum.

### Foreign Language Requirement

All M.A. candidates must pass a reading proficiency examination in one language, normally French or German. Substitutions may be made upon faculty recommendation and approval of the chair of art history when it is deemed appropriate to the student's course of study (i.e., Spanish, Italian, Chinese, Japanese, Greek, etc.). The language requirement should be completed by the end of the senior year.

A minimum grade point average of 3.0 is required for the Master of Arts degree. Each student's progress will be reviewed by the faculty at regular intervals throughout the student's enrollment in the program.

Art History 241

### Graduate Degrees

#### Admission

Admission to all programs, with the exception of the Museum Studies Certificate, is granted through the Graduate School in conjunction with the Department of Art History; all applicants must meet the requirements of both. Applicants at the M.A. level must hold a bachelor of arts with a major in art history, or the equivalent, from an accredited school. Applicants at the Ph.D. level must indicate an intended area of primary research and submit an M.A. thesis for consideration. Interviews are strongly encouraged. Applicants to the Museum Studies Certificate Program must hold an M.A. or Ph.D. in Art History from an accredited institution. Admission to this program is granted through the College of Letters, Arts and Sciences, Art History Department.

All applicants must complete the department's supplemental application form, which may be obtained by writing: Graduate Programs, Art History Department, Von KleinSmid Center 351, University of Southern California, Los Angeles, CA 90089-0047.

Complete details for all graduate programs can be found in the *Guidelines for Graduate Studies in Art History*, obtainable upon admission.

### **Areas of Concentration**

Greek and Roman Art and Archaeology, Medieval Art, Renaissance Art, Baroque Art, 18th and 19th Century European Art, Modern and Contemporary Art, Chinese and Japanese Art.

# Master of Arts, Art History (Museum Studies)

The Master of Arts in Art History (Museum Studies) is a two-year course of study leading to the Master of Arts in Art History, designed to meet the special training needs of students whose career goals are oriented toward professional work in art museums.

The degree requires a minimum of 33 units. The program consists of four parts: courses in art history, museum studies courses, production of an exhibition and accompanying catalogue and an internship in a museum.

### Foreign Language Requirement

All candidates must pass a reading proficiency examination in one language, normally French or German. Substitutions may be made upon faculty recommendation and approval of the chair of art history when it is deemed appropriate to the student's course of study (i.e., Italian, Chinese, Japanese, Greek, etc.). The language requirement should be completed by the end of the first year.

#### Course Distribution

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Courses will be at the 400 and 500 level. No seminars with the same course number can be taken for credit toward the master of arts. AHIS 500 normally must be taken in the first semester of study.

A minimum grade point average of 3.0 is required for the master of arts degree. Each student's progress will be reviewed by the faculty at regular intervals throughout the first and second years.

REQUIRED COURSES	UNITS
AHIS 500	Methods and Theory
	of Art History 4
AHIS 501	Problems in the
	History and Theory
	of Collecting and
	Display 4
AHIS 530	Museum Studies:
	Institutions and Collections 4
AHIS 541ab	Museum Studies
	Exhibition 4-4
AHIS 550	Art, Business and the Law 4
AHIS 630	Museum Internship 1
Additional 400- ar	nd 500-level art history
seminars	8
	33

The museum internship (AHIS 630) requires a full-time summer internship prior to the student's second year of the program.

# Certificate in the History of Collecting and Display

This program, open to University of Southern California Ph.D. students of art history as well as qualified students from other USC departments with written permission from their home department and the Department of Art History, is devoted to the study of the history of collecting and display of works of art and related materials across a broad chronological and geographical spectrum. The program provides a means of advancing knowledge about the presentation, circulation and consumption of works of art, as distinct from the more traditional art historical investigation of the conditions surrounding their production. Additionally, this program is designed to remedy a widely perceived disjunction between the ways art history is practiced in the museum and the academy. Each academic department will determine the number of units completed which may be applied to the student's graduate degree in that department.

REQUIRED COURSES	UN	IITS
AHIS 501	Problems in the History	
	and Theory of Collecting	
	and Display	4
AHIS 504	Museum Research	
	Assistantship	1
Two of the follow	ing courses:	
AHIS 502	Markets, Value and the	
	Institutions of Art	4
AHIS 503	Categories and Collections	4
AHIS 550	Art, Business and the Law	4
		13

### **Certificate in Museum Studies**

The Certificate in Museum Studies is a flexible program which may be completed in one year. It is designed for graduate students in all disciplines, or those already holding degrees in art history, who seek additional training for the museum profession.

The Museum Studies Certificate has three components: the core course (AHIS 530); the exhibition and catalogue (AHIS 541ab); the historical and theoretical component (AHIS 501 or 550). A total of 16 units is required.

REQUIRED COURSES	UNITS
AHIS 530	Museum Studies:
	Institutions and Collections 4
AHIS 541ab	Museum Studies
	Exhibition 4-4
One of the follow	ving courses:
AHIS 501	Problems in the History
	and Theory of Collecting
	and Display 4
AHIS 550	Art, Business and the Law 4
	16

### Master of Arts, Art History

The Master of Arts in Art History is a twoyear program of study administered in collaboration with the Graduate School, emphasizing course work and specialized research in the history of art. It is not offered as a terminal degree, but only en route to the Ph.D. A student may be eligible for the M.A. on leaving the program after two years. A minimum of 32 units is required for the degree. The opportunity to gain experience as a teaching assistant is available on a competitive basis.

Transfer work applicable to the M.A. program must have been completed within 10 years of the date of application.

### Degree Requirements

A minimum of 32 units, usually taken during a two-year period, is required for the Master of Arts in Art History, to be distributed as follows:

REQUIRED COURSE	ES .	UNITS
AHIS 500	Methods and Theory	
	of Art History	4
Additional 500-level courses		28
		32

### Course Distribution

Courses will be at the 500 level; 400-level courses may be accepted with approval of the graduate advisor. No more than two seminars with the same course number can be taken for credit toward the master of arts. AHIS 500 normally must be taken in the first semester of study.

### Foreign Language Requirement

All candidates must pass a reading proficiency examination in one language, normally French or German. Substitutions may be made upon faculty recommendation and approval of the chair of art history when it is deemed appropriate to the student's course of study (i.e., Italian, Chinese, Japanese, Greek, etc.). The language requirement should be completed by the end of the first year.

### **Doctor of Philosophy**

The Doctor of Philosophy in Art History program normally requires at least three years of course work and two years of dissertation research. Applicants may be admitted directly into the program after receiving the B.A.

Other applicants may already hold an M.A. in art history or the equivalent from USC or another accredited school.

A student with a master's degree in the history of art from USC must apply to the Ph.D. program, and will be evaluated on the basis of his or her overall performance. Every student will be subject to departmental screening procedures, which involve periodic review by the art history graduate committee. The committee may recommend at any time, based on a student's grades, evaluation of instructors or rate of progress toward the degree, that a student be dropped from the program. Such recommendations will become effective at the end of the semester during which the recommendation is made.

### Course Requirements

Master of Arts and Doctor of Philosophy units total 60. Up to 32 master of arts units from USC or 30 from other institutions may be transferred with approval of the faculty. Transfer work applicable to the Ph.D. program must have been completed within 10 years of the date of application. AHIS 500, or equivalent, is required of all graduate students. Four units are for work on the dissertation. (Two units of dissertation credit each semester — including summer — for a minimum registration period of two semesters.)

### Foreign Language Requirements

All candidates must pass reading proficiency examinations in a minimum of two languages, normally French and German or the requisite languages in Asian art. Substitutions and/or additions may be made with faculty recommendation and approval of the chair of the Art History department when appropriate to the student's program. Additional foreign language beyond the minimum may be required depending on the student's program of study. All language requirements must be completed by the end of the third year of study.

### Qualifying Examination

At the end of the second year, the student will nominate a five-member guidance committee for the qualifying examination that includes one member from outside the Department of Art History. The student must pass the qualifying examination in a major field and satisfy the requirements for the minor and outside fields. Forms for permission to take the qualifying examination must be submitted at least 60 days before the date of the scheduled examination. The written portion of the examination will be followed by an oral examination. The oral examination will be given to discuss in greater depth the student's knowledge of the dissertation proposal; the oral lasts approximately two hours. After passing the qualifying examination, the student will be admitted to candidacy for the Ph.D.

### Dissertation

Following the completion of the qualifying exam the guidance committee will be reduced to three members, including one member from outside the department, who will guide and finally approve the dissertation.

### Courses of Instruction

### ART HISTORY (AHIS)

The terms indicated are *expected* but are not *guaranteed*. For the courses offered during any given term, consult the *Schedule of Classes*.

**001x Web Site Authoring and Design (2, Sm)** Course focuses on the World Wide Web as a teaching tool. Students will construct a Web site as a final project, utilizing a hands-on computer laboratory. Not available for degree credit. Graded CR/NC.

### 100 Introduction to Visual Culture (4, FaSp)

The description and analysis of various forms of visual culture, including both mass media and "high" art representations, both Western and non-Western images.

### 120g Foundations of Western Art (4, Fa)

European art in its historical, cultural and social context. Painting, sculpture and architecture presented within a theoretical framework that introduces art history as a discipline.

**121g** Art and Society: Renaissance to Modern (4, Sp) European art and its legacy in the Americas. Painting, sculpture, architecture and other visual media considered in relation to social and cultural history.

**123** Introduction to Art History: Form, Culture, and Communication (4, Fa) Survey of the major monuments of Western art, Renaissance to the Modern; emphasis on the function of form in the communication of cultural values. Open to filmic writing majors only.

### 125g Arts of Asia: Antiquity to 1300 (4, Fa)

An introduction to the major art forms and monuments of religious art in India, Southeast Asia, China, and Japan from prehistory to 1300.

**126g Introduction to Asian Art: 1300 to the Present (4, Sp)** A survey of the art and architecture of India, China, Korea, and Japan from 1300 to the present.

201g Digging into the Past: Material Culture and the Civilizations of the Ancient Mediterranean (4, Irregular) A broad survey, covering some 8,000 years and focusing on the material culture of the ancient world in a historical and social context.

### 220g Medieval Visual Culture (4, FaSp)

Medieval visual culture as an introduction to the Christian heritage of western civilization and to the interaction of Church and state from the 3rd to the 13th century. Art History 243

- **230** Art and Culture in Early Modern Europe (4, FaSp) Survey of European art from the 15th to the 17th century. Case studies in Renaissance and Baroque art with emphasis on artists in major urban centers.
- 250m Modernity and Difference: Critical Approaches to Modern Art (4, Irregular) Consideration of various categories of "The Modern" as they have been constructed in Western art of the late 19th and 20th centuries.
- **255g Culture Wars: Art and Social Conflict** in the USA, 1900-Present (4, Sp) Examination of social conflicts and political controversies in American culture through the lens of visual art and photography.
- **270 L.A. Now: Contemporary Art in Los Angeles (4)** Explores the production, display and critical reception of contemporary art, taking Los Angeles as its laboratory.
- **282 Korean Art (4, Sp)** Introduction to the richness and complexity of artistic expression in Korean art through the study of painting, sculpture, ceramics, and architecture through the 19th century.
- **284g** Art in Context: Introduction to the Chinese Visual World (4, Sp) A survey of Chinese art from antiquity to the early modern period, emphasizing the context in which art objects were produced, displayed, circulated and consumed.
- **304m Italian Renaissance Art: Old Masters and Old Mistresses (4, FaSp)** An introduction to Italian Renaissance art with emphasis on the role of gender and sexuality in the creation of "masterpieces."
- **319** Mesoamerican Art and Culture (4, FaSp) Introductory survey of painting, sculpture, and architecture of Mesoamerica before the Spanish conquest presented in their social, cultural, and political contexts.
- **320 Aegean Archaeology** (Enroll in CLAS 323)
- **321** Greek Art and Archaeology (4, Fa) An introductory survey of artistic works and monuments of ancient Greece from the Geometric through the Hellenistic period (c. 1000-30 B.C.).
- **322** Roman Art and Archaeology (4, Sp) An introductory survey of the most important works of art and monuments of ancient Rome from the beginnings of the city through Constantine (8th century B.C. to 4th century A.D.).

- **330 Medieval Art (4, FaSp)** Introductory survey of art and architecture of Christianity from 300-1300; biblical themes and classical traditions; cultural and historical analysis of medieval art.
- **343 Renaissance Art (4, FaSp)** Painting, sculpture and architecture in Renaissance Europe, north and south, from 1300-1600. (Duplicates credit in former AHIS 340 and AHIS 342.) *Recommended preparation:* AHIS 120 or AHIS 121.
- **344** Baroque Art (4, FaSp) Painting, sculpture and architecture in 17th century Europe, north and south. (Duplicates credit in former AHIS 353 and AHIS 356.)
- **357** History of French Art 1860-1920 (4, Sp) (Paris Semester only) Exploration of the main movements of late 19th and early 20th century French art using the resources of Parisian museums and monuments. Visits to Paris museums are an integral part of the course work. *Recommended preparation:* familiarity with modern European history.
- **361** British Art, 1730-1890 (4) A survey of art and architecture in Britain from the age of Hogarth to Art Nouveau. Among the artists studied are Constable, Turner, and the Pre-Raphaelites. (Duplicates credit in former AHIS 461.)
- **363m Race, Gender, and Sexuality in Contemporary Art (4)** Focuses on issues of race, gender, and sexuality in American art of the last three decades. *Recommended preparation:* AHIS 121.
- **364m Myths, Arts, Realities: Visual Culture in California, 1849 to the Present (4, Fa)** Diverse interpretations of "the California experience and lifestyle" in paintings, sculpture, photography, cinema, public art and popular culture of the last 150 years.
- **365m African American Art (4, FaSp)** A survey of the fine arts produced by people of African descent in the United States from the nation's inception in the late 18th century until the contemporary movement.
- **368 Modern Art I: 1700-1850 (4, FaSp)** A cultural and historical examination of European art and architecture from 1700 (Rococo) to 1850 (Realism), focusing on the beginnings of modernism in the age of revolution. (Duplicates credit in former AHIS 360.)
- **369 Modern Art II: 1851-1940 (4)** An examination of European modern art and design, focusing on industrialization, urbanism, primitivism, colonialism, and their relations to the arts.

- **370 Modern Art III: 1940 to the Present (4, Irregular)** Questions of social engagement and political address structure this examination of major movements in art since 1940. (Duplicates credit in former AHIS 372.)
- **373** History of Photography (4, Irregular) Explores key moments in the history of photography from its invention to the present. Issues include modernity and mass culture; photography as a fine art; technologies of vision.
- **376** Introduction to African Art (4, FaSp) An introduction to sub-Saharan art (sculpture, textiles, architecture, masquerades, performances and body arts) in the context of issues of function, gender, politics and ethnic diversity.
- **377** Spanish Colonial Art and Architecture (4, FaSp) Spanish Colonial Revival arts and architecture examined in view of Spanish, Mexican and Indian ethnic sources and regional movements of the 1920s, '30s and '70s.
- 378 Modern Russian Art (4) (Enroll in SLL 378)
- **384** Early Chinese Art (4, FaSp) A survey of Chinese architecture, ceremonial bronzes, sculpture, ceramics and painting from antiquity through the T'ang Dynasty.
- **385** Later Chinese Art (4, FaSp) A survey of Chinese painting from 900 to the present, emphasizing the role of painting within the context of Chinese intellectual history.
- **386** Early Japanese Art **(4, FaSp)** A survey of Japanese Buddhist and secular architecture, sculpture and painting from antiquity to 1333, stressing the relation of art to cultural context.
- **387** Later Japanese Art (4, FaSp) A survey of Japanese architecture, garden design, ceramics, and painting from 1333 to the present, stressing the role of art within cultural context.
- **388 Early Art of India and Southeast Asia (4, FaSp)** A survey of Buddhist and Hindu art of the Indian subcontinent and Southeast Asia from antiquity to 1300.
- **389** Later Indian Art: Indo-Islamic Architecture and Painting (4, FaSp) A survey of Indo-Islamic architecture and Indian painting in the Mogul, Rajput and Pahari styles, stressing the relation between art and cultural context.
- **400 Undergraduate Apprenticeship (2, max 4, FaSpSm)** The opportunity to work in cultural institutions under the supervision of professionals in art history disciplines. Available to upper division art history majors only.

- **420 Studies in Ancient Art (4, max 16, Irregular)** In-depth exploration of specified topics within the area of Ancient art and architecture.
- 425 Interdisciplinary Studies in Classical Art and Archaeology: Research and Methodology (4, max 8, Irregular) Each year a different topic in Greek and Roman art and archaeology will be examined in depth. Emphasis on interdisciplinary methodological approaches and research techniques.
- **430 Studies in Renaissance Art (4, FaSp)** Indepth exploration of specified topics within the area of Renaissance art and architecture. (Duplicates credit in former AHIS 444 and AHIS 446.) *Recommended preparation:* AHIS 230 or AHIS 330.
- **433 Studies in Medieval Art (4, max 16, FaSp)** In-depth exploration of specified topics within the area of Medieval art and architecture.
- **449 History of Prints and Drawings (4, Irregular)** Aspects of the history of the graphic arts; stylistic and technical considerations may both be included or specific areas stressed at the choice of the instructor.
- **453 Studies in Baroque Art (4, max 16, FaSp)** In-depth exploration of specified topics within the area of 17th century art and architecture. *Recommended preparation:* AHIS 230 or AHIS 344.
- **460 Studies in 18th and 19th Century Art (4, max 8, FaSp)** In-depth exploration of specified topics within the area of 18th and 19th century art and architecture.
- **465 Studies in American Art (4, max 8, FaSp)** In-depth exploration of a specified topic in the history of American art.
- **466 Studies in the Decorative Arts and Design (4, FaSp)** Exploration of a specified topic in the history of the decorative arts and design in Europe and America.
- **467 19th Century French Art (4, FaSp)** Exploration of the main movements in 19th century French art, using the city of Paris and its museums. Field trips in conjunction with classwork. Advisement is required for credit for art history majors.
- **468 Studies in Modern Art (4, max 8, Irregular)** In-depth exploration of a specified topic in art of the late 19th and/or early 20th centuries.
- **469 Critical Approaches to Photography (4, Irregular)** Selected problems in the history, theory and criticism of photography; recent scholarship considered in relationship to specific photographers and photographic images.

**470 Studies in Contemporary Art (4, FaSp)** In-depth exploration of specified topics

In-depth exploration of specified topics within the area of contemporary art and architecture.

- **475m Blackness in American Visual Culture (4, FaSp)** An historical overview of how people of African descent have been represented visually in American culture.
- **481 Studies in Japanese Art (4, max 16, FaSp)** In-depth exploration of specified topics within the area of Japanese art and architecture.
- **484 Studies in Chinese Art (4, max 16, FaSp)** In-depth exploration of specified topics within the area of Chinese art and architecture.
- **490x Directed Research (2-8, max 8, FaSp)** Individual research and readings. Not available for graduate credit. *Prerequisite:* departmental approval.
- **494** Undergraduate Proseminar in Art History (4, Fa) Historiography and methodology: introduction to techniques of research and writing. Required of all art history majors, preferably in the junior year.
- **495ab Undergraduate Honors Thesis (2-2, FaSp)** Research and writing of original thesis under guidance of faculty member. Departmental approval.
- **496** Paintings in the Prado Museum **(4, Irregular)** (Madrid Center only) From Romanticism through Goya in relation to European and Mediterranean antecedents using paintings in the Prado Museum. Field trips in conjunction with classwork.
- **499** Special Topics (2-4, max 8, FaSp) Comprehensive exploration of particular aspects of the history of art.
- **500** Methods and Theory of Art History (4, Fa) Methodologies, theories and critical traditions that have shaped the discipline. Emphasis will vary depending on faculty. Required of all first-year M.A. and Ph.D. candidates. Open to graduate or limited status students in art history only.
- **501** Problems in the History and Theory of Collecting and Display (4, FaSp) Explores the history of patronage, collecting and display in the private and the public spheres (e.g., salons, galleries, museums, and international expositions).
- **502** Markets, Value and the Institutions of Art (4) Intensive examination of economic, societal, and aesthetic frameworks in which art was sold, bought, exhibited and reviewed. Explores how perceptions of art and value were shaped.

- **503** Categories and Collections (4) How collections are organized by category e.g., period, culture, materials, or mode of production. Examines collecting protocols, historiography and modes of collecting and viewing associated with that category.
- **504 Museum Research Assistantship (1)** Working within an institution with a collection and reflecting, in class meetings, upon how collections are formed, shaped and used.
- **505** Seminar in Feminist Theory and Visual Culture (4, FaSp) Recent feminist scholarship in art history, cultural studies, film theory. Feminist theory in relation to art from the late 19th and 20th centuries. Occasional film screenings.
- 510 Seminar in Ancient Art (4, max 16, FaSp)
- 511 Seminar in Medieval Art (4, max 16, FaSp)
- **512** Seminar in Renaissance Art (4, max 16, FaSp) *Recommended preparation:* relevant languages.
- 513 Seminar in Baroque Art (4, max 16, FaSp)
- 514 Seminar in 18th and 19th Century European Art (4, max 16, FaSp)
- 515 Seminar in Contemporary Art (4, max 16, FaSp)
- **517** Seminar in Korean Art (4, max 8, FaSp) In-depth exploration of a specified topic in the history of Korean art.
- 518 Seminar in Chinese Art (4, max 16, FaSp)
- 519 Seminar in Japanese Art (4, max 16, FaSp)
- **520 Seminar in Modern Art (4, max 16, FaSp)** In-depth exploration of a specified topic within the area of European art of the late 19th and early 20th centuries.
- **521 Seminar in Modern German Art (4, max 8, FaSpSm)** In-depth exploration of a specific topic in modern German art of the 19th and early 20th centuries.
- **522** Writing (and) the History of Art (4, FaSpSm) Examination of how various forms of writing and different contexts of presentation shape the visual experience of art and the understanding of its history, encouraging students to think critically about how to develop a voice of their own.

Biological Sciences 245

# 524 Readings in Greek and Roman Authors on Ancient Art and Monuments (4, max 8)

Focuses on readings of ancient Greek and Roman authors writing on Greek and Roman art, monuments and topography. Topics vary from year to year. Departmental approval.

**525 Seminar in American Art (4, FaSp)** Indepth exploration of a specified topic in the history of American art.

**530 Museum Studies: Institutions and Collections (4, Fa)** Introduction to the art museum, its history, purpose, philosophy, programs, and administration. Topics include collection management, conservation and restoration, preparation and installation, curatorial functions and educational programming. Taught with the assistance of museum professionals and trustees. Numerous field trips required. Admission to the Museum Studies Program required.

# **540 Museum Studies Exhibition Colloquium (4, Sp)** Seminar for Museum Studies Exhibition. In-depth study for preparation and selec-

tion. In-depth study for preparation and selection of pieces to include in the Museum Studies Exhibition. Topic determined by faculty committee.

### 541ab Museum Studies Exhibition (4-4,

**FaSp)** Preparation and mounting of a professional exhibition. *a:* Preparation of catalogue; *b:* mounting and dismantling of exhibition.

### 550 Art, Business and the Law (4, FaSp)

Investigation of the financial, legal and ethical dimensions of the collection and display of cultural property by private and public institutions. Participants will explore the legal and ethical issues related to the public use of museums and visual reproductive technologies.

### 590 Directed Research (2-12, FaSpSm)

Research leading to the master's degree. Maximum units which may be applied to the degree to be determined by the department. Graded CR/NC.

594abz Master's Thesis (2-2-0, FaSpSm)
Credit upon acceptance of thesis Graded

Credit upon acceptance of thesis. Graded IP/CR/NC.

### 599 Special Topics (2-4, max 8, Irregular)

Comprehensive exploration of particular aspects of the history of art. Departmental approval.

**630 Museum Internship (1, Sm)** Supervised, professional training with a principal museum, during third year of study in the Museum Studies Program. *Prerequisite:* successful completion of all other requirements for the Museum Studies Program.

**794abcdz Doctoral Dissertation (2-2-2-0, FaSpSm)** Credit on acceptance of dissertation. Graded IP/CR/NC.

### **Bioethics**

Coordinator: William May, Ph.D. (323) 671-7699 Email: wmay@chla.usc.edu

The bioethics minor is designed to inform students of the new issues facing the health professions and society as a result of advances in medicine and changing attitudes toward health care and delivery. It encourages and prepares students to analyze and understand the ethical and moral dimensions of problems about human experimentation, genetic screening, and death and dying. It also

explores how cultural and historical factors contribute to the ways in which our society deals with health and health care provision. The faculty of the program are drawn from several schools and departments; together they provide a cross-disciplinary perspective.

### The Bioethics Minor

Students who have at least a 3.25 GPA may apply for admission to the program. Application forms may be obtained from the School of Religion, Room 328, Taper Hall of Humanities.

Four courses are required for the bioethics minor; not less than a grade of B must be earned in each course. Students are required to take REL 460 and three courses from the following: GERO 437, GERO 475, HIST 330, HP 422, OT 375, POSC 333, REL 319, REL 360, SOCI 475.

For completion, 16 upper division units are required.

### **Biological Sciences**

Hancock Foundation Building 103 (213) 740-1109 FAX: (213) 740-8123 Email (undergraduate programs): biodept@usc.edu Email (graduate programs): marinebio@usc.edu, molecule@usc.edu, neurosci@usc.edu Chair: David Caron, Ph.D.

### Faculty

ARCO/William F. Kieschnick Chair in the Neurobiology of Aging and University Professor: Caleb E. Finch, Ph.D. Ester Dornsife Chair in Biological Sciences and Distinguished Professor: Norman Arnheim, Ph.D.

George and Louise Kawamoto Chair in Biological Sciences: Simon Tavaré, Ph.D.

William M. Keck Chair in Biological Sciences: Richard F. Thompson, Ph.D. (Psychology)

McCulloch-Crosby Chair in Marine Biology: Jed Fuhrman, Ph.D.

USC Associates Chair in Natural Sciences and University Professor: Michael S. Waterman

William and Julie Wrigley Chair in Environmental Studies: Douglas G. Capone, Ph.D.

Milo Don and Lucille Appleman Professorship in Biological Sciences: Larry Swanson, Ph.D.

Paxson H. Offield Professorship in Fisheries Ecology: Dennis Hedgecock, Ph.D.

Gabilan Assistant Professorship in Biological Sciences: Michelle Arbeitman, Ph.D.

Professors: Michael A. Arbib, Ph.D. (Computer Science); Robert F. Baker, Ph.D.; Gerald Bakus, Ph.D.; Michel Baudry, Ph.D.; Sarah Bottjer, Ph.D.; William Louis Byerly, Ph.D.; David Caron, Ph.D.; Myron F. Goodman, Ph.D.; Albert A. Herrera, Ph.D.\*(Executive Director of College Advising Office); Dale Kiefer, Ph.D.; Chien-Ping Ko, Ph.D.; Donal T. Manahan, Ph.D. (Dean of Research); William O. McClure, Ph.D.\*; Anthony F. Michaels, Ph.D.; John A. Petruska, Ph.D.; Cornelius W. Sullivan, Ph.D. (Vice Provost for Research); Miriam M. Susskind, Ph.D.; Alan Watts, Ph.D.

Associate Professors: Xiaojiang Chen, Ph.D.; Susan Forsburg, Ph.D.; Magnus Nordborg, Ph.D.; Michael Quick, Ph.D.; Peter M. Shugarman, Ph.D.\*; Fengzhu Sun, Ph.D.; John Tower, Ph.D.

Assistant Professors: Oscar M. Aparicio, Ph.D.; Donald Arnold, Ph.D.; Samantha Butler, Ph.D.; Ting Chen, Ph.D.; Suzanne Edmands, Ph.D.; Steven Finkel, Ph.D.; Andrew Gracey, Ph.D.; Judith Hirsch, Ph.D.; Lei Li, Ph.D.; Emily Liman, Ph.D.; Jeffrey Wall, Ph.D.; Xianghong Zhou, Ph.D.; Wiebke Ziebis, Ph.D.

Adjunct Professors: Luis Chiappe, Ph.D.; Kirk Fitzhugh, Ph.D.; John Heyning, Ph.D.; Joel W. Martin, Ph.D.

Adjunct Associate Professors: Gordon Hendler, Ph.D.; Richard Pieper, Ph.D.

Adjunct Assistant Professors: Kenneth Johnson, Ph.D.; Christine E. Thacker, Ph.D.; Angel Valdes, Ph.D.; Xiaoming Wang, Ph.D.

Research Professor: Melvin Lyon, Ph.D.

Research Associate Professors: Linda Duguay, Ph.D.; Burton H. Jones, Ph.D.

Research Assistant Professors: Mihail Bota, Ph.D; Gully Burns, Ph.D.; Myrna Jacobson, Ph.D.; Radu Popa, Ph.D.; Yoshie Sugiura, Ph.D.

Emeriti Professors: Bernard C. Abbott, Ph.D.\*; Michael Appleman, Ph.D.; James W. Bartholomew, Ph.D.; Robert Bils, Ph.D.; Robert M. Chew, Ph.D.; Richard Deonier, Ph.D.; Richard C. Dugdale, Ph.D.; Arnold S. Dunn, Ph.D.; Walter E. Martin, Ph.D.; John L. Mohr, Ph.D.; Basil G. Nafpaktitis, Ph.D.; Edwin M. Perkins, Jr., Ph.D.; Thomas R. Pray, Ph.D.; Russel Zimmer, Ph.D.

\*Recipient of university-wide or college teaching award.

### **Academic Program Staff**

Directors of Instructional Laboratories: Shelley Cao, Ph.D.; Celeste Chong-Cerrillo, Ph.D.; Eric Price, Ph.D

#### **Programs**

The Department of Biological Sciences has research faculty with specialties in three disciplines: marine environmental biology, molecular and computational biology, and neurobiology. A diversity of upper division undergraduate and graduate courses permits biology majors to choose an emphasis in any of these three disciplines.

The department offers both B.A. and B.S. degrees in biological sciences and an honors program in which a student can earn either a B.A. or a B.S. degree in biological sciences with honors. The B.S. in biochemistry is offered as a joint program with the Department of Chemistry. The honors program is available to students who maintain a GPA of 3.5 in the sciences and who have completed their freshman year. The honors program includes research opportunities, seminars and thesis preparation courses. Applications for the Honors Program are available in Hancock 105.

Undergraduates in biological sciences have the opportunity to become involved in laboratory or field research by taking research courses for some of their elective units.

At the graduate level, the department offers challenging degree programs that lead to an M.S. and/or Ph.D. in Biology (with options in either marine environmental biology, neurobiology/cell biology or integrative and evolutionary biology) and an M.S. and/or Ph.D. in Molecular and Computational Biology.

### **Honor Society**

The Department of Biological Sciences offers membership in Phi Sigma, a national honor society, to selected biology majors (Alpha Alpha Chapter at USC.) Phi Sigma is devoted to the promotion of research and academic excellence in the biological sciences. Students with a GPA above 3.0 who have interest in research and have completed core requirements for the first two years in biological sciences are eligible. Major activities range from presentation of papers by members and lectures by outside speakers to field trips, laboratory demonstrations and joint research projects. The advisor is Professor John Petruska, Ph.D., SHS 561, (213) 740-5189.

#### Catalina Semester

This new and expanded program is specifically designed for both environmental studies and biological sciences majors and for students in any field who want to minor in environmental studies. The semester is sponsored by the USC Wrigley Institute for Environmental Studies and held at USC's Philip K. Wrigley Marine Science Center on Catalina Island each spring semester. The courses are taught by USC faculty and are specialized to take advantage of the unique facilities and settings of Catalina Island. Students generally enroll in 16 units.

Students will live on Catalina Island for the entire semester (with two breaks). Rates for room and board at the USC Wrigley Marine Science Center are comparable to those on campus.

For more information, students should contact their advisors or the USC Wrigley Institute Offices at Allan Hancock Foundation 232 on the University Park campus, (213) 740-6780.

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### Undergraduate Degrees

#### Advisement

Advisement in the Department of Biological Sciences is required each semester. First semester freshman and transfer advisement takes place during orientation. Advisement in all remaining semesters takes place during the pre-registration period. The undergraduate coordinator forwards advisement appointment information each semester to all students in biological sciences and biochemistry.

## Pre-Medical and Other Pre-Professional Preparation

The department offers specially planned courses within the biological sciences to prepare students for admission to professional schools (medicine, dentistry, veterinary science, occupational therapy, physical therapy, pharmacy, optometry, public health), paramedical sciences (medical technology, physician's assistant, clinical and public health microbiology, clinical biochemistry), naturalist and environmental positions in the public and private sectors, jobs in industry (biotechnology), and graduate study (basic biological and biomedical fields). With the proper selection of courses under the guidance of the Department of Biological Sciences and the USC Rossier School of Education, the B.S. degree satisfies the California requirements for secondary school teaching in the life sciences.

# Undergraduate Programs in Biological Sciences

The programs outlined below are available only to students who entered USC in fall 2002 or later.

Those students majoring in biological sciences or majoring/minoring in other programs requiring the biological sciences core who entered USC prior to fall 2002 will complete the degree requirements in the catalogue year of their admission. Students in biological sciences admitted prior to fall 2002 who wish to pursue the new program requirements instead of the requirements in the catalogue year of their admission must meet with a biological sciences department academic advisor to receive preapproval to update their catalogue year. If necessary, a student may petition for new core courses to satisfy former core course requirements. Such petitions will be reviewed on a case-by-case basis.

### **Bachelor of Science in Biological Sciences**

The general education, writing, language and diversity requirements for a College of Letters, Arts and Sciences degree are applicable.

MAJOR CORE COL	JRSES, LOWER DIVISION	UNITS
BISC 120L	General Biology:	
	Organismal Biology ar	nd
	Evolution, or	
BISC 121L	Advanced General Bio	ology:
	Organismal Biology ar	nd
	Evolution	4
BISC 220L	General Biology: Cell	
	Biology and Physiolog	gy, or
BISC 221L	Advanced General Bio	ology:
	Cell Biology and	
	Physiology	4

MAJOR CORE COURSES, UPPER DIVISION		UNITS
BISC 320L	Molecular Biology	4
BISC 325	Genetics	4
BISC 330L	Biochemistry	4

# COLLATERAL SCIENCES CORE COURSES, LOWER DIVISION UNITS

CHEM 105aLbL	General Chemistry, or	
CHEM 115aLbL	Advanced General	
	Chemistry 4	l-4
MATH 125	Calculus I	4
MATH 208x	Elementary Probability	
	and Statistics	4
PHYS 135abL	Physics for the Life	
	Sciences (4-4), or	
PHYS 151L	Fundamentals of	
	Physics I: Mechanics	
	and Thermodynamics, and	4
PHYS 152L	Fundamentals of	
	Physics II: Electricity	
	and Magnetism	4

# COLLATERAL SCIENCES CORE COURSES, UPPER DIVISION UNITS

CHEM 322abL	Organic Chemistry, or	
CHEM 325abL	Organic Chemistry	4-4

Upper Division Major Requirements

Twenty units of upper-division BISC course work available for major credit are required. At least two courses in the upper-division electives must carry a lab ("L") or be 490. No more than 4 units of BISC 490x may be used to fulfill the upper-division elective requirement. In addition, no more than two seminars (BISC 460 to BISC 462), totaling 4 units, may be applied to the upper-division elective requirement.

Total required units: 128 Free elective units: 12-16

### Scholarship in Major Subject

The department requires that students receive a grade no lower than C- in their five core courses. They must maintain a 2.0 GPA

in the upper-division biology and chemistry courses required for the major, as well as an overall 2.0 GPA.

### **Bachelor of Arts in Biological Sciences**

The general education, writing, language and diversity requirements for a College of Letters, Arts and Sciences degree are applicable.

MAJOR CORE COL	JRSES, LOWER DIVISION	UNITS
BISC 120L	General Biology:	
	Organismal Biology an	d
	Evolution, or	
BISC 121L	Advanced General Bio	logy:
	Organismal Biology an	d
	Evolution	4
BISC 220L	General Biology: Cell	
	Biology and Physiolog	y, or
BISC 221L	Advanced General Bio	logy:
	Cell Biology and	
	Physiology	4

MAJOR CORE COURSES, UPPER DIVISION		UNITS
BISC 320L	Molecular Biology	4
BISC 325	Genetics	4
BISC 330L	Biochemistry	4

COLLATERAL SCIENCES CORE			
COURSES, LOWER DIVISION			TS
CHEM 105aLbL	General Chemistry, or		
CHEM 115aLbL	Advanced General		
	Chemistry	4	-4
MATH 125	Calculus I		4
PHYS 135abL	Physics for the Life		
	Sciences (4-4), or		
PHYS 151L	Fundamentals of		
	Physics I: Mechanics		
	and Thermodynamics,	and	4
PHYS 152L	Fundamentals of		

COLLATERAL SCIENCES CORE			
	COURSES, UPPER DIVISION		UNITS
	CHEM 322abL Organic Chemistry, or		

Physics II: Electricity

and Magnetism

4

4-4

### Upper Division Major Courses

CHEM 325abL Organic Chemistry

Eight units of upper-division BISC course work available for major credit are required. No more than 4 units of BISC 490x may be used to fulfill the upper-division elective requirement. In addition, no more than two seminars (BISC 460 to BISC 462), totaling 4 units, may be applied to the upper-division elective requirement.

It is expected that students will take 100-level BISC core courses during the first year, two 300-level BISC core courses during the second year, and the remaining core courses and the 300- or 400-level BISC major elective courses during the third and fourth years.

Total required units: 128 Free elective units: 24

#### Scholarship in Major Subject

The department requires that students receive a grade no lower than C- in their five core courses. They must maintain a 2.0 GPA in the upper-division biology and chemistry courses required for the major, as well as an overall 2.0 GPA.

### **Honors Program in Biological Sciences**

The department offers an honors program to outstanding students already pursuing studies for the B.A. or B.S. degree in Biological Sciences. This program offers students an opportunity to participate in undergraduate research, experience in writing an honors thesis summarizing the completed research, and experience in an honors seminar. Honors students are required to take two semesters of BISC 493x Honors Seminar (1 unit/semester) and one semester of BISC 494x Honors Thesis (2 units) in addition to fulfilling all requirements of the B.A. or B.S. degree. Honors students must also choose BISC 490x as one of their upper division electives. This program leads to the designation on the transcript of Bachelor of Arts or Bachelor of Science in Biological Sciences with Honors.

### Honors Admission Requirements

Students may apply to the department for admission to the honors program after having completed at least one year of work at USC with a minimum GPA of 3.5 in all science and math courses required for the major.

Upper Division Major Elective Courses BISC 490x and a minimum of three, fourunit upper-division BISC elective courses are required; two courses may be 300-level core courses not taken in satisfaction of the core requirement.

Honors Scholarship Requirements
For continuation in the honors programs, students must maintain a minimum GPA of 3.5 in the sciences and mathematics courses required for the major.

### **Bachelor of Science in Biochemistry**

This degree is offered jointly by the Departments of Biological Sciences and Chemistry. The general education, writing, foreign language and diversity requirements for a degree in the College of Letters, Arts and Sciences are applicable.

Students must complete each required course in the Departments of Biological Sciences and Chemistry with a grade of C- or better, and maintain an overall GPA of 2.0 or better in all attempted courses in the two departments in the regular degree program.

REQUIRED COURSES, LOWER DIVISION UNITS		UNITS
BISC 120L	General Biology: Organismal Biology and	
	Evolution, or	
BISC 121L	Advanced General Biolo	gv:
	Organismal Biology and	0,
	Evolution	4
BISC 220L	General Biology: Cell	
	Biology and Physiology,	or
BISC 221L	Advanced General Biolo	gy:
	Cell Biology and	
	Physiology	4
CHEM 105aLbL	General Chemistry, or	
	Advanced General	
	Chemistry	4-4
MATH 125	Calculus I	4
MATH 126	Calculus II	4
MATH 208x	Elementary Probability	
	and Statistics, or	
MATH 226	Calculus III	4
PHYS 135abL	Physics for the Life	4-4
	Sciences, or	
PHYS 151L	Fundamentals of	
	Physics I: Mechanics	
	and Thermodynamics	4
PHYS 152L	Fundamentals of	
	Physics II: Electricity	
	and Magnetism	4

REQUIRED COURSES, UPPER DIVISION		UNITS
BISC 320L	Molecular Biology	4
BISC 330L	Biochemistry	4
BISC 403	Advanced Molecular	
	Biology	4
BISC 435	Advanced Biochemistry	4
CHEM 300L	Analytical Chemistry	4
CHEM 322abL	Organic Chemistry, or	
CHEM 325abL	Organic Chemistry	4-4
CHEM 430a	Physical Chemistry, or	
CHEM 432	Physical Chemistry for t	he
	Life Sciences	4

Eight units of upper division course work available for biological sciences or chemistry B.S. major credit are required.

### **Honors Program in Biochemistry**

A B.S. degree with honors in biochemistry is available for eligible students. In meeting program requirements students must submit an application and satisfy the objectives of one of the program options noted below.

Option One: Biochemistry Honors with Chemistry Research

Students seeking admission into option one must have at least junior standing (64 units) with an overall USC GPA of 3.5 or better in at least 32 units at USC, and have a 3.5 or better in at least 16 units in biological sciences and chemistry. Students in this option must complete 8 units of research (CHEM 490) under the supervision of chemistry faculty with the results of research being described in an undergraduate thesis reviewed and approved by a faculty committee. To graduate with honors under this option students must earn a GPA of 3.5 in all biological sciences and chemistry courses required for the major.

### Option Two: Biochemistry Honors with Biology Research

Students seeking admission into option two must have at least sophomore standing (32 units) with an overall USC GPA of 3.5 or better both cumulatively and in 16 units in biological sciences and chemistry. Students in this option must complete 4 units of research (BISC 490) under faculty in biological sciences or under faculty in any other department approved by biological sciences. In addition, students must complete two semesters of Honors Seminar (BISC 493), 1 unit each, and one semester of Honors Thesis (BISC 494), 2 units. To graduate with honors under this option students must earn a GPA of 3.5 in all sciences and mathematics courses required for the major.

Upon graduation, transcripts of students following either option will be noted, "Bachelor of Science with Departmental Honors."

### Minor in Biotechnology

The College of Letters, Arts and Sciences departments of biological sciences and chemistry and the Marshall School of Business jointly offer the cross-departmental minor in biotechnology. This minor brings essential knowledge in the basic sciences together with the corporate skills needed in a rapidly growing industry. The minor is especially well suited for the business, biological sciences, chemistry or engineering student seeking a career in business and/or the biomedical/bio-technical sciences.

This minor requires a varying number of units beyond major requirements, depending upon the student's major program of study: biological sciences (B.A. or B.S.), 18 additional units; business (B.S.), 28 additional units; chemistry (B.S.), 26 additional units; chemistry (B.A.), 30 additional units.

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Students in other majors may be required to complete up to 46 units for the minor, depending on whether their major includes any of the minor requirements or their prerequisites.

Please see a biological sciences or business advisor for specific program requirements.

REQUIRED COURSES	UNI	TS
Biological Sciences		
BISC 220L	General Biology: Cell	
	Biology and Physiology, or	
BISC 221L	Advanced General Biology:	
	Cell Biology and	
	Physiology	4
BISC 320L	Molecular Biology	4
BISC 330L	Biochemistry	4
BISC 406L	Biotechnology	4
Recommended: B BISC 450L	BISC 300L, BISC 403,	

Recommended: CHEM 322bL, CHE 489

CHEM 105aLbL General Chemistry

CHEM 322aL Organic Chemistry

Chemistry

Business		
ACCT 410x	Accounting for Non-Busin	ness
	Majors, or	4
BUAD 250ab*	Core Concepts of	
	Accounting Information	(4-4)
BUAD 215x	Foundations of Business	
	Finance, or	
BUAD 306*	Business Finance	4
BUAD 403	Legal Environment of	
	Business	4

\*Students pursuing the business degree must enroll in BUAD 250ab and BUAD 306.

Choose one from:		
BUAD 304	Organizational Behavior	4
BUAD 307	Marketing Fundamentals	4

Recommended: MATH 118x or MATH 125 and MATH 208x or MATH 218

### Minor in Natural Science

The minor in natural science will first provide students with a foundation in the basic sciences of physics, chemistry and biology. Each student will then build on this by selecting a variety of electives to meet individual scientific interests and academic goals. Eighteen units toward the natural science minor must be completed at USC. This minor is not available to majors in the natural sciences or engineering.

REQUIRED COURSES	S (22 UNITS)	UNITS
Any five courses	from among:	
BISC 120L	General Biology: Organi	smal
	Biology and Evolution,	or
BISC 121L	Advanced General Biolo	gy:
	Organismal Biology and	
	Evolution	4
BISC 220L	General Biology: Cell	
	Biology and Physiology,	or
BISC 221L	Advanced General Biolo	gy:
	Cell Biology and	
	Physiology	4
CHEM 105aL	General Chemistry, or	
CHEM 115aL	Advanced General	
	Chemistry	4
CHEM 105bL	General Chemistry, or	
CHEM 115bL	Advanced General	
	Chemistry	4
PHYS 135aL	Physics for the Life	
	Sciences	4
PHYS 135bL	Physics for the Life	
	Sciences	4
And a capstone of	course:	
BISC 321x	Science, Technology	
	and Society	2

Elective Course Requirement (8 units)
Any two courses chosen from among those offered for major credit by the departments of chemistry, physics, biological sciences, earth sciences and kinesiology.

### Graduate Degrees

### **Degree Programs in Biology**

Graduate students may apply to one of four programs of study within the Department of Biological Sciences at the time of their admission to graduate study: the graduate programs in marine environmental biology and neurobiology/cell biology, which lead to the Master of Science or Doctor of Philosophy degrees in biology with emphasis in either chosen area; the graduate program in molecular and computational biology, which leads to a Master of Science or Ph.D. degree in molecular and computational biology; the graduate program in Computational Biology and Bioinformatics, which leads to a Ph.D. degree; and the graduate program in Integrative and Evolutionary Biology, which leads to a Ph.D. degree. The four programs emphasize different levels of biological organization and consequently may require somewhat different undergraduate preparation.

### **Biology**

The graduate programs in biology with emphases in marine environmental biology and neurobiology/cell biology provide education and training of biologists interested in living systems ranging from cellular to ecosystem

levels of organization, investigated by laboratory or field work. Courses and faculty research interests allow a multidisciplinary approach. Specialty areas of particular strength include marine biology, biological oceanography, neurobiology, cell biology, and integrative and evolutionary biology. A number of additional research areas are provided by adjunct faculty in the adjacent Los Angeles County Museum of Natural History and elsewhere. Students develop the ability to formulate and test hypotheses, integrating information and concepts in the completion of a research project (M.S.) or dissertation (Ph.D.). A guidance committee is formed for each student during the first year to develop a particular program of course work and research, and to evaluate the student's progress. Specific information about the options in Biological Sciences can be obtained by requesting marine environmental biology and neurobiology information brochures.

### Admission Requirements

Applicants must have a bachelor's degree in a natural science (preferably biology), or in mathematics or engineering; required back-ground courses include organic chemistry, general physics and mathematics through integral calculus. Applicants are evaluated by their transcripts and GPA; scores on the GRE General Test; three letters of recommendation; and a statement of interests. A faculty member must serve as initial sponsor and advisor. Applicants who are accepted but judged to have minor deficiencies are expected to correct them within the first year.

Applications to the graduate program include a departmental form which may be obtained from: Graduate Programs Manager, Department of Biological Sciences, University of Southern California, Los Angeles, CA 90089-0371 or www.usc.edu/dept/LAS/biosci.

### Degree Requirements

These degrees are awarded under the jurisdiction of the Graduate School. Refer to the Requirements for Graduation section (page 81) and the Graduate School section of the catalogue (page 91) for general regulations. All courses applied toward the degrees must be courses accepted by the Graduate School.

### Master of Science in Biology

The M.S. degree program in biology admits students for a terminal degree only; students who may later wish to continue for a doctorate should enter the Ph.D. program initially, in which case the M.S. can be earned along the way by completion of the M.S. requirements.

The M.S. degree program is a non-thesis program but a paper, based on the student's original research investigation of a selected program in biology, constitutes one of the requirements. Each student must take two full biology graduate core courses (BISC 582 and BISC 583 or BISC 524 and BISC 525), two seminars and additional graduate courses or research units for a minimum of 24 units. Students also must satisfy the residency and other requirements of the Graduate School. Further details of these requirements are contained within each graduate program's particular requirements and policies.

### **Doctor of Philosophy in Biology**

Students pursuing this degree choose between two broad areas of specialization, a marine environmental biology option or a neurobiology/cell biology option. Each option specifies particular course work and other requirements. A minimum total of 60 units is required, consisting of formal courses, seminars and research credit. At least 24 of the minimum 60 total units required are to be formal graduate course work (lecture or seminar courses). Candidates must also pass a screening examination to determine competence and point out deficiencies, fulfill a research tool requirement (computer skills, biostatistics, quantitative chemistry), and meet the residency and other requirements of the Graduate School. Because teaching experience is considered to be an important part of graduate training, each student is required to serve at least two semesters as a teaching assistant within the department.

Before the end of the fifth semester, each student must pass a written and oral qualifying examination given by the student's guidance committee. The written part involves answering a number of questions at length. The oral part is in the area of the student's intended research, based on a project selected and developed by the student into a written proposition. After passing the qualifying examination, the student completes the research investigation and any other requirements under the guidance of the research advisor who also chairs the dissertation committee. The student then writes a dissertation, which must be defended by the student before committee approval.

In the marine environmental biology option, each student receives a general background in marine sciences and obtains in-depth specialization in a research area of his or her choosing. Each student's curriculum is fitted to the particular needs and demands of the chosen research field. The 24 units of formal course work must include the following: BISC 582 (4), BISC 584 (2), BISC 585 (2), BISC 529 (4), four advanced graduate seminars (8) and a statistics course approved by the student's advisor.

The neurobiology/cell biology option provides each student with a broad, fundamental background in neurobiology and with detailed knowledge and expertise in the chosen area of concentration. Each student's curriculum is tailored to the particular interests of that individual. The formal course work includes 12 units of specified courses (a two semester core sequence plus four BISC 539 seminars) and 12 units of advanced electives chosen from a long list of courses in biological sciences, psychology, computer science, and other relevant departments. Students are expected to attend and participate in departmental research seminars.

### **Molecular and Computational Biology**

This program is designed to train the participants intensively in the concepts and experimental methodologies of molecular biology and biochemistry. The subject matter is organized in an integrated fashion (lectures, seminars and laboratory) to present fundamental information on the biochemistry, biophysics, genetics and development of cells from a variety of different organisms. Primary emphasis is on the relationship between structure and function at different integrative and functional levels. The program offers a Ph.D. in Molecular Biology and a Ph.D. in Computational Biology and Bioinformatics. Applications may be obtained from: Graduate Programs Manager, Department of Biological Sciences, University of Southern California, Los Angeles CA 90089-0371 or www.usc.edu/ dept/LAS/biosci/mcb.

### Admission Requirements

Applicants are expected to have a bachelor's degree or equivalent in a cognate area such as biology, chemistry, physics, engineering, bacteriology, computer science, or bioinformatics. Undergraduate work should include a basic course in biology, basic physics, physical chemistry, organic chemistry, biochemistry and calculus. Students who are deficient in any of these may be required to correct the deficiency during the first two years of graduate study. Courses taken to correct these deficiencies are usually not credited toward the degree. The student must submit letters of recommendation from at least three faculty members who can evaluate the promise of the student for graduate work and independent research. The applicant must take the GRE General Test prior to acceptance.

### Degree Requirements

These degrees are awarded under the jurisdiction of the Graduate School. Refer to the Requirements for Graduation section (page 81) and the Graduate School section of this catalogue (page 91) for general regulations. All courses applied toward the degrees must be courses accepted by the Graduate School.

### Master of Science in Molecular and Computational Biology

The study of molecular biology places so many demands upon the student that it is difficult to attain any satisfactory level of competence in the time generally taken for a master's degree. Therefore, enrollment of graduate students as master's degree applicants is not encouraged and is reserved for special circumstances. The curriculum of the master's student is patterned after that of the doctorate up to and including the qualifying examination, but not including thesis research. The qualifying examination will serve as the comprehensive master's examination.

### **Doctor of Philosophy in Molecular Biology**

During the first year, the student's program is under the direction of an initial guidance committee composed of members of the committee on admissions to the program. Before the end of the second semester a permanent guidance committee, chaired by the student's research director, is established. Thereafter, the student's program of studies and dissertation is under the direction of the permanent guidance committee and the dissertation committee.

### Screening Procedure

In the third semester the student's progress is discussed and evaluated by the guidance committee. The purpose of this evaluation is to determine competence to continue graduate study, and to point out deficiencies to be remedied prior to the qualifying examination.

### Course Requirements

A minimum of 24 of the 60 units required for the Ph.D. degree must be in formal course work, exclusive of research. These must include the core courses, BISC 502a and BISC 502b, to be completed in the first year with a B average. Additionally, students will register for BISC 504L (3-3) in both semesters. In the fall semester of the second year, students will choose an additional 4-unit, 400- or 500-level course in consultation with their advisor. Students must participate in molecular biology seminars. Other courses may be chosen, in consultation with the program chair, from graduate offerings of this and other departments.

### Language Requirement

Students in the graduate program in molecular biology are not required to pass a foreign language examination.

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#### Qualifying Examination

The examinations qualifying the student for candidacy for the Ph.D. in molecular biology must be initiated in the second semester of the second year. The first part is written and consists of comprehensive questions covering the student's knowledge of prokaryotic and eukaryotic molecular biology and developmental biology or genomics. The second part is an oral examination. It consists of general questions and the presentation and defense of a proposition outlining a research program, which must be in a field other than the student's immediate research interest. This examination sequence must be completed by the end of the fifth semester of the program.

#### Doctoral Dissertation

The dissertation is based on original, publishable, and significant research conducted independently by the student under the guidance of the dissertation committee.

#### Defense of the Dissertation

The defense of the dissertation is either a defense oral or a final oral. In most cases a defense oral will suffice if approved by the dissertation committee.

#### Student Teaching

Since most graduates in biological sciences will spend some part of their careers in academic work, teaching experience is considered an important part of graduate training. Each graduate student in the program is therefore required to assist in the teaching program of the Department of Biological Sciences.

## Doctor of Philosophy in Computational Biology and Bioinformatics

During the first year, the student's program is under the direction of an initial guidance committee composed of members of the admissions committee. After passing the screening procedure before the end of the first semester, the student must form a guidance committee consisting of an advisor and four other faculty members, including at least one from another department. Thereafter, the student's program of studies and dissertation are under the direction of the permanent guidance committee and the dissertation committee.

#### Screening Procedure

The screening examination should be taken by the end of the second semester in the program. If the student fails the examination, the department, at its discretion, may permit the student to take it again during the next semester. The screening examination consists of written examinations on topics including molecular biology, mathematical probability and statistics.

#### Qualifying Examination

The qualifying examination should be taken within two semesters following successful completion of the screening examination.

The written portion of the qualifying examination consists of a dissertation proposal. This document should include: introduction, statement of the problem, literature survey, methodology, summary of preliminary results, proposed research, references, appendix (including one or two fundamental references).

The oral portion of the qualifying examination consists of presentation of the Ph.D. dissertation proposal. The student must demonstrate research potential.

#### Course Requirements

The student must complete, with no grade lower than a B, a minimum of 60 units of courses carrying graduate credit and approved by the guidance committee. The required courses include: BISC 502a, CSCI 570, MATH 505a, MATH 541a, MATH 578ab, MATH 650. An additional 6 units of elective courses will be taken in consultation with the student's advisor. Students must register for a minimum of 4 units of dissertation research (BISC 794ab).

#### Transfer of Credit

No transfer of credit will be considered until the screening examination is passed. A maximum of 30 units of graduate work at another institution may be applied toward the course requirements for the Ph.D. A grade of B-(A = 4.0) or lower will not be accepted and, at most, two grades of B will be accepted. A Ph.D. candidate may petition the department for transfer of additional credit, after he or she passes the qualifying examination.

#### Dissertation

Following passage of the screening examination and approval of a dissertation topic by the guidance committee, the student begins research toward the dissertation under the supervision of the dissertation committee. The primary requirement of the Ph.D. is an acceptable dissertation based on a substantial amount of original research conducted by the student.

#### Doctor of Philosophy in Integrative and Evolutionary Biology

This program of study is designed to provide each student with a broad, fundamental background in integrative and evolutionary biology (IEB) coupled with detailed knowledge and expertise in the chosen area of concentration. The core of the course work in integrative and evolutionary biology consists of a two-semester course (BISC 510ab) that is taken by all first-year graduate students. Various faculty members also give a variety of advanced courses and seminars on specialized

research topics each semester. In addition, a range of courses in areas relating to IEB are available in various departments on the University Park and Health Sciences campuses.

#### Course Requirements

Each student's curriculum is tailored to the particular interests of the individual and the needs and demands of the chosen research field. The 24 units of formal course work must include 12 units of specified course work (a two-semester core sequence, BISC 510ab and seminar, BISC 549, minimum 4 units) and 12 units of advanced electives chosen in consultation with the student's advisor.

#### Elective Courses

The content of elective courses changes from semester to semester according to the interests of students and faculty. These courses are worth 2, 3 or 4 units, and are offered in biological sciences, anthropology, kinesiology, psychology, molecular biology, computer science, gerontology, cell and neurobiology and other relevant departments.

#### Qualifying Exam

By the end of the third semester, students should choose a committee consisting of four "inside" IEB faculty and one "outside" faculty. This committee will conduct the qualifying exam and provide guidance during dissertation research. The chair of the committee will serve as the principle advisor. Students should consult extensively with each committee member regarding subjects to be covered in the exam.

The qualifying exam consists of written and oral parts. Both parts must be finished before the end of the fifth semester. For the written exam, the advisor will obtain two to three questions from each of the four inside faculty. Three suggested formats are: 1) write a brief review of a specific topic; 2) summarize, critically evaluate and synthesize a large body of knowledge; 3) devise an experiment to test a hypothesis.

The oral exam consists of an oral defense of written questions and will be conducted within a month of the written part of the qualifying exam. The exam will consist of a critical defense of the written response to questions, so students should expect questions that relate to questions posted in the written part. The oral exam may also be used to tell whether weaknesses that were identified in the written exam have been corrected.

#### Doctoral Dissertation

The dissertation is based on original, publishable and significant research conducted independently by the student under the guidance of the dissertation committee.

### Courses of Instruction

#### **BIOLOGICAL SCIENCES (BISC)**

The terms indicated are *expected* but are not *guaranteed*. For the courses offered during any given term, consult the *Schedule of Classes*.

**101Lxg Cellular and Molecular Biology (4, FaSp)** Cellular and molecular biology with examples related to human biology and diseases. Fundamental life processes examined at the genetic, cellular and molecular levels. Not available for major credit.

**102Lxg Humans and Their Environment (4, Fa)** An examination of the physical and biological laws that influence agriculture, pollution, population dynamics (including humans), climate, biodiversity and ecosystem structure and function. Not available for major credit.

104Lxg How the Body Works: Topics in Human Physiology (4, Fa) Structure and function of the human body, including the role of organ systems, tissues, and cells in normal function. Malfunctions relating to disease, substance abuse and lifestyle. Not available for major credit.

**108L Special Laboratory I (1)** Laboratory component for BISC 120 for entering freshmen or transfer students with advanced placement or equivalent lecture credit from another institution. *Prerequisite:* departmental approval.

**109L Special Laboratory II (1)** Laboratory component for BISC 220 for entering freshmen or transfer students with advanced placement or equivalent lecture credit from another institution. *Prerequisite*: departmental approval.

**120Lxg General Biology: Organismal Biology and Evolution (4, FaSm)** In-depth survey of key topics related to advances in our knowledge of the diversity of life and evolution; origin of life; eukaryotes/prokaryotes; ecology. (Duplicates credit in BISC 112*L*, BISC 113*L*, and BISC 121*L*.)

**121Lg Advanced General Biology: Organismal Biology and Evolution (4, Sp)** Equivalent to 120*L*, but taught at a higher level for exceptionally well-prepared students. Admission to the course by departmental approval only. (Duplicates credit in BISC 112*L*, BISC 113*L*, and BISC 120*L*.) *Corequisite:* CHEM 115*aL*.

**140 Human Impact on the Ocean Planet (4)** Overview of marine biodiversity and human influence on marine biota; eutrophication in

influence on marine biota; eutrophication in bays and estuaries; global movement of invasive species, harmful algal blooms, fishing activities and sewage/chemical pollution.

**150Lxg The Nature of Human Health and Disease (4, FaSp)** The human organism; the nature of inherited and acquired diseases; the biological and societal basis for the AIDS epidemic; therapy, drug design and the future. Not available for major credit.

**180Lxg Evolution (4, Sp)** Changes in the physical and biological universe over time; origins of life, dinosaurs, human evolution. Implications of evolutionary mechanisms and mass extinctions for human survival. Not available for major credit.

**193 Freshman Colloquium I (1, Fa)** A series of lectures and discussions at which faculty of the department introduce their research activities to students entering biology and related majors. Graded CR/NC. *Corequisite:* BISC 120*L* or BISC 121*L*.

**194 Freshman Colloquium II (1, Sp)** A series of lectures and discussions at which faculty of the department introduce their research activities to students entering biology and related majors. Graded CR/NC. *Corequisite*: BISC 220*L* or BISC 221*L*.

**212Lx Human Anatomy (4, FaSp)** Systemic human anatomy; morphological and embryological conditions contributing to the structures of the adult. Lecture, 3 hours; laboratory, 3 hours. Not available for major credit to biological sciences majors. (Duplicates credites in former BISC 320Lx.) *Prerequisite:* high school biology; *recommended preparation:* BISC 120L or BISC 121L.

**220L General Biology: Cell Biology and Physiology (4, SpSm)** In-depth survey of key topics related to advances in our knowledge of cellular biology and physiology; cell composition/metabolism; gene action; organism structure and function. (Duplicates credit in BISC 110*L*, BISC 111*L*, and BISC 221*L*.) *Recommended preparation:* BISC 120*L* or BISC 121*L*.

**221L** Advanced General Biology: Cell Biology and Physiology (4, Sp) Equivalent to 220L, but taught at a higher level for exceptionally well-prepared students. Admission to the course by departmental approval only. (Duplicates credit in BISC 110*L*, BISC 111*L*, and BISC 220*L*) *Prerequisite*: BISC 120*L* or BISC 121*L*; *corequisite*: CHEM 105*bL* or CHEM 115*bL*.

230Lxg Brain, Mind and Machines: Topics in Neuroscience (4, Sp) The structure and function of the mammalian brain including the role of the brain in regulating behavior, both in normal and diseased states; in relation to mind; and in comparison with machine forms of intelligence. Not available for major credit.

**290L** Introduction to Biological Research (2 or 4, max 4, FaSpSm) Experience in basic techniques through supervised research in the research laboratory of a departmental faculty member. Graded CR/NC. *Prerequisite:* BISC 120*L* or BISC 121*L*; BISC 220*L* or BISC 221*L*; CHEM 105*bL* or CHEM 115*bL*; departmental approval.

**300L** Introduction to Microbiology (4, Fa) Comparative approach to bacteria, Archaea and viruses; their structure, life cycles, geochemical activity, ecology and nutrition. Fundamentals of metabolism and microbial genetics. Lecture, 2 hours; laboratory, 6 hours. *Prerequisite:* BISC 320*L*; CHEM 322a*L* or CHEM 325a*L*.

**307L General Physiology (4, Sp)** Physiological functions of the circulatory, digestive, endocrine, integumentary, musculoskeletal, nervous, respiratory, and urogenital systems of animals. Lecture, 3 hours; laboratory, 3 hours. *Prerequisite:* BISC 220L or BISC 221L.

**313 Evolution and Population Genetics (4, Sp)** History of evolutionary thought; molecular basis for evolution; dynamics of genes in populations; speciation and macroevolution; patterns of evolution. *Prerequisite:* BISC 220*L* or BISC 221*L*; BISC 120*L* or BISC 121*L*; *recommended preparation:* BISC 320*L*.

#### 315L Introduction to Ecology (4, Fa)

Organism-environment interactions; dynamics of populations, communities, and ecosystems; evolutionary forces. Lecture, 3 hours; laboratory, 3 hours. *Prerequisite:* BISC 120*L* or BISC 121*L*.

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- **320L Molecular Biology (4, FaSm)** Structure and synthesis of nucleic acids and proteins; molecular biology of prokaryotes and eukaryotes; principles of genetics and cell biology. (Duplicates credit in BISC 311.) *Prerequisite:* CHEM 105*bL* or CHEM 115*bL*.
- **321x Science, Technology and Society (2, Sp)** Builds upon a basic science background to provide students with an awareness of cutting edge scientific research, its technological applications and its societal ramifications. Not available for major credit. (Duplicates credit in former MDA 321.) *Prerequisite:* BISC 120*L* or BISC 121*L* or BISC 220*L* or BISC 221*L*; CHEM 105*aL* or CHEM 115*aL*; PHYS 135*aL* or PHYS 151*L*.
- **325 Genetics (4, Fa)** Transmission genetics and genotype/phenotype; mapping methods; complex traits; genetics of human disease and population genetics. (Duplicates credit in BISC 313.) *Prerequisite:* BISC 120*L* or BISC 121*L*; BISC 220*L* or BISC 221*L*; BISC 320*L*; CHEM 322*aL*; *corequisite:* CHEM 322*bL* or CHEM 325*bL*.
- **330L Biochemistry (4, Sp)** Basic biochemical principles; classes of molecules structure and function; cellular energetics. (Duplicates credit in BISC 316*L*). *Prerequisite*: BISC 320*L*; CHEM 322*aL*.
- **369L Ecology and the Natural History of California (4, Sp)** Marine, freshwater, and terrestrial communities of California. Life histories, morphology, special evolutionary adaptations. Relationships between organisms and their biological-physical-chemical environment. Emphasis on field biology. Junior standing. *Prerequisite:* BISC 120*L* or BISC 121*L*.
- **371L** Molecular Approaches to the Diversity of Life (4) Patterns of evolutionary change investigating the molecular basis of heredity utilizing DNA data. History, principles and application of molecular systematics, and genetic variation. Taught on Catalina Island. *Prerequisite:* BISC 120*L* or BISC 121*L*; BISC 220*L* or BISC 221*L*; *recommended preparation:* BISC 320*L*.
- **373L Conservation Biology (4, Sp)** Biological principles underlying conservation including ecology, evolution, genetics and biogeography. Covers both marine and terrestrial environment, with special emphasis on island biology. Catalina semester only. *Prerequisite:* BISC 120*L* or BISC 121*L;* BISC 220*L* or BISC 221*L; recommended preparation:* BISC 320*L;* BISC 313 or BISC 325.

**390** Special Problems (1-4) Supervised, individual studies. No more than one registration permitted. Enrollment by petition only.

- **403 Advanced Molecular Biology (4, Fa)** Molecular mechanisms and control of DNA replication, DNA repair, recombination, gene expression, cell growth, and development in prokaryotic and eukaryotic organisms, from bacteria to humans. *Prerequisite:* BISC 3201*L; recommended preparation:* BISC 313 or BISC 325.
- **405L General Embryology (4, Fa)** Vertebrate and human development: cellular differentiation; germ cell development and growth; hormonal regulation of reproductive cycles; cleavage through neurulation and subsequent development of primary organs. Lecture, 3 hours; laboratory, 3 hours. Junior standing. *Prerequisite:* BISC 120*L* or BISC 121*L*; BISC 220*L* or BISC 221*L*; *recommended preparation:* two from BISC 313, BISC 320*L*, BISC 325 and BISC 330*L*.
- **406L Biotechnology (4, Sp)** Techniques in molecular biology and biochemistry applied to prokaryotic and eukaryotic model systems; applications of recombinant DNA and genomic technology. *Prerequisite:* BISC 320*L; recommended preparation:* BISC 313 or BISC 325.
- **410 Applications of Molecular Biology to Medicine (4, Fa)** Advances and trends in the understanding, diagnosis and treatment of human diseases. Senior standing. *Prerequisite*: BISC 330*L*.
- **411 Cell Biology (4, Sp)** The synthesis, transport and assembly of the complex structures that mediate eukaryotic cellular function. Electrical and biochemical mechanisms underlying intercellular communication. *Prerequisite:* BISC 220*L*; BISC 320*L*.
- 419 Environmental Microbiology (4, Sp)

Qualitative and quantitative appraisal of microbial activities in pure and contaminated environments; microbial community and its development; interspecific relationships; effects of microorganisms on their surroundings. Lecture, 4 hours. *Prerequisite:* BISC 330*L; recommended preparation:* BISC 300*L.* 

**421 Neurobiology (4, Fa)** Structure, function, and development of nervous systems; neural integration and mechanisms of behavior; organization and operation of brains. Lecture, 3 hours; discussion, 2 hours. *Prerequisite:* BISC 220*L* or BISC 221*L*.

#### 422L Neurobiology Laboratory (2, FaSp)

Experimentation on excitable cells, synapses, and neural circuits; intracellular and extracellular techniques for recording, stimulation, and identification of nerve and muscle cells. Lecture, 1 hour; laboratory, 3 hours. *Corequisite*: BISC 421.

- **423** Epilepsy to Ecstasy: Biological Basis of Neurological Disorders (4, Sp) Examination of various neurological disorders originating from developmental signaling and/or anatomical abnormalities. *Prerequisite:* BISC 421.
- **424 Brain Architecture (4, Fa)** How the parts of the brain are interconnected to form a complex biological computer, from historical, evolutionary, and developmental perspectives. *Prerequisite:* BISC 421.
- **425x History of Discovery in Biology (4, Sp)** Exploration of intellectual and experimental revolutions that produced fundamental discoveries in anatomy, physiology, biochemistry, and evolution; social, institutional, and artistic factors will also be considered. Not available for major credit in the natural sciences. *Prerequisite:* BISC 120*L* or BISC 121*L;* BISC 220*L* or BISC 221*L;* HIST 103 or HIST 104.
- **435** Advanced Biochemistry (4, Sp) Macromolecular structure and function; enzymology; metabolic regulation. Lecture, 3 hours; discussion, 2 hours. *Prerequisite*: BISC 330*L*.
- **437L Comparative Physiology of Animals (4, Sp)** Control of the internal environment of animals in relation to their external environment. Thermal regulation, osmoregulation, excretion, and ion balance. Lecture, 3 hours; laboratory, 3 hours. Junior standing. *Prerequisite:* BISC 120*L* or BISC 121*L;* BISC 220*L* or BISC 221*L; recommended preparation:* two from BISC 313, BISC 320*L*, BISC 325 and BISC 330*L*.
- **438 Nutritional Biochemistry (4, Fa)** Digestion, absorption and assimilation of nutrients; metabolism of carbohydrates, proteins, fats; biochemistry of vitamins, minerals, trace elements; nutritional needs; medical aspects of nutrition. *Prerequisite:* BISC 330*L*.
- **440 Biodemography of Aging (4)** (Enroll in GERO 440)
- **445L Fundamentals of Vertebrate Biology (4, Sp)** Evolution and comparative anatomy of vertebrates. Lecture, 3 hours; laboratory, 3 hours. Junior standing. *Prerequisite:* BISC 120*L* or BISC 121*L*; BISC 220*L* or BISC 221*L*; recommended preparation: two from BISC 313, BISC 320*L*, BISC 325 and BISC 330*L*.

#### 450L Principles of Immunology (4, Fa)

Immune processes, humoral and cellular; immunoglobulins; antibody formation; antigen-antibody interactions; immune dyscrasias; transplantation and tumor immunology; basic hematology and immuno-hematology. Lecture, 3 hours; laboratory, 3 hours. *Prerequisite*: BISC 220L or BISC 221L.

**460** Seminar in Marine and Environmental Biology (2, max 4, FaSp) Topical seminar in marine and environmental biology. Junior, senior or graduate standing.

**461** Seminar in Molecular and Computational Biology (2, max 4, FaSp) Topical seminar in molecular and computational biology. Junior, senior or graduate standing.

**462 Seminar in Neurobiology (2, max 4, FaSp)** Topical seminar in neurobiology. Junior, senior or graduate standing.

**467L Histology (4, FaSm)** Descriptive and comparative survey of cells, tissues, and organ systems, with emphasis upon the correlation of structure and function. Lecture, 3 hours; laboratory, 6 hours. Senior standing. *Prerequisite:* BISC 120*L* or BISC 121*L;* BISC 220*L* or BISC 221*L; recommended preparation:* BISC 313 or BISC 320*L* or BISC 325 or BISC 330*L*.

**469L Marine Biology (4, Fa)** Oceanography and marine biology, sampling techniques, evolutionary adaptations, morphology, systematics. Lecture, 3 hours; laboratory, 3 hours. Field trip and field research projects required. *Prerequisite:* BISC 120*L* or BISC 121*L*.

**473L Biological Oceanography (4, Sp)** Biological, physical, chemical dynamics and analysis of the ocean; primary production of phytoplankton, secondary production by zooplankton, bacterial remineralization; physiology, ecology of fishes, marine mammals. Lecture, 3 hours; laboratory, 3 hours. Junior standing. *Prerequisite:* BISC 120*L* or BISC 121*L;* BISC 220*L* or BISC 221*L; recommended preparation:* two from BISC 313, BISC 320*L*, BISC 325 and BISC 330*L*.

**474L** Ecosystem Function and Earth Systems (4, Fa) General principles of ecosystem function, energy flow and materials cycling in marine systems at various scales and the importance of microbial processes in these systems. Taught on Catalina Island. *Prerequisite:* BISC 120*L* or BISC 121*L*.

**478** Computational Genome Analysis (4, Sp) Introduction to and applications of algorithms and statistics to genome analysis. Analysis of physical and genetic maps, DNA sequencing, sequence comparisons, DNA chips. *Prerequisite:* BISC 320*L*; BISC 325.

**480 Developmental Biology (4, FaSp)** Basic mechanisms of animal development are considered at different levels of analysis. Emphasis is on molecular, genetic, and cellular processes underlying vertebrate and invertebrate development. General concepts and evolutionary mechanisms are emphasized. Lecture, 3 hours; discussion, 2 hours. *Prerequisite:* BISC 220L or BISC 221L.

**483 Geobiology and Astrobiology (4, Sp)** Relationships between microbiota and the earth environment including the hydrosphere, lithosphere and atmosphere, with consideration of the potential for life on

consideration of the potential for life on other planets. *Prerequisite:* BISC 120*L*, CHEM 105*bL*.

**490x Directed Research (2-8, max 8, FaSpSm)** Individual research and readings. Not available for graduate credit.

**493x Honors Seminar (1, max 4, FaSp)** Not available for graduate credit. *Prerequisite:* BISC 120*L* or BISC 121*L*; BISC 220*L* or BISC 221*L*.

**494x Honors Thesis (2, FaSp)** Not available for graduate credit. *Prerequisite:* BISC 493.

**499** Special Topics (2-4, max 8, FaSp) Lecture and discussion in specialized areas of the biological sciences. Students cannot register more than twice for this course. Junior standing. *Prerequisite:* BISC 220*L* or BISC 221*L; recommended preparation:* two from BISC 313, BISC 320*L*, BISC 325 and BISC 330*L*.

**502ab Molecular Genetics and Biochemistry (4-4, FaSp)** Current genetic and biochemical analysis of replication, recombination, mutagenesis, and repair. Fundamentals of transcription and regulation of gene expression. Recent applications of genetic engineering and genome analysis.

**504L** Laboratory Techniques in Cellular and Molecular Biology (1-4, max 8, FaSp) Rotation of graduate students through Molecular Biology research laboratories to learn the major technological skills required in the field. Graded CR/NC.

**505 Genomics and Molecular Genetics (4, Sp)** Molecular genetics (mutagenesis, repair,

Molecular genetics (mutagenesis, repair, recombination, and gene regulation) from quantitative and mechanistic approaches. Simple and complex genome analysis using recombinant DNA, physical, and computational techniques. *Recommended preparation:* BISC 502*b.* 

**510ab Integrative and Evolutionary Biology** (a: 4, Fa; b: 4, Sp) Current topics in integrative and evolutionary biology including genetics, natural selection, ecology with emphasis on higher order complex questions including form, function, and energy use throughout the life span.

**520 Recent Advances in Neurobiology** (2 or 4, max 12, Fa) Lectures on selected topics in neurobiology. Registration restricted to three semesters. *Prerequisite:* graduate status in departmental program or departmental approval.

**529 Seminar in Marine Biology (1, max 4, FaSp)** Graded CR/NC.

**530** Advanced Seminar in Plankton Biology (2, FaSp) An overview of phytoplankton and zooplankton taxa, their morphologies and life histories using material collected from the local environment off LA and near the Phillip K. Wrigley Marine Science Center on Catalina Island.

**531** Advanced Seminar on the Physiology of Marine Organisms (2, FaSp) Physiological processes dictate survival potential, growth rates, and many other biological processes that affect the distribution of species in the oceans. Emphasis on the diverse environmental factors that influence physiological adaptations of marine organisms. Examples from a wide variety of marine organisms, from bacterial to animals, will be studied.

**532** Advanced Seminar in Molecular and Microbial Ecology (2, FaSp) Microorganisms dominate biological processes in the ocean. These species pose significant problems for estimating species diversity, abundance and activity. Examination of modern molecular biological approaches for analyzing aquatic microbial communities and their ecological roles.

**533** Advanced Seminar in Remote Sensing and Modeling (2) Modern oceanographic methods for making remote measurements of aquatic and terrestrial ecosystems using satellite imagery and other means. Integrating these data into models that describe ecosystem structure and enable interpretation of ecosystem function.

534 Advanced Seminar in Population Genetics of Marine Organisms (2)  $\rm An$ 

overview of the theory underlying population and quantitative genetics, with applications to marine systems. Basic evolutionary mechanisms (mutation, migration, drift, selection, nonrandom mating) and modern evidence for their roles in structuring genetic variation within and among marine populations. Chemistry 255

#### 535 Seminar in Physiology (2, max 8, FaSp)

**536** Advanced Seminar in Marine/Global N Cycle (2) Biological processes in marine ecosystems strongly affect the cycling of important elements on our planet. Examination of the interplay between ocean biology and the cycling of carbon and nitrogen on a local, regional and global scale.

537 Seminar in Cellular and Molecular Biology (2, max 8, FaSp)

**542** Seminar in Molecular Biology (1, max 6, FaSp) Graded CR/NC.

**543 Human Molecular Genetics (4)** (Enroll in BIOC 543)

**549** Seminar in Integrative and Evolutionary Biology (2, max 6, FaSp) Current topics in integrative and evolutionary biology.

**577ab Computational Molecular Biology Laboratory (2-2)** (Enroll in MATH 577ab)

**581L Current Problems in Marine Sciences (4, max 16, Irregular)** In-depth studies on selected problems of current interest in the marine sciences. Lecture and laboratory.

**582** Advanced Biological Oceanography **(4, Fa)** Aspects of physics and chemistry of the oceans. Qualitative and quantitative considerations of the ecology of pelagic and benthic communities.

**583** Biochemistry and Physiology of Marine Organisms (4, Fa) Biochemical and physiological adaptations of marine bacteria, plants, and animals to the wide range of environments that exists in the ocean.

**584** Faculty Lecture Series (2, Sp) Multiinstructor course designed to introduce students to the breadth and depth of faculty interests within the Marine Environmental Biology section of Biological Sciences and the Natural History Museum.

#### 585 Scientific Writing and Reviewing (2, Sp)

Hands-on experience writing and reviewing scientific literature. The review process and participation in writing and reviewing their own proposals.

#### 590 Directed Research (1-12, FaSpSm)

Research leading to the master's degree. Maximum units which may be applied to the degree to be determined by the department. Graded CR/NC.

599 Special Topics (2-4, max 8, Irregular)

**790 Research (1-12, FaSpSm)** Research leading to the doctorate. Maximum units which may be applied to the degree to be determined by the department. Graded CR/NC.

**794abcdz Doctoral Dissertation (2-2-2-0, FaSpSm)** Credit on acceptance of dissertation. Graded IP/CR/NC.

## Chemistry

Seeley G. Mudd 418 (213) 740-7036 FAX: (213) 740-2701 Email: chemmail@usc.edu www.usc.edu/dept/chemistry

Chair: Hanna Reisler, Ph.D.

### Faculty

Gabilan Endowed Chair for Women in Science and Engineering: Hanna Reisler, Ph.D.

Ray R. Irani, Chairman of Occidental Petroleum Corporation, Chair in Chemistry: James F. Haw, Ph.D.

Donald P. and Katherine B. Loker Chair in Organic Chemistry and Distinguished Professor: George A. Olah, Ph.D.

Paul A. Miller Chair in Letters, Arts and Sciences: Curt Wittig, Ph.D.

Harold and Lillian Moulton Chair in Chemistry: Nicos Petasis, Ph.D.

George A. and Judith A. Olah Nobel Laureate Chair in Hydrocarbon Chemistry: G.K. Surya Prakash, Ph.D. WiSE Junior Career Development Chair: Amy M. Barrios, Ph.D.

Professors: Robert Bau, Ph.D.\*; Robert A. Beaudet, Ph.D.; David A. Dows, Ph.D.; Thomas C. Flood, Ph.D.; Myron F. Goodman, Ph.D. (Biological Sciences); Thieo E. Hogen-Esch, Ph.D.; Bruce E. Koel, Ph.D.; Chi H. Mak, Ph.D.\*; Charles E. McKenna, Ph.D.; Kenneth L. Servis, Ph.D. (Dean, Academic Records and Registrar); Lawrence A. Singer, Ph.D.\*; Philip J. Stephens, D. Phil.; Mark E. Thompson, Ph.D.; Andrey Vilesov, Ph.D.; Arieh Warshel, Ph.D.; William P. Weber, Ph.D.\*

Associate Professors: Stephen E. Bradforth, Ph.D.; Xiaojiang Chen, Ph.D. (Biological Sciences); Anna Krylov, Ph.D.; Roy A. Periana, Ph.D.

Assistant Professors: Peter Z. Qin, Ph.D.; Clay C. Wang, Ph.D. (Pharmaceutical Sciences); Chongwu Zhou, Ph.D. (Electrical Engineering)

Adjunct Professors: Karl O. Christe, Ph.D.; Larry R. Dalton, Ph.D.

Emeritus Professors: Arthur W. Adamson, Ph.D.; John Aklonis, Ph.D.; Sidney W. Benson, Ph.D.; Anton B. Burg, Ph.D.; Milton C. Kloetzel, Ph.D.; Judith Olah, Ph.D.; Kirby V. Scherer, Jr., Ph.D.; Otto Schnepp, Ph.D.; Gerald A. Segal, Ph.D.; Howard S. Taylor, Ph.D.; James C. Warf, Ph.D.

\*Recipient of university-wide or college teaching award.

#### **Programs**

The Department of Chemistry offers degree programs which provide undergraduate and graduate students with core instruction and excellent research opportunities. Undergraduate programs leading to the B.S. and B.A. degrees are offered. The B.S. degree is intended for persons preparing for careers in chemistry and satisfies the guidelines for a chemistry degree recommended by the American Chemical Society. The B.A. degree is designed for students who wish a concentration of course work in chemistry, but who have career plans in the health sciences, business or law. In addition, a chemistry minor is available for students who want a broader exposure to the chemical sciences. The B.S. in Biochemistry is offered as a joint program with the Department of Biological Sciences. A minor program in biotechnology is also offered by the Departments of Biological Sciences and Chemistry and the Marshall School of Business. Graduate programs are offered leading to the Master of Arts, Master of Science and Doctor of Philosophy in Chemistry.

### Undergraduate Degrees

#### Bachelor of Science and Bachelor of Arts in Chemistry

In addition to the general education requirements, the following courses are required.

#### Chemistry Major Requirements (B.S.)

REQUIRED COURSES, LOWER DIVISION		UNITS
CHEM 105aLbL	General Chemistry, or	
CHEM 115aLbL	Advanced General	
	Chemistry	4-4
MATH 125	Calculus I	4
MATH 126	Calculus II	4
MATH 225	Linear Algebra and	
	Linear Differential	
	Equations, or	
MATH 226	Calculus III	4
PHYS 151L	Fundamentals of	
	Physics I: Mechanics	
	and Thermodynamics	4
PHYS 152L	Fundamentals of	
	Physics II: Electricity	
	and Magnetism	4
PHYS 153L	Fundamentals of	
	Physics III: Optics	
	and Modern Physics	4

REQUIRED COURSES, UPPER DIVISION UN		UNITS
CHEM 300L	Analytical Chemistry	4
CHEM 325abL	Organic Chemistry	4-4
CHEM 332L	Physical Chemical	
	Measurements	4
CHEM 426	Advanced Organic	
	Chemistry	4
CHEM 430ab	Physical Chemistry	4-4
CHEM 453	Advanced Inorganic	
	Chemistry	4
CHEM 423L	Advanced Laboratory	
	Techniques in Organic	
	and Inorganic Chemistry	,
	or	
CHEM 465L	Chemical	
	Instrumentation	4
CHEM 490x	Directed Research	4

One advanced elective chosen from among the following: MATH 226, MATH 245, or any upper division course in chemistry, biological sciences, mathematics, physics or engineering which can satisfy requirements as upper division electives in the major in the department involved.

#### Chemistry Major Requirements (B.A.)

UNITS
4-4
4
4
4

PHYS 151L	Fundamentals of	
	Physics I: Mechanics	
	and Thermodynamics	4
PHYS 152L	Fundamentals of	
	Physics II: Electricity	
	and Magnetism	4
PHYS 153L	Fundamentals of	
11110 1001	Physics III: Optics	
	and Modern Physics	4
	and wodern i mysics	7
REQUIRED COURSES,	UPPER DIVISION	UNITS
CHEM 300L	Analytical Chemistry	4
CHEM 325abL	Organic Chemistry	4-4
CHEM 430ab	Physical Chemistry	4-4
ONE COURSE FROM	AMONG:	UNITS
CHEM 332L	Physical Chemical	
	Measurements	4
CHEM 423L	Advanced Laboratory	
	Techniques in Organic	
	and Inorganic	
	Chemistry	4
CHEM 453	Advanced Inorganic	
	Chemistry	4
CHEM 490	Directed Research	2-8

One additional upper division science elective

#### Physical Sciences Major Requirements (B.S.)

REQUIRED COURSES,	LOWER DIVISION	UNITS
CHEM 105aLbL	General Chemistry, or	
CHEM 115aLbL	Advanced General	
	Chemistry	4-4
GEOL 105L	Planet Earth	4
PHYS 151L	Fundamentals of	
	Physics I: Mechanics	
	and Thermodynamics	4
PHYS 152L	Fundamentals of	
	Physics II: Electricity	
	and Magnetism	4
PHYS 153L	Fundamentals of	
	Physics III: Optics	
	and Modern Physics	4
REQUIRED COURSES, UPPER DIVISION		UNITS
Astronomy elective*		4

REQUIRED COURSES, UPPER DIVISION UN	
Astronomy elective*	4
Chemistry elective*	4
Earth Sciences elective*	4
Physics elective*	4
Three additional electives from these fields*	4

<sup>\*</sup>Upper division courses must be applicable to majors in their respective departments.

OTHER COURSES		UNITS
MATH 125	Calculus I	4
MATH 126	Calculus II	4
MATH 226	Calculus III	4
Total units		64

#### **Bachelor of Science in Biochemistry**

This degree is offered jointly by the Departments of Biological Sciences and Chemistry. An honors option is also available. See the

Department of Biological Sciences for the complete description, page 248.

#### **Biotechnology Minor**

The College of Letters, Arts and Sciences departments of biological sciences and chemistry and the Marshall School of Business jointly offer the cross-departmental minor in Biotechnology. This minor brings essential knowledge in the basic sciences together with the corporate skills needed in a rapidly growing industry. The minor is especially well suited for the business, biology, chemistry or engineering student seeking a career in business and/or the biomedical/biotechnical sciences. See Biological Sciences, page 248, for course requirements.

#### **Chemistry Minor**

A chemistry minor is available for students who wish to broaden their exposure to the chemical sciences. In addition to a core of five chemistry courses (year-long sequences in general chemistry and organic chemistry and a one semester course in analytical chemistry), students must take one upper division chemistry elective in either advanced organic or advanced inorganic chemistry.

Biology majors must take CHEM 300L, CHEM 426 and CHEM 453.

REQUIRED COURSES, LOWER DIVISION		UNITS
CHEM 105aLbL	General Chemistry, or	
CHEM 115aLbL	Advanced General	
	Chemistry	4-4
REQUIRED COURSES,	UPPER DIVISION	UNITS
CHEM 300L	Analytical Chemistry	4
CHEM 322aLbL	Organic Chemistry, or	
CHEM 325aLbL	Organic Chemistry	4-4
CHEM 426	Advanced Organic	
	Chemistry, or	
CHEM 453	Advanced Inorganic	
	Chemistry	4

#### Grade Point Average in Major Subject

A grade of C- or higher is required in each chemistry course specifically listed as a degree requirement. The GPA for all chemistry courses required for a department major or a physical sciences major must be C (2.0) or higher. The GPA for all upper division chemistry courses must also be C (2.0) or higher.

#### **Honors Programs**

An honors program in chemistry is available. Please consult with departmental advisors for additional information.

An honors program in biochemistry is offered. See the Department of Biological Sciences for requirements, page 248.

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### Graduate Degrees

Close contact between students and faculty is a constant feature of the chemistry graduate programs. The emphasis is on individualized programs aiming at in-depth understanding and development of scientific maturity. Attention is given to career aims, including research and development; secondary, college and university teaching; and the wide variety of industrial testing, operation and management areas.

#### **Admission Requirements**

A baccalaureate degree, equivalent to the B.A. with a major in chemistry at USC, is prerequisite to admission to the graduate program in chemistry. A baccalaureate degree in an appropriate physical science, engineering or mathematics is prerequisite to admission to the doctoral program in chemical physics.

Entering students must take examinations (at the undergraduate level) in physical chemistry and two of the following: organic chemistry, inorganic and analytical chemistry, physics and mathematics; the options depend on each student's objectives. Examinations are scheduled immediately before registration and the results serve as a basis for selecting courses during the first year of graduate study.

Application must be made to the department on a special form, which includes application for fellowship and teaching assistant appointment and is available on request from the department chair. Materials describing the faculty, research areas and facilities will be sent with the application.

#### **Degree Requirements**

These degrees are under the jurisdiction of the Graduate School. Refer to the Requirements for Graduation section (page 81) and the Graduate School section of this catalogue (page 91) for general regulations. All courses applied toward the degrees must be courses accepted by the Graduate School.

## Master of Arts and Master of Science in Chemistry

The department does not accept applicants for a Master of Arts or Master of Science degree in chemistry. The M.A. and M.S.

degrees are intended only as transitional degrees in the process of completing requirements for the Ph.D. in chemistry.

The Master of Arts degree is granted on completion of 24 units of graduate course work (not including 590) approved by the guidance committee, and comprehensive final examinations. The Master of Science degree is granted on completion of 24 units of graduate course work, including not more than eight units (normally two registrations) in directed research, approved by the guidance committee, an approved thesis on the results of an original investigation, and a final oral defense of the thesis. The final defense is made while the thesis is in final draft form.

The guidance committee is appointed no later than the beginning of the second semester. The guidance committee is chaired by the research director in the case of the M.S. option, or by an appropriate member of the faculty in the case of the M.A. option.

#### **Doctor of Philosophy in Chemistry**

Screening Procedure

Appointment of a guidance committee and registration for research are contingent on passage in a single semester of at least two graduate courses with grades of B or better, and with an overall better than B average in graduate work. Retention in the doctoral program requires at least a B average in the first two semesters of graduate work.

#### Guidance Committee

The committee is appointed as soon as the student is prepared to undertake research, normally near the beginning of the second semester, and is chaired by the research director. Its function is to guide the student in selection of courses and research and in preparation for the qualifying examination, and to administer that examination.

#### Course Requirements

Completion, with no grade lower than B (3.0), of a series of graduate courses totaling 24 units, approved by the guidance committee. The committee may require more than 24 units of graduate course work. The overall average for all graduate work must be higher than B. Sixty units of registration, including CHEM 790 and 794, are required for the Ph.D.

#### Foreign Language Requirement

The department has no formal foreign language requirement. However, an individual guidance committee may require competency in a foreign language if this is relevant to the student's area of research.

#### Qualifying Examination

The examination requires presentation of two propositions, written answers to questions previously submitted by the committee, and oral defense of both propositions and answers. It is administered by the guidance committee.

#### Seminar

A research seminar presented within the subdivisional seminar program is required. This usually takes the form of a presentation of research accomplishments just prior to graduation.

#### Dissertation

An acceptable dissertation based on completion of an original investigation is required. The candidate must defend an approved penultimate draft of the dissertation in an oral examination.

## Doctor of Philosophy in Chemistry (Chemical Physics)

Course Requirements

Completion (with no grade lower than B) of CHEM 538 and a minimum of five additional courses (20 units) selected from chemistry, physics, mathematics and engineering with the advisement and approval of the guidance committee. All other requirements and procedures are the same as for the Ph.D. in Chemistry.

#### **Seminars and Research Conference**

Seminars are held regularly in physical, inorganic and organic chemistry. All students are expected to attend one and are invited to attend all of these. All students are expected to attend the departmental research conference featuring speakers from all branches of chemistry, who may be local, national or international.

#### **Teaching Experience**

Teaching experience is required for the advanced degrees in chemistry.

### Courses of Instruction

#### CHEMISTRY (CHEM)

The terms indicated are *expected* but are not *guaranteed*. For the courses offered during any given term, consult the *Schedule of Classes*.

#### 040x Preparation for Chemistry (4, FaSp)

Elementary course to prepare students for chemistry 105*aLbL*. Strong emphasis on chemical mathematics and more significant laws, trends, and concepts of general chemistry. Not available for degree credit. Graded CR/NC. Lecture, 3 hours; discussion, 4 hours.

#### 050x General Chemistry Tutorial (2, FaSp)

Weekly tutorial for selected students in CHEM 105*aL*. Strong emphasis on chemical mathematics and key concepts in general chemistry. Topics parallel lectures in CHEM 105*aL*. Not available for degree credit. Graded CR/NC. Discussion, 2 hours. *Concurrent enrollment:* CHEM 105*aL*.

#### 102Lxg The Molecular World (4, FaSpSm)

A generally qualitative study of basic chemistry and its impact on the modern world, including topics such as organic chemistry, polymers, energy resources and environmental issues. Not available for major credit.

#### 105aLg-bL General Chemistry (4-4, FaSpSm)

Fundamental principles and laws of chemistry; laboratory work emphasizes quantitative procedures. Prerequisite to all more advanced courses in chemistry. Lecture, 3 hours; laboratory and discussion, 4 hours. Quiz, 1 hour. *Prerequisite for aL:* CHEM 050 or passing of placement test; *for bL:* CHEM 105*aLg* or CHEM 115*aL.* (Duplicates credit in CHEM 115*aL* or CHEM 115*bL.*)

**115aLg-bL Advanced General Chemistry (4-4, a: Fa; b: Sp)** Equivalent to 105aLg-bL, but taught at a higher level for exceptionally well-prepared students. Admission to course by departmental approval only. Lecture, 3 hours; lab and discussion, 4 hours; quiz, 1 hour. *Prerequisite for bL:* CHEM *115aL.* (Duplicates credit in CHEM 105aLg or CHEM 105bL.)

**201Lg Chemistry in the Environment, Energy and Society (4, FaSpSm)** A range of issues where chemistry impacts society will be explored. Topics such as global warming, pollution, energy utilization and genetic engineering will be covered.

**202Lxg Materials for the 21st Century: Synthetic Polymers (4, FaSpSm)** The study of the chemistry of man-made polymeric materials, their properties and design, how they are manufactured and their economic and societal significance. Not available for major credit. *Recommended preparation:* one year college chemistry.

203Lxg Chemistry in Life: AIDS Drug Discovery and Development (4, Fa) Scientific principles underlying molecular approaches to diagnosis and treatment of diseases, using specific models within a societal (business, legal, ethical) context. Not available for major credit.

#### 290abcd Special Laboratory (1-1-1-1,

**FaSpSm)** Laboratory component for CHEM 105*a*, 105*b*, 322, or 322*b* for students with equivalent lecture credit from another institution. *Prerequisite*: consent of department head.

**300L Analytical Chemistry (4, Fa)** Theory and practice in chemical analysis, emphasizing instrumental techniques; error analysis, fractional distillation, extraction; chromatography; visible, ultraviolet, and infrared spectroscopy; introductions to electrochemistry and nuclear magnetic resonance spectroscopy. Lecture, 2 hours; laboratory and discussion. *Prerequisite:* CHEM 105*bL* or CHEM 115*bL*.

#### 322abL Organic Chemistry (4-4, FaSpSm)

Chemistry of the carbon compounds of the aliphatic and aromatic series; laboratory preparation of typical compounds of both series. Lecture, 3 hours jointly with 325abL; laboratory and discussion, 4 hours. For premedical and predental students and some categories of biology majors and engineers. *Prerequisite for aL:* CHEM 105bL or CHEM 115bL; for bL: CHEM 322aL.

#### 325abL Organic Chemistry (4-4, a: Fa; b: Sp)

Required of majors in chemistry. Lecture, 3 hours a week with 322abL; laboratory and discussion, 7 hours. *Prerequisite for aL*: CHEM 105bL or CHEM 115bL; for bL: CHEM 325aL.

#### 332L Physical Chemical Measurements (4, Sp)

Experimental study of topics discussed in 430*ab*; adsorption, magnetic susceptibility; electron spin resonance, kinetics, equilibria, molecular spectra and structure, viscosity, dielectric properties. Discussion, 1 hour; laboratory, 9 hours. *Corequisite:* CHEM 430*b*.

**390** Special Problems (1-4) Supervised, individual studies. No more than one registration permitted. Enrollment by petition only.

## 423L Advanced Laboratory Techniques in Organic and Inorganic Chemistry (4, Sp)

Advanced synthetic, analytical, and physical measurement techniques in organic and inorganic chemistry. Emphasis on laboratory work with discussion of theoretical background. Lecture, 2 hours; discussion, 1 hour; laboratory, 8 hours. *Prerequisite*: CHEM 300*L*, CHEM 322*bL* or CHEM 325*bL*.

#### 426 Advanced Organic Chemistry (4, Fa)

Advanced treatment of organic chemistry from a mechanistic point of view according to the following topics: polar and isopolar reactions, intermediates. Lecture, 3 hours; discussion, 1 hour. *Prerequisite*: CHEM 322bL or CHEM 325bL.

#### 430ab Physical Chemistry (4-4, a: Fa; b: Sp)

Kinetic theory; equations of state; thermodynamics; phase equilibria; chemical equilibrium; nuclear chemistry, wave mechanics; spectroscopy; statistical thermodynamics; kinetics; electrochemistry; surface and colloid chemistry. Lecture, 3 hours; discussion, 1 hour. *Prerequisite for a:* CHEM 300*L*, CHEM 322*bL* or CHEM 325*bL;* MATH 225 or MATH 226 or MATH 245; PHYS 152; *for b:* CHEM 430*a* and PHYS 153.

#### 432 Physical Chemistry for the Life Sciences

**(4, Fa)** Principles of physical chemistry relevant for the life sciences: thermodynamics, chemical equilibria, molecular dynamics, kinetics, molecular structures and interactions, spectroscopy, statistical thermodynamics and macromolecular structures. *Prerequisite*: CHEM 300*L*, CHEM 322*bL* or CHEM 325*bL*; MATH 126; PHYS 135*bL* or PHYS 152*L*.

#### 453 Advanced Inorganic Chemistry (4, Sp)

Atomic structure, theory of bonding, molecular structure, metallic state, coordination compounds, transition and nontransition metals, magnetic and optical properties, crystal field theory, mechanism of reactions. Lecture, 3 hours; discussion, 1 hour. *Prerequisite*: CHEM 105*bL* or CHEM 115*bL* and CHEM 322*bL* or CHEM 325*bL*.

#### 465L Chemical Instrumentation (4. Fa)

Principles of operation of instruments used in physical sciences. Basic electronics, interconnection of building blocks, data acquisition and data reduction, noise, instrument systems. Lecture, 2 hours; laboratory, 6 hours. *Prerequisite*: CHEM 332L or CHEM 430b or departmental approval.

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- **490x Directed Research (2-8, max 8, FaSpSm)** Individual research and readings. Not available for graduate credit. *Prerequisite:* departmental approval.
- **499 Special Topics (2-4, max 8)** Lectures and discussions on specialized topics in chemistry. *Prerequisite:* CHEM 300*L*; CHEM 322*abL* or CHEM 325*abL*.
- **515** Structure and Bonding in Inorganic and Organometallic Chemistry (4) An integrated core course of structure and bonding in inorganic, coordination and organometallic chemistry within an oxidation state framework. Symmetry, electronic properties.
- **516** Synthesis, Reactivity, and Mechanism in Inorganic and Organometallic Chemistry **(4)** A reactivity framework for inorganic and organometallic chemistry. Synthesis, reaction mechanisms and energetics. Homogeneous catalysis. *Prerequisite*: CHEM 515.
- **519** Biochemistry and Molecular Biology: An Introduction for Chemists (4) Amino acids and peptides; protein structure and function; enzyme kinetics; structure, analysis and synthesis of nucleic acids; chemical biology of DNA and RNA; biotechnology.
- **526 Structure and Mechanism in Organic Chemistry (4)** Review of modern structural theory of organic chemistry; and relation to the mechanisms of organic chemical reactions.
- **527 Synthetic Organic Chemistry (4)** A survey of representative groups of widely used synthetic organic reactions; emphasis on scope, limitations, and stereochemical consequences.
- 535 Introduction to Molecular Spectroscopy
- **(4)** Theory and experimental methods of molecular spectroscopy and applications to chemistry. Rotational, vibrational, electronic and nuclear magnetic resonance spectroscopies. *Prerequisite:* CHEM 544.
- **536 Molecular Dynamics (2 or 4)** Potential energy surfaces, reaction dynamics, scattering theories, classical trajectories, statistical theories, molecular energy transfer, photodissociation dynamics, gas-surface interactions, experimental results, beam and laser techniques.

**538** Mathematical Techniques of Physical Chemistry (4) Fundamentals and techniques of mathematics and physics. Linear algebra, differential equations, mechanics, electricity and magnetism. Applications to physical chemistry/chemical physics.

**539 Surface Chemistry (4)** Physical and chemical properties of solid surfaces; thermodynamics and kinetics of gas chemisorption; chemical bonding at surfaces; applications to catalysis and electronic materials.

## **540** Introduction to Statistical Mechanics **(4)** Study of macroscopic systems from molecular

Study of macroscopic systems from molecular viewpoint using statistical mechanics: ensembles, fluctuations, gases, gas-solid interfaces, crystals, polymers, critical phenomena, non-equilibrium systems.

**544** Introduction to Quantum Chemistry (4) Basic principles of quantum mechanics and their application to chemistry. Electronic structure of atoms and molecules.

**545** Theory and Practice of Molecular Electronic Structure (4, Fa) Provide working knowledge and hands-on experience in current quantum chemical methods for chemists who would like to employ these techniques in their own research. *Prerequisite:* CHEM 538, CHEM 544.

**550** Special Topics in Chemical Physics (2-4, max 8) Study of selected areas of chemical physics. Critical evaluation of recent advances in the field. *Prerequisite:* departmental approval.

**555** Computational Quantum Chemistry: Methods and Applications (4, FaSp) Introduction to modern computational quantum chemistry. Prediction of molecular structure, molecular spectra and molecular reaction mechanisms using ab initio and semi-empirical methods. *Prerequisite:* CHEM 340; *recommended preparation:* CHEM 544.

**561 Polymer Synthesis (4)** Concepts of polymer structure and stereochemistry. Organic chemistry of polymerization reactions with emphasis on condensation, radical, cationic, anionic, and coordination-metathesis polymerization.

**570** Seminar in Chemical Biology (2, max 4, FaSp) Introduce students to emerging research areas in chemical biology through a thorough discussion of seminal research articles and pre-

areas in chemical biology through a thorough discussion of seminal research articles and presentations of current research topics. *Recommended preparation:* some research experience and familiarity with literature search.

**588ab X-ray Crystallography (2-2)** *a:* Single-crystal X-ray diffraction theory and experimental methods. *b:* Application of diffraction techniques to problems of current chemical and biological interest. *Prerequisite:* CHEM 588*a* before *b.* 

#### 590 Directed Research (1-12, FaSpSm)

Research leading to the master's degree. Maximum units which may be applied to the degree to be determined by the department. Graded CR/NC.

**594abz Master's Thesis (2-2-0, FaSpSm)** Credit on acceptance of thesis. Graded IP/CR/NC.

**599 Special Topics (2-4, max 8)** Special topics in chemistry.

**625** Chemical Applications of Magnetic Resonance Spectroscopy (4) Elementary theory of magnetic resonance spectroscopy, methods of spectral analysis, treatment of Fourier Transform methods and time dependent phenomena; recent applications in organic chemistry.

**626** Natural Products Chemistry (2) Survey of the chemistry and biogenesis of the major classes of secondary metabolites along biogenetic lines: terpenes, aceto genins, and alkaloids.

**661 Selected Topics in Polymer Synthesis (2-4, max 8)** Advanced level study in selected areas of polymer synthesis. Critical evaluation

areas of polymer synthesis. Critical evaluation of recent advances. Topic examples: ionic polymerization; stereo chemistry of polymers; silicon polymers; ladder polymers.

**790 Research (1-12, FaSpSm)** Research leading to the doctorate. Maximum units which may be applied to the degree to be determined by the department. Graded CR/NC.

**794abcdz Doctoral Dissertation (2-2-2-0, FaSpSm)** Credit on acceptance of dissertation. Graded IP/CR/NC.

## **Classics**

Taper Hall of Humanities 224 (213) 740-3676 or 740-3677 FAX: (213) 740-7360 Email: classics@usc.edu www.usc.edu/dept/LAS/classics

Chair: Thomas N. Habinek, Ph.D.\*

#### Faculty

*Professors:* Anthony J. Boyle, M.A. (*Cantabr.*); Jerold C. Frakes, Ph.D. (*German*); Thomas N. Habinek, Ph.D.\*; Frank Lewis, Ph.D.

(*Philosophy*); Claudia Moatti, Ph.D.; John Pollini, Ph.D. (*Art History*); Amy Richlin, Ph.D.\*; William G. Thalmann, Ph.D.\*

Associate Professors: Clifford Ando, Ph.D.; Vincent Farenga, Ph.D.; Susan Lape, Ph.D.

Assistant Professors: Bryan Burns, Ph.D.; Anne Porter, Ph.D.; Kevin van Bladel, Ph.D.

Associate Professor Emerita: Jane Cody, Ph.D.

The curriculum of the Classics Department is designed to transmit a knowledge and an appreciation of the civilizations of the Greeks and the Romans — their languages and literatures, myths, philosophies and political thought — as well as to develop an understanding of the ways in which the classical heritage has manifested itself in later ages. Approximately one half of the department's classes are taught in English; these have to do with broad areas of civilization, including classical culture and literature. The remainder are courses in language and literature taught from the original Greek and Latin texts.

### Undergraduate Degrees

The undergraduate classics major gives the student an understanding of the cultures, languages and literatures of ancient Greece, Rome and the Mediterranean world.

Classics is a broadly interdisciplinary field. Most courses focus on ancient Greece and Rome, but students in the department also study the impact of classical cultures on later societies and the interactions among various ancient cultures. USC is a member of the Intercollegiate Center for Classical Studies and the College Year in Athens program, and classics majors are encouraged to spend a semester in Rome or Athens. The classics major is also encouraged to explore courses in allied fields such as ancient philosophy, history, comparative literature, art history and archaeology (School of Religion).

## Classics Major Requirements for the Bachelor of Arts

All classics majors are required to take two of the following three introductory courses: CLAS 150 The Greeks and the West, CLAS 151 Civilization of Rome, COLT 150x Origins of Western Literature and Culture. In addition all majors must have completed one of the two elementary language sequences (including GR 220 or LAT 222).

All majors must take seven additional courses from the list maintained by the classics undergraduate mentor. Of these seven, at least five must be courses offered by the Classics Department (i.e., CLAS, LAT, GR) and at least six must be numbered 300 or

above. In selecting courses from allied fields (anthropology, art history, comparative literature, English, history, Judaic studies, linguistics, philosophy, political science, religion [includes archaeology], gender studies), the student must work closely with the classics undergraduate mentor. Course work in departments other than classics must be approved in advance by the undergraduate mentor in order to count for major credit.

#### **Classics Minor**

The classics department minor requires one language course at the 100-level or above. One course from either A or B:

	•	
- 4	4	

CLAS 150	The Greeks and the West
CLAS 151	Civilization of Rome
CLAS 280	Classical Mythology

В

Second and third semester Latin or Greek

courses.	
GR 150	Greek II
GR 220	Greek III
LAT 150	Latin II
LAT 222	Latin III

Four upper-division courses (16 units) drawn from classics course offerings in classics, Latin or Greek

Total: 6 courses

#### Minor in Ancient Religion and Classical Languages

See the School of Religion section of the catalogue, page 412.

#### Minor in Critical Approaches to Leadership See the Department of Interdisciplinary

See the Department of Interdisciplinary Studies, page 339.

#### **Honors Program**

Candidates for the B.A. in classics can receive an honors degree by meeting these requirements: a 3.5 GPA in department courses at the time of graduation; completion of an honors research project under the guidance of a faculty member (CLAS 495x). Admission to the program is granted by the departmental undergraduate advisor in the semester preceding enrollment in CLAS 495x; students should have a 3.5 GPA in the major at this time.

## Students Anticipating Graduate Study in Classics

Students interested in attending graduate school in classics are advised to take as many courses in Greek and/or Latin as possible.

#### Advisement

Because of the great flexibility built into the classics major, students are required to have their course schedule approved by the undergraduate advisor every semester. Students must have a total of 32 upper division units (8 four-unit courses) to graduate at USC and 24 upper division units (6 four-unit courses) in their major.

<sup>\*</sup>Recipient of university-wide or college teaching award.

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### Graduate Degrees

The graduate program in classics at USC aims to train students to become scholars, teachers and interpreters of ancient Mediterranean civilizations, of the Greek and Latin languages and literatures, and of the traditions that have developed from them. In order to prepare students to work in a variety of intellectual contexts, the department seeks to provide both a traditional substantive training in classical philology and the intellectual flexibility that will enable them to make the accomplishments of the past available to audiences of the present.

The department offers the Ph.D. in Classics (Greek and Latin) and the M.A. in Greek, Latin and Classics. Collateral offerings are available in related departments, such as comparative literature, history, philosophy, art history, English and anthropology.

The graduate program offers mastery of traditional philological and linguistic skills as a basis for the study of ancient cultures, with emphasis on literature, other discursive practices and material culture. Students are encouraged to explore interdisciplinary approaches to classical studies and the relations between classics and other fields. Courses in related departments are recommended and degree requirements permit students to develop individual interests.

#### **Admission Requirements**

An applicant for admission will normally have an undergraduate major in classics, but programs may be arranged for promising students who do not. The student should have an undergraduate record satisfactory to the department. At least three letters of recommendation from the student's undergraduate teachers should be sent to the chair of the department. All applicants are required to take the verbal and quantitative general tests of the Graduate Record Examinations. See

the department Web site for detailed application instructions.

#### **Degree Requirements**

These degrees are under the jurisdiction of the Graduate School. Refer to the Requirements for Graduation section (page 81) and the Graduate School section of this catalogue (page 91) for general regulations. All courses applied toward the degrees must be courses accepted by the Graduate School.

#### Master of Arts in Classics

The department does not accept applicants for a Master of Arts degree in classics. The M.A. degree is intended only as a transitional degree in the process of completing requirements for the Ph.D. in classics.

Work toward the M.A. consists of six fourunit courses (24 units) and a thesis and oral defense, or the M.A. comprehensive examination. Two of the core seminars are required and five of the six courses must be taken in the Department of Classics. Under the guidance of a faculty committee, the student elects those courses appropriate to individual areas of special interest and previous academic preparation.

#### **Doctor of Philosophy in Classics**

Sixty units of course work are required. Of these ordinarily at least 48 will be taken in the Department of Classics. Course work, exam and individual research projects are organized into a three-year cycle of 12 core courses. The final two years of the five-year program are reserved for dissertation preparation. At the end of each of the first three years a student will sit for a portion of the preliminary examinations, with all preliminary exams to be completed by the end of the third year. In addition, at the end of each of the first three years students present before a jury of internal and

external examiners an individual research project. A substantial dissertation prospectus will be submitted within six months of the completion of course work, and an oral examination conducted by the student's five-member guidance committee will be based on the prospectus.

The core program is as follows, and a student may enter at any time in the three-year sequence.

GREEK YEAR		UNITS
CLAS 540	Seminar in Early Greek	
	Literature	4
CLAS 545	Seminar in Theoretical	
	Approaches to Greek	
	Culture and Literature	4
CLAS 550	Seminar in Classical and	
	Hellenistic Literature	4
CLAS 555	Seminar in Greek	
	History, Culture, and	
	Society	4
LATIN YEAR		UNITS
CLAS 560	Seminar in Republican	
02.15	Latin Literature	4
CLAS 565	Seminar in Theoretical	-
	Approaches to Roman	
	Culture and Literature	4
CLAS 570	Seminar in Imperial	-
02.100,0	Latin Literature	4
CLAS 575	Seminar in Roman	
	History, Culture, and	
	Society	4
	Society	
THEORY, SKILLS, MET	HODS YEAR	UNITS
CLAS 510	Seminar in Classical	
	Philology	4
CLAS 515	Topics in Classical	
	Scholarship	4
CLAS 520	Approaches to Antiquity	4
CLAS 525	Studies in Ancient and	
	Pre-Modern Cultures	4

### Courses of Instruction

#### CLASSICS (CLAS)

The terms indicated are *expected* but are not *guaranteed*. For the courses offered during any given term, consult the *Schedule of Classes*.

Knowledge of Greek or Latin not required for courses numbered 499 and below.

**150g** The Greeks and the West (4, Fa) A historical and cultural survey of ancient Greece, 1100-300 BCE. Emphasis will be on the reading and interpretation of literary texts, with extensive use of visual matter.

**151g Civilization of Rome (4, Sp)** Studies of Roman civilization through the major literary works of ancient Rome. All reading in translation.

**202** Introduction to Archaeology **(4)** (Enroll in ANTH 202)

#### 210 Greek and Latin Roots of English (2)

Greek and Latin components of English, including specialized vocabularies in medicine, technology, and law. Historical relationship of English to Greek, Latin and other languages.

- **212L** Archaeology: Interpreting the Past **(4, Sp)** Methods and techniques employed in modern archaeological research, including the tools and principles of allied scientific fields and the impact of analytical and technological advances.
- **220g Egypt and India: Colonial Experiences (4)** A comparative evaluation of the colonial experiences of Egypt and India. Emphasis on primary sources. Distinct historical periods are considered.
- **280g Classical Mythology (4, FaSp)** Origin, development, and transmission of mythology in Greek and Latin literature, with parallels from other traditions.
- **300** Women in Antiquity **(4)** Theoretical approaches to women's history; evidence for the daily life, legal status, and religion of ancient Greek and Roman women; the female in literature and art.
- 301abcd Cross Registration with UCLA (2½-2½-2½-2½)
- **305 Roman Law (4)** History and elements of Roman law, including persons, property, obligations, and inheritance, in context of social structure (family, gender, class, slavery, empire). *Recommended preparation:* CLAS 151 or HIST 101.
- **310 Pagans and Christians (4)** The Christian reception and transformation of pagan religious and philosophical thought.
- **315** Sport and Spectacle in the Ancient World (4, FaSp) The role of athletic training and competition in ancient society, from the Greek Olympic games to Roman gladiatorial combat and modern recreations.
- **320gm Diversity and the Classical Western Tradition (4, Sp)** Political, ethical, and ideological aspects of classical Western attitudes towards human diversity. Relationship between classical tradition and contemporary discussions of diversity and unity.
- **321** Greek Art and Archaeology (4, Fa) (Enroll in AHIS 321)
- **322** Roman Art and Archaeology (4, Sp) (Enroll in AHIS 322)
- **323 Aegean Archaeology (4, FaSp)** Survey of the Bronze Age Aegean societies of Minoan Crete and Mycenaean Greece; emphasis on archaeological theory and method in a prehistoric context.
- **325 Ancient Epic (4)** Representative epics of the Greek and Roman world; development of the character of the hero; later influences.

333 Cult and City in Ancient Greece (4)

Explores the relationship between civic and religious institutions in ancient Greece: city planning, warfare, mystery cults, drama, sacrifice, and women's rituals.

- **337 Ancient Drama (4)** Tragedies and comedies of the ancient world; later influences.
- **348** The Athenian Century (4) Democratic concepts and values of fifth century B.C. Athens utilizing rhetorical, historical, dramatic, and biographical sources.
- **360** Classical Arabic Literature in Translation (4, Irregular) Introduction to Classical Arabic literature and culture of the period 500 to 1500 A.D. Focus on continuity of ancient traditions in Arabic. In English translation.
- **370** Leaders and Communities: Classical Models (4, FaSp) Examination of political and moral leadership in classical republican, democratic, and imperial communities; consideration of how these models are useful to contemporary democracies.
- **375** Alexander the Great: Leadership, Personality and World Conquest (4) Ancient sources on Alexander's life, personality and conquests. Modern evaluations of his achievements as a prototype for autocracy and empire-building from antiquity to today.
- **380** Approaches to Myth (4) Advanced study of uses and interpretations of myth. Approaches include myth and ritual; psychology; gender; myth in literature, film and art. *Recommended preparation:* CLAS 280.
- **390** Special Problems (1-4) Supervised, individual studies. No more than one registration permitted. Enrollment by petition only.
- 425 Interdisciplinary Studies in Classical Art and Archaeology: Research and Methodology (4, max 8, Irregular) (Enroll in AHIS 425)
- 401abcd Cross Registration with UCLA (2½-2½-2½)
- **470** Democracies Ancient and Modern (4) Democratic and republican governments in Athens and Rome; their influence on republicanism in early modern Italy and 18th-century America; their relevance for contemporary democracies.
- **485** Comparative Grammar of Greek and Latin (4) A systematic comparative and historical linguistic study of the phonological, morphological and syntactic components of the grammars of the ancient Greek and Latin languages.

- **490x Directed Research (2-8, max 8)** Individual research and readings. Not available for graduate credit. *Prerequisite:* departmental approval.
- **495x Honors Research (4)** Individual research for honors in the major leading to a substantial paper or other project. Not open to graduate students. *Prerequisite*: departmental approval.
- 499 Special Topics (2-4, max 8)

All of the following courses require a knowledge of Greek or Latin.

- **500 Proseminar (2, Sp)** Introduction to classical scholarship; research methods; bibliography.
- 501abcd Cross Registration with UCLA (2½-2½-2½) Special studies in selected areas of classical civilization and literature.
- **510 Seminar in Classical Philology (4, 3 years, Fa)** Close study of the Greek and Latin languages and linguistic theory.
- **511 Sanskrit I (4)** Introduces the student to the fundamentals of Sanskrit grammar, the ancient Indo-European language most closely related to Greek.
- **512 Sanskrit II (4)** Completes the acquisition of the fundamentals of Sanskrit grammar and enables the student to read a variety of Vedic and classical Sanskrit texts.
- **515 Topics in Classical Scholarship (4, 3 years, Fa)** Intensive study of individual authors, genres, periods, or areas of classical scholarship.
- **520** Approaches to Antiquity (4, 3 years, Sp) Study in the history and theory of classical scholarship.
- **525** Studies in Ancient and Pre-Modern Cultures (4, 3 years, Sp) Investigation of cultural interaction among Greeks, Romans and other ancient peoples. Includes a comparative study of pre-modern cultures.
- **540 Seminar in Early Greek Literature (4, 3 years, Fa)** Homer through Aeschylus.
- 545 Seminar in Theoretical Approaches to Greek Culture and Literature (4, 3 years, Fa) Introduces students to the study of Greek culture and to the range of theories useful for modeling that culture and its literature.
- **550** Seminar in Classical and Hellenistic Literature (4, 3 years, Sp) Tragic poetry, comic poetry, Hellenistic poetry.

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- **555** Seminar in Greek History, Culture, and Society (4, 3 years, Sp) Develops a historical framework for Greek culture from the Mycenaean period through the Hellenistic world. Emphasis on prose texts: historians, philosophers, orators.
- **560** Seminar in Republican Latin Literature **(4, 3 years, Fa)** Early Latin literature through Virgil.
- **565** Seminar in Theoretical Approaches to Roman Culture and Literature (4, 3 years, Fa) Introduces students to the study of Roman culture and to a range of theories useful for modeling that culture and its literature.
- **570** Seminar in Imperial Latin Literature **(4, 3 years, Sp)** Latin literature from the Augustan period to that of the Antonines.
- **575** Seminar in Roman History, Culture, and **Society (4, 3 years, Sp)** Introduces students to research in Roman history and historiography.
- **590 Directed Research (1-12, FaSp)** Research leading to the master's degree. Maximum units which may be applied to the degree to be determined by the department. Graded CR/NC.
- **594abz Master's Thesis (2-2-0, FaSp)** Credit on acceptance of thesis. Graded IP/CR/NC.
- **790 Research (1-12)** Research leading to the doctorate. Maximum units which may be applied to the degree to be determined by the department. Graded CR/NC.
- **794abcdz Doctoral Dissertation (2-2-2-0, FaSp)** Credit on acceptance of dissertation. Graded IP/CR/NC.

#### GREEK (GR)

- **120 Greek I (4, FaSp)** Essentials of classical Greek grammar and vocabulary.
- **150 Greek II (4, FaSp)** Essentials of classical Greek grammar and vocabulary, continued. Basic reading skills. *Prerequisite*: GR 120.
- **220 Greek III (4, FaSp)** Reading Greek literature. Introduction to reading and translation of classical Greek prose and poetry. Extensive grammar review. *Prerequisite:* GR 150.
- **321 Greek Art and Archaeology (4, Fa)** (Enroll in AHIS 321)
- **322** Roman Art and Archaeology (4, Fa) (Enroll in AHIS 322)
- **345** Greek Tragic Poets (4) Selected plays of Aeschylus, Sophocles, and Euripides. (Duplicates credit in former GR 445.)

- **353 Plato (4)** Readings from the Republic or other dialogues.
- **354 Greek Historians (4)** Selections from such representative historians as Herodotus and Thucydides.
- **355 Aristophanes (4)** A study of at least three comedies. (Duplicates credit in former GR 455.)
- **362** Homer and the Greek Epic **(4)** Selections from the *Iliad* and/or *Odyssey*. Problems of oral composition and transmission. (Duplicates credit in former GR 462.)
- **365** Greek Lyric Poetry **(4)** Readings from Archilochus, Sappho, Alcaeus, Pindar, and other lyric poets. *Prerequisite:* GR 220.
- **375 Plutarch (4)** Readings of selected works by the Greek author Plutarch. *Prerequisite:* GR 220.
- **390** Special Problems (1-4, FaSp) Supervised, individual studies. No more than one registration permitted. Enrollment by petition only.
- 425 Interdisciplinary Studies in Classical Art and Archaeology: Research and Methodology (4, max 8, Irregular) (Enroll in AHIS 425)
- **450** Readings in Greek Literature (4, max 12) Readings in various authors and genres of Greek literature. *Prerequisite*: 300-level Greek course.
- **490x Directed Research (2-8, max 8, FaSp)** Individual research and readings. Not available for graduate credit. *Prerequisite:* departmental approval.
- 499 Special Topics (2-4, max 8)

#### LATIN (LAT)

- **020x Latin for Research (2)** For students who wish to use Latin in their research, or who need help in meeting the reading requirement for the Ph.D. Not available for degree credit.
- **120 Latin I (4, FaSp)** Essentials of Latin grammar and vocabulary.
- **150 Latin II (4, FaSp)** Essentials of Latin grammar and vocabulary, continued. Basic reading skills. *Prerequisite:* LAT 120.
- **222** Latin III (4, FaSp) Reading Latin literature. Introduction to reading and translation of classical Latin prose and poetry. Extensive grammar review. *Prerequisite:* LAT 150.

#### 310 Latin Elegiac Poetry (4, Irregular)

Selected poems of Catullus, Tibullus, Propertius, and Ovid; meter, style, and themes. *Prerequisite*: LAT 313, LAT 314, LAT 315, or LAT 316. (Duplicates credit in former LAT 410.)

- **312** Roman Satire (4, Irregular) Selected satires of Horace and Juvenal; history of the genre. (Duplicates credit in former LAT 412.)
- **313 Ovid and Classical Mythology (4)** Selections from the *Metamorphoses* and *Fasti*; collateral reading on classical mythology.
- **314 Catullus and Horace (4)** Selected poems of Catullus and Odes of Horace.
- **315 Cicero (4)** Representative philosophical, oratorical, and rhetorical works; selected letters.
- **316 Roman Comedy (4)** Selected plays of Plautus and Terence.
- **320 Vergil (4)** Studies in the *Aeneid* or *Eclogues* and *Georgics*. (Duplicates credit in former LAT 413.)
- **322** Lucretius' *De Rerum Natura* **(4)** The didactic epic as a vehicle of Epicurean philosophy. (Duplicates credit in former LAT 414.)
- **325 Roman Historians (4)** Readings from Sallust, Livy, and Tacitus. *Prerequisite:* LAT 222 or satisfactory completion of placement test.
- **365** Latin Literature of the Silver Age (4) Readings in Seneca, Martial, Pliny, and other representative writers. (Duplicates credit in former LAT 465.)
- **385** Late and Medieval Latin (4) Selections from poets and prose writers from late antiquity to the 15th century. (Duplicates credit in former LAT 485.)
- **390 Special Problems (1-4, FaSp)** Supervised, individual studies. No more than one registration permitted. Enrollment by petition only.
- **450 Readings in Latin Literature (4, max 12, FaSp)** Readings in various authors and genres of Latin literature. *Prerequisite:* 300-level Latin course.
- **490x Directed Research (2-8, max 8, FaSp)** Individual research and readings. Not available for graduate credit. *Prerequisite:* departmental approval.
- 499 Special Topics (2-4, max 8)

### **Comparative Literature**

Taper Hall of Humanities 161 (213) 740-0102 FAX: (213) 740-8058 Email: complit@usc.edu www.usc.edu/dept/comp-lit

Chair: Peggy Kamuf, Ph.D.

#### Faculty

Professors: Dagmar Barnouw, Ph.D. (German)\*; Joseph A. Boone, Ph.D. (English); Dominic C.N. Cheung, Ph.D. (East Asian Languages and Cultures); Jerold Frakes, Ph.D. (German); David E. James, Ph.D. (Cinema-Television); Peggy Kamuf, Ph.D. (French and Italian)\*; James R. Kincaid, Ph.D. (English); Marsha Kinder, Ph.D. (Cinema-Television); Moshe Lazar, Ph.D.; Tania Modleski, Ph.D. (English); Gloria Orenstein, Ph.D.; Karen Elyse Pinkus, Ph.D. (French and Italian); Dana B. Polan, Ph.D. (Cinema-Television); Hilary M. Schor, Ph.D. (English and Gender Studies); David St. John, M.F.A. (English);

William G. Thalmann, Ph.D. (Classics)\*; Daniel Tiffany, Ph.D. (English); Alexander Zholkovsky, Ph.D. (Slavic Languages and Literatures)

Associate Professors: Roberto Ignazio Diaz, Ph.D. (Spanish and Portuguese); Vincent Farenga, Ph.D. (Classics); Heather James, Ph.D. (English); Janet Johnson, Ph.D. (Music); Panivong Norindr, Ph.D. (French and Italian); Margaret Rosenthal, Ph.D. (French and Italian); Peter Starr, Ph.D. (French and Italian)

Assistant Professors: David Bialock, Ph.D. (East Asian Languages and Cultures); Gabriel Giorgi, Ph.D. (Spanish and Portuguese); Jinhee Kim, Ph.D. (East Asian Languages and Cultures); Antonia Szabari, Ph.D. (French and Italian); Boris Wolfson, Ph.D. (Slavic Languages and Literatures); Maria Teresa Zubiaurre, Ph.D. (Spanish and Portuguese)

Emeritus Professors: David Malone, Ph.D.; Albert Sonnenfeld, Ph.D. (French and Italian)\*

\*Recipient of university-wide or college teaching award.

#### **Degree Programs**

The Comparative Literature Department offers the B.A., minor, M.A. and Ph.D. in cross-linguistic and cross-cultural literary studies, including the study of various literary genres, periods and movements; literary theory; and interdisciplinary approaches to literature. The literatures and cultures represented in the department fall within three primary traditions: Western (European and American), East Asian, and Pan-African.

### Undergraduate Degrees

## Comparative Literature Major Requirements

Students may earn the B.A. in Comparative Literature by satisfying one of two sets of requirements. The first set, Comparative Literature with Interdisciplinary Option, is designed to include some course work from other literature departments and from other disciplines related to literary study (e.g., the arts, cinematelevision, gender studies, history, religion, philosophy).

These requirements provide the opportunity to create a major program that is broadly based in the liberal arts, with special emphasis on literature and its interrelations with other fields. Students who choose to complete these requirements might consider completing a double major or minor in a non-literary field or in English. Conversely, the minor in Comparative Literature with Interdisciplinary Option will complement the programs of students majoring in non-literary fields or in English.

The second set of requirements, Comparative Literature with Foreign Language Emphasis, incorporates the study of at least one literature in a foreign language into the comparative and interdisciplinary perspectives of courses in the Comparative Literature Department.

Students who intend to pursue graduate studies in comparative literature or a foreign literature are strongly advised to complete these requirements, as are students who already possess advanced skills in a language other than English. Majors in comparative literature with foreign language emphasis might consider a double major or a minor in a department of foreign language or in a non-literary field such as international relations or journalism. Conversely, the minor in comparative literature with foreign language emphasis will complement the programs of students majoring in a foreign language or in these non-literary fields.

Comparative Literature Major with Interdisciplinary Option Students earn a B.A. in Comparative Literature and are required to complete at least 40 units (10 courses) as follows:

- (a) COLT 301 and COLT 401
- (b) Six additional COLT courses, of which no more than two may be at the 200-level. (Note that courses marked "x" cannot be taken for major credit.)
- (c) A combination of two additional upperdivision courses selected from COLT and/or other literature departments, or in fields related to literature through interdisciplinary approaches (e.g., history and theory of the arts, cinema-television, gender studies, history, religion and philosophy.) All courses outside comparative literature must be selected in consultation with a departmental advisor.

Comparative Literature Major with Foreign Language Emphasis Students earn a B.A. in Comparative Literature and are required to complete 40 units (10 courses) as follows:

- (a) COLT 301 and COLT 401
- (b) Five additional COLT courses, of which no more than two may be at the 200-level. (Note that courses marked "x" cannot be taken for major credit.)
- (c) Three courses in the literature of a foreign language, with all readings in that language.

#### **Honors Program**

The B.A. in Comparative Literature with Honors is available to students who are admitted to the honors program. Qualifications for admission are: an overall GPA of at least 3.0 (A = 4.0), and a GPA of at least 3.5 in courses counted for major credit.

Majors in Comparative Literature with Interdisciplinary Option must complete a four-unit course of independent study (COLT 490x) and COLT 495 Senior Honors Thesis in place of two upper division courses. In place of two upper division courses, majors in comparative literature with foreign

language emphasis must complete an upper division course in the literature of a second language other than English and COLT 495 Senior Honors Thesis.

#### **Minor in Comparative Literature**

Students may minor in either comparative literature with interdisciplinary option or in comparative literature with foreign language emphasis. This first minor will complement a major in English or in a non-literary field related to literature through interdisciplinary approaches. The second minor will complement a major in a foreign language or in a non-literary field where foreign language skills are advantageous (e.g., international relations, journalism).

Minor in Comparative Literature with Interdisciplinary Option Students are required to complete at least 24 units (six courses) as follows:

- (a) COLT 301 and COLT 401
- (b) Two additional COLT courses, of which no more than one may be at the 200-level. (Note that courses marked "x" cannot be taken for major credit.)

(c) A combination of two additional upperdivision courses selected from COLT and/or other literature departments, or in fields related to literature through interdisciplinary approaches (e.g., history and theory of the arts, cinema-television, gender studies, history, religion and philosophy.) All courses outside of Comparative Literature must be selected in consultation with a departmental advisor.

Minor in Comparative Literature with Foreign Language Emphasis Students are required to complete at least 24 units (six courses) as follows:

- (a) COLT 301 and COLT 401
- (b) Three additional COLT courses, of which no more than one may be at the 200-level. (Note that courses marked "x" cannot be taken for major credit.)
- (c) One course in the literature of a foreign language, with all readings in that language.

### Graduate Degrees

The primary goal of graduate study in comparative literature is to prepare students to engage in original literary research and teaching after acquiring: (1) a broadly based knowledge of literature's formal or generic development extending across linguistic boundaries; (2) an understanding of literature's historical development within a number of specific cultural or ideological contexts; and (3) an appreciation of the principles of literary criticism and theory essential to the sophisticated analysis, interpretation and evaluation of individual works. The core of the discipline of comparative literature is advanced skill in several languages allowing research in several literary traditions.

Graduate students follow individualized programs that combine the study of a major literary tradition in one language with one or more comparative fields. The program has strong faculty resources in the principle literary genres and periods of Western tradition, in selected genres and cultural issues within the East Asian tradition, and in a variety of methodological approaches within contemporary literary criticism and theory. Literature and gender studies is a particularly strong area of interdisciplinary work.

#### **Admission Requirements**

The department makes no offers of admission to applicants seeking only the M.A. degree. Requirements for admission to the Ph.D. program in comparative literature include: a B.A. in literature or the equivalent; satisfactory scores in both the verbal and quantitative General Test of the Graduate Record Examinations; satisfactory grades from course work completed at other institutions; a written statement of at least 500 words indicating the applicant's interests in graduate study in comparative literature; a sample of scholarly or critical writing on a literary work or subject; three letters of recommendation from former instructors; and, for international applicants, a satisfactory score on the TOEFL examination. All applicants must be fluent in English before being admitted to the program.

#### **Degree Requirements**

These degrees are under the jurisdiction of the Graduate School. Refer to the Requirements for Graduation section (page 81) and the Graduate School section of this catalogue (page 91) for general regulations. To be applied toward the degrees, courses must be accepted by the Graduate School.

#### Master of Arts in Comparative Literature

Although the department does not admit candidates for the M.A., it awards the degree either as a terminal degree or as a transitional degree in the course of Ph.D. study. Some differences in the requirements pertain depending on whether the student is a candidate for the terminal M.A. or seeks to continue study for the Ph.D.

#### Course Requirements

Completion of at least eight courses (29-32 units) distributed as follows: (1) three courses in one major literary tradition, which is understood to be a national literature (e.g., Russian or Japanese); several literatures of one language (e.g., Francophone literatures of Europe, Africa and the Americas; peninsular and Latin American literatures in Spanish); or a bilingual tradition like classics (Greek and Latin); (2) at least two courses in a minor field, which is understood to be a second literary tradition, a major literary genre, period, or movement, literary theory, a comparative cultural context for literary study (e.g., East-West literary relations), or an interdisciplinary area (e.g., literature and gender

studies); and (3) three additional courses in comparative literature, including COLT 502 and two other COLT courses related to the student's major literary tradition or minor field. No more than one of the required eight courses may be in directed research (COLT 590). COLT 502 must be completed by the end of each student's second semester in the program.

Students may transfer up to four units toward the M.A.

#### Examination

Terminal: A written examination on the student's major literary tradition, normally to be taken at the end of the semester in which course work is completed and after language requirements have been met. For this examination the student will prepare, in consultation with the COLT graduate advisor, an individual reading list based on COLT reading lists.

Transitional: The same examination will serve as the Ph.D. Screening Procedure, to be taken at the end of the semester in which eight courses are completed (for students entering with a B.A.) or at the end of the second full semester (for students entering with an M.A.).

#### Foreign Language Requirement

Terminal: The successful completion of at least two advanced courses (400-level or higher) in the original language of a literary tradition other than the Anglophone.

Transitional: The successful completion of at least three advanced courses (400-level or higher) in the original languages of two literary traditions other than the Anglophone. Alternatively, students may combine the successful completion of two such courses in one literary tradition with an examination administered by the Comparative Literature Department demonstrating a linguistic ability and literary knowledge equivalent to an advanced course in the other literary tradition.

## Doctor of Philosophy in Comparative Literature

#### Course Requirements

A minimum of 15 courses or 60 units. The courses are to be distributed as follows: (1) at least six courses in the student's major literary tradition, which is understood to be a national literature (e.g., Russian or Japanese); several literatures of one language (e.g., Francophone literatures of Europe, Africa and the Americas; peninsular and Latin American literatures in Spanish); or a bilingual tradition like Classics (Greek and Latin); (2) at least two courses in a second

literary tradition; (3) at least six courses in comparative literature or comparative fields relating to the student's program, including COLT 502. Normally, students will also take an additional course in a third literary tradition, as outlined below under "Foreign Language Requirements." No more than three of the required 15 courses may be in directed research (590 or 790). COLT 502 must be completed by the end of each student's second semester in the program.

#### Foreign Language Requirements

All students must successfully complete their required advanced course work (400level or higher) in three languages, one of which may be English. This will normally be accomplished by completing all courses in the major and second literary traditions in the original languages, and by successfully completing at least one advanced course in a third literary tradition. In rare circumstances, an examination administered by the Comparative Literature Department demonstrating a linguistic skill and literary knowledge equivalent to an advanced course (400-level or higher) may be substituted for the third language. Where Anglophone literature constitutes a student's major literary tradition, advanced course work in two other literary traditions is required without the option of examination in the third language. In some cases the COLT Graduate Studies Committee may require special preparation in languages essential to the student's program (e.g., Latin or Greek for specialization in the Renaissance).

#### Screening Procedure

To be permitted to work toward the Ph.D. in comparative literature, a student must pass the examination for the transitional master's degree. Students entering the program with an M.A. from another institution must pass this examination at the end of their second semester in the program. The COLT Graduate Studies Subcommittee periodically reviews the progress of all students in the program and may recommend that a student not be allowed to continue if examinations, grades, or other forms of evaluation indicate inadequate performance.

#### Comparative Field Examination

The purpose of the comparative field exam is to demonstrate the breadth of the student's comparative expertise. Thus the principal texts under analysis in the comparative field must not belong to that major literary tradition on which the student was tested in the screening procedure; nor should they be in any way central to the thesis he or she proposes to write.

At the time of the screening procedure, the student will designate a three-member comparative field exam committee, normally chaired by that member of the COLT faculty with whom the student intends to write the thesis. This committee is responsible for helping the student prepare for the comparative field exam, as well as for assuring its integrity as a comparative exercise.

The centerpiece of the field exam is a 30-40 page paper with bibliography. Typically, this paper will grow out of work the student has done for one or more graduate seminars. It can be literary and/or theoretical in nature, but must draw principally on work in one or both of the student's secondary languages. The oral portion of the field exam involves discussion of the submitted paper and of the student's evolving research plans.

#### Guidance Committee

Upon successful completion of the comprehensive field exam, students will form a five-member guidance committee in accordance with Graduate School guidelines. The chair and two other members of this committee must be COLT faculty; at least one member must come from outside the Comparative Literature Department. The committee will help the student form reading lists for the qualifying exam and write the dissertation prospectus. Its recommendations will be subject to the approval of the COLT Graduate Studies Committee.

#### Qualifying Examination

When all required courses or units, all language requirements and the comparative field examination have been completed, the student must pass an examination on the area of his or her proposed dissertation topic. The examination will consist of a five-hour written examination, an oral examination on the written part and discussion of a written proposal for the dissertation which the student has submitted prior to the written examination. The proposal should follow the form prescribed by the Graduate Studies Subcommittee. Each student will prepare, in consultation with his or her guidance committee, a reading list on the area of the proposed topic.

#### Dissertation

During the oral part of the qualifying examination, the student will receive advice and instruction from the guidance committee on the proposal for the dissertation. Following successful completion of the qualifying examination, any necessary revisions must be made in consultation with the student's dissertation committee.

### Courses of Instruction

#### COMPARATIVE LITERATURE (COLT)

The terms indicated are *expected* but are not *guaranteed*. For the courses offered during any given term, consult the *Schedule of Classes*.

**150xg Origins of Western Literature and Culture (4, FaSp)** Survey of literary and other cultural texts from antiquity through the Renaissance with emphasis on changing conceptions of community and the individual. Not available for major credit.

**151xg Modern Western Literature and Culture (4, FaSp)** Survey of literary and other cultural texts from the 17th to the 21st centuries, with emphasis on the individual and social change. Not available for major credit.

**201** Introduction to Comparative Literature **(4)** Gateway to the major and minor in comparative literature. Introduction to the study of comparative literature through analysis of works in such genres as the novel, short story, one-act play or lyric poem.

**250g Cultures of Latin America (4)** Comparative study of Latin American cultures, especially vis-a-vis those of Europe and the U.S. Materials drawn from literature, but also film, opera, history, cultural theory.

**262 Masterpieces in East Asian Literature (4)** Introduction to the literature of East Asia in translation, principally the literature of Japan and China.

**264g** Asian Aesthetic and Literary Traditions (4) A comparative study of the Asian aesthetic heritage of poetry, painting, music, and drama; of literary themes, trends, and myths.

**301 Junior Seminar in Comparative Literature (4, Fa)** Introduction to methods of comparative analysis and interpretation. Works will be studied through various comparative categories that may include genre, period, movements, and interdisciplinary approaches.

**310 Spirituality and Literature (4)** Crosscultural study of the literary forms, from ethno-poetic chants to contemporary novels and plays, through which writers have expressed their religious and spiritual beliefs. (Duplicates credit in former COLT 360.)

**312** Heroes, Myths and Legends in Literature and the Arts (4) Study of transformations of characters and themes from myth, legend or fairytale (Oedipus, Antigone, Faust, Don Juan, Cinderella, Comic and Tragic Twins, Hero and Monster).

**320** Epic and Society in Medieval Europe (4) Reading and analysis of epics from across the European Middle Ages; focus on the cultural functions of heroism.

**324** Women in the European Middle Ages **(4)** Study of the literary, social and cultural lives of women during the European Middle Ages by reading and analyzing texts written by and about women.

**330** Lyric Interactions: Poetry, Self and Society (4) Lyric poetry as communicative interaction between individuals and groups in premodern to modern societies, with interdisciplinary approaches from communication theory, cultural history and social psychology.

**335** Symbolism and Decadence **(4)** Study of the late 19th and early 20th century movements in Symbolism and Decadence.

**343** The Rise of the Novel, 1500-1800 (4) A survey of influential pre-modern narratives, from picaresque and epistolary designs to psychological, sociomoral, and historicist strategies by Cervantes, Defoe, Fielding, Richardson, Voltaire, Laclos, Goethe.

**345** Realist Fiction (4) Study of the ways literature presents the "real" (social and/or individual) through readings of selected novels and short stories in the realist and naturalist traditions.

**346 Fictions of the First Person (4)** Study of prose fiction in the first person as a model of fiction in general and as a reflection of the fictional structure of selfhood.

**348 Modernist Fiction (4)** Study of the Modernist aesthetic in narrative texts by Gide, Joyce, Kafka, Woolf and others; possible focus on related trends in other literary traditions.

**351 Modern and Contemporary Drama (4)** Comparative study of major modern dramatic trends, subgenres, and techniques, through representative works from Strindberg to the Theatre of the Grotesque and the Absurd. (Duplicates credit in former COLT 305.)

**357 The Avant-Garde (4, max 8)** Study of the relationship between literary modes and other arts since 1900, focusing on particular avant-garde movements.

**360 Classical Arabic Literature in Translation (4, Irregular)** (Enroll in CLAS 360)

#### 365 Literature and Popular Culture (4)

Study of popular culture (e.g., movies, science fiction, detective novel, mass media, the occult, and other popular modes) in European and American literatures. Comparisons with non-Western literatures.

370 Leaders and Communities: Classical Models (4, FaSp) (Enroll in CLAS 370)

**372** Women Writers in Asian Literature (4) Examination of feminism's coming of age in Asia by examining canonical texts by women writers of the 20th century, with special reference to Korea.

**374gm Women Writers in Europe and America (4)** Introduction to works of major women writers from the Middle Ages to the 20th century in their literary, social, and cultural contexts.

**376** Women in Contemporary Literature and the Arts (4) Cross-cultural study of contemporary works by women throughout the world in both literature and the visual arts.

**382g Zen and Taoism in Asian Literature (4)** Studies of the presence and influence of Zen Buddhism and Taoism in Asian literature, with a focus on China and Japan.

**386 20th-Century Yiddish Literature and Film (4)** Study of the major Yiddish texts and films and their social function in Jewish cultural life during the 20th century.

**388 U.S. Latino Fiction and the Literatures of the Americas (4)** Reading and comparative study of narrative fiction by U.S. Latino, Spanish American, and American writers. Spanish majors prepare assignments in Spanish. Conducted in English. *Recommended preparation:* reading knowledge of Spanish.

**390 Special Problems (1-4)** Supervised, individual studies. No more than one registration permitted. Enrollment by petition only.

**391 Seminar in Literary Criticism (4)** Introduction to major critical texts in the Western tradition from the beginnings to the present; particular attention to 20th-century criticism and selected literary texts.

**401 Senior Seminar on a Comparative Literary Topic (4)** Study of a selected topic employing a comparative perspective on literature.

- **420 The Fantastic (4)** Representative works from the "fantastic" and related currents within the European, U.S., and Spanish American traditions; reading of texts by authors such as Borges, Cortazar, Kafka, and Poe. Discussion of relevant theoretical concepts and critical works.
- **426 Utopias (4)** Examination of selected utopias in their historical context as "no places" whose projections of alternate cultures always comment on their own.
- **445m Eurocentrism (4)** Analysis of European texts, music and art from ancient Greece to the present, demonstrating prevalent cultural biases in European dealings with other cultures.
- **448** Transcultural Representations **(4)** Study of fictional texts, chronicles and travel narratives in which authors depict cultures other than their own; reading and discussion of literary and cultural theory.
- **452** Representation and Cognition in Photography (4) Analysis of documentary photo-representation in its historical context through study of the work of selected 20th century documentary photographers and of pertinent critical writings.
- **454 Aesthetic Philosophy and Theory (4)** Introduction to philosophical and critical writings on the nature of art and aesthetic experience. Special attention to technology's impact on art.
- **460** Love, Self and Gender in Japanese Literature (4) (Enroll in EALC 460)
- **472 Criminal Fictions (4)** Selected works of crime fiction from European, U.S., and Spanish American traditions of the 19th and 20th centuries by authors such as Borges, Chandler, Chesterton, Christie, Puig, Robbe-Grillet, and Vargas Llosa. Discussion of relevant theoretical concepts and critical works.
- **475 Politics and the Novel (4)** Examination of the modern realist novel with special focus on the representation of social change (revolution, class conflict, sexual politics).
- **480** Dada and Surrealism **(4)** A comparative study of Dada and Surrealism in literature in relation to painting, sculpture, photography and cinema.

- **485** The Shoah (Holocaust) in Literature and the Arts (4) A critical analysis, in their historical contexts, of representative literary, dramatic, musical and artistic works created by or about the victims of the Shoah (Holocaust).
- **490x Directed Research (2-8, max 8)** Individual research and readings. Not available for graduate credit. *Prerequisite:* departmental approval.
- **495 Senior Honors Thesis (4)** Writing of an honors thesis under individual faculty supervision.
- **499** Special Topics (2-4, max 8) Intensive study of selected author or authors in the context of a major literary tradition.
- **502** Introduction to Literary Theory **(4)** Major developments in 20th-century literary criticism, with special attention to theoretical work of the past three decades.
- **524** Topics in Classical to Early Modern Literature (4, max 12) Literary currents from classical antiquity through to the 17th century. Varying focus on specific genres, periods, movements, or problematics.
- **526 Topics in Modern Literature (4, max 12)** Literary currents from the 19th century to the present. Varying focus on specific genres, periods, movements, or problematics. Views of the modern in different cultural contexts.
- **541 Seminar in Drama (4, max 12)** Problems in dramatic theory, in the history of the drama, and in comparative analysis of dramatic forms, techniques, and themes.
- **542** Seminar in Poetry (4, max 12) History and theory of poetic genres, communicative contexts, periods and movements. Possible focus on epic, lyric, orality, literacy, visual media, modernism, postmodernism translation.
- **543** Seminar in Prose (4, max 12) Readings of prose texts from various genres. Possible focus on narrative fiction, the essay, travel writing, chronicles, autobiography, or testimonial literature.
- **555** Studies in Literatures of the Americas (4, max 8) Comparative study of literary currents in the U.S., Canada, Latin America, and the Caribbean.
- **565** Studies in Literatures of East Asia (4) Advanced study of major cultural paradigms and their divergent influences in East Asian literature.

**575 Studies in Literature and Ethnicity (4, max 8)** Study of literary expression in different cultural, racial, or religious communities. Possible focus on African, Asian, Hispanic, or

Jewish themes across several national traditions.

- **585 Studies in Literature and Gender (4, max 8)** Emphasis on gender difference and sexual difference as signifying categories for literary works, criticism, or theory.
- **590 Directed Research (1-12)** Research leading to the master's degree. Maximum units which may be applied to the degree to be determined by the department. Graded CR/NC.
- **600 Topics in Comparative Literary Analysis (4, max 12)** Intensive study of fictional or poetic language, with emphasis on techniques of literary analysis.
- **602 Topics in Literary Criticism and Theory (4, max 12)** Intensive study of a theoretical tradition or critical movement, or of an individual topic or thinker, in literary criticism or theory. May be repeated for credit.
- **620** Seminar in Literature and Social Thought (4, max 12) Inquiry into relationships among literature, social and political ideologies, principles of political systems, and social or intellectual theory.
- **640 Seminar in Literature and Visual Culture (4, max 12)** Topics in reciprocal relation of visual arts and theory to narratology, semiotics, psychoanalysis, and other areas.
- **660 Seminar in Literature and Psychoanalysis (4, max 12)** Problems in the psychoanalytic study of literature and culture, or in the literature and culture of psychoanalysis.
- **680 Seminar in Literature and Philosophy (4, max 12)** Emphasis on questions raised when literature confronts philosophical discourses: aesthetics, philosophy of law, ethics, philosophy of language, political philosophy, and others.
- **790 Research (1-12)** Research leading to the doctorate. Maximum units which may be applied to the degree to be determined by the department. Graded CR/NC.
- **794abcdz Doctoral Dissertation (2-2-2-2-0)** Credit on acceptance of dissertation. Graded IP/CR/NC.

### **Computational Linguistics**

Grace Ford Salvatori 301 (213) 740-2986 FAX: (213) 740-9306 Email: compling@mizar.usc.edu www.isi.edu/natural-language/MSCompLing

Director: Eduard Hovy, Ph.D.

Coordinator: Bonnie Glover Stalls, Ph.D.

Participating Faculty: Michael Arbib, Ph.D.; Joseph Aoun, Ph.D.; Robert S. Belvin, Ph.D.; Hagit Borer, Ph.D.; Dani Byrd, Ph.D.; Bonnie Glover Stalls, Ph.D.; Andrew Gordon, Ph.D.; Elena Guerzoni, Ph.D.; Jerry Hobbs, Ph.D.; Eduard Hovy, Ph.D.; Kevin Knight, Ph.D.; Ania Lubowicz, Ph.D.; Daniel Marcu, Ph.D.; Shri Narayanan, Ph.D.; Roumyana Pancheva, Ph.D.; Patrick Pantel, Ph.D.; Barry Schein, Ph.D.; David Traum, Ph.D.; Jean-Roger Vergnaud, Ph.D.; Rachel Walker, Ph.D.; Maria Luisa Zubizarreta, Ph.D.

*Participating Researchers:* Ulf Hermjakob, Ph.D.; Chin-Yew Lin, Ph.D.

## Master of Science in Computational Linguistics

The computational linguistics master's program trains individuals in computational techniques and linguistic theory as they pertain to Natural Language Processing (NLP) and Human Language Technology (HLT). Drawing on courses and faculty resources from the Computer Science, Linguistics and Electrical Engineering departments, this joint program emphasizes the development of a detailed understanding of the theory and computational practice of NLP and the roles of linguistical theory, machine learning and statistics. Special emphasis is placed on topical research issues as well as on important issues that have shaped this field over the last several decades. The degree emphasizes the development of multilingual capabilities in a variety of areas, with hands-on experience in technologies such as machine translation, information retrieval, information extraction, speech recognition, question answering and document summarization.

#### **Admission Requirements**

Applicants for admission must have a bachelor's degree from an accredited institution with a GPA of least 3.0, satisfactory GRE and (for international students) TOEFL test scores. Also required is the ability to program with expertise in a computer language, such as JAVA, C++, PERL, LISP or PROLOG, and proficiency in basic linguistics (phonetics, phonology, syntax and semantics) with experience in data analysis. Strongly recommended is familiarity with machine learning, statistics and advanced knowledge or at least two years of study at the college level of a human language other than the student's native language. Applicants must also submit three letters of recommendation and a one- to twopage statement of purpose.

#### **Degree Requirements**

The master of science degree requires 27 units (equivalent to nine graduate courses), with at least 12 units (4 courses) each in computer science and linguistics, and a final original research project. Although highly motivated students may be able to complete the course work in three semesters, the program is intended to span four semesters, and most students require more time to complete the final project. According to university regulations, a student has up to five years to finish the master's degree.

#### CORE REQUIREMENTS UNIT

Of the 27 course units required, 18 units must be from the core courses consisting of three courses each in computer science and linguistics:

CSCI 544	Natural Language	
	Processing	3
CSCI 561	Artificial Intelligence	3
CSCI 562	Empirical Methods in	
	Natural Language	
	Processing	3
LING 530	Generative Syntax, or	
LING 531a	Phonology	3
LING 534	Logic and the Theory	
	of Meaning, or	
LING 548	Lexical Semantics	3
LING 585	Computational Linguistics	3

Up to six core units may be waived with special permission based on previous course work. In consultation with an advisor, students will need to take other courses to fulfill these unit requirements.

Students are expected to enter the program with a background strong enough to enable them to complete the program course work in two years. However, for those students with insufficient experience in a specific area, the following courses are prerequisites for the core courses:

Principles of Software	
Development	4
Introduction to	
Programming Systems	
Design	4
Advanced Phonology	4
Advanced Syntax	4
	Development Introduction to Programming Systems Design Advanced Phonology

#### BREADTH REQUIREMENTS AND ELECTIVE

readth

Six units must be from a short list of breadth requirements – one course each in computer science and linguistics – and 3 units (one course) is an elective.

The breadth requirement for computer science must be fulfilled by one of the following:

	.,	
CSCI 564	Brain Theory and	
	Artificial Intelligence	3
CSCI 567	Machine Learning	3
CSCI 573	Advanced Artificial	
	Intelligence	3
CSCI 599	Special Topics (courses	
	vary; only certain courses	
	qualify, for example,	
	Computational	
	Approaches to Natural	
	Language Dialogue	
	Modeling) 2-4, max	9
EE 619	Advanced Topics in	
	Automatic Speech	
	Recognition	3

The breadth requirement for linguistics must be fulfilled by one course from:

LING 512	Language Variation and	
	Language Changes	3
LING 527	Second Language	
	Acquisition	3
LING 530*	Generative Syntax	3
LING 531a*	Phonology	3
LING 533	Language Universals and	
	Typology	3
LING 576	Psycholinguistics	3
LING 580	General Phonetics	3

<sup>\*</sup> If not taken as a core course

The elective course may be any other relevant course (except directed studies or directed readings) from computer science, linguistics, electrical engineering, statistics, philosophy or neuroscience, selected with an advisor. Please see the course listings for descriptions, prerequisites and additional information.

#### Internships

Internships with one of the research groups at USC or at a company are available to students and are encouraged but not required.

#### **Research Project**

In addition to the course work detailed above, an in-depth research project equivalent to a conference or workshop paper is required. By the beginning of the second year, each student will have a faculty advisor from either Computer Science or Linguistics who will oversee the project. The project must be submitted to and approved by a committee consisting of three faculty members, the advisor and two other faculty

members. At least one committee member must be from Computer Science and at least one must be from Linguistics. Students must submit a project draft by April 1 for a spring degree, by July 1 for a summer degree or by November 1 for a fall degree. Students are also required to present their papers before an academic audience. The research project may be based on independent research or on work done in conjunction with an internship.

### **Earth Sciences**

Zumberge Hall of Science 117 (213) 740-6106 FAX: (213) 740-8801 Email: earthsci@usc.edu www.usc.edu/dept/earth

Chair: Thomas L. Henyey, Ph.D.

#### Faculty

W.M. Keck Foundation Chair in Geological Sciences: Thomas H. Jordan, Ph.D.

Wrigley Chair in Environmental Studies: Kenneth H. Nealson, Ph.D.

Wilford and Daris Zinsmeyer Chair in Marine Studies: Teh-Lung Ku, Ph.D.

Professors: J. Lawford Anderson, Ph.D.\*; Yehuda Ben-Zion, Ph.D.; David J. Bottjer, Ph.D.; Gregory A. Davis, Ph.D.; Robert G. Douglas, Ph.D.; Douglas E. Hammond, Ph.D.; Thomas L. Henyey, Ph.D.; Terence G. Langdon, Ph.D., D.Sc. (Materials Science); Steven P. Lund, Ph.D.; Jean Morrison, Ph.D.\*; Scott R. Paterson, Ph.D.; John P. Platt, Ph.D.; Charles G. Sammis, Ph.D.\*; Lowell D. Stott, Ph.D.; Ta-liang Teng, Ph.D.

Associate Professors: William M. Berelson, Ph.D.; James F. Dolan, Ph.D.\*

Assistant Professors: Thorsten Becker, Ph.D.; Frank A. Corsetti, Ph.D.

Adjunct Professor: Kenneth G. Johnson, Ph.D.

Research Professors: Alexandre Tsapin, Ph.D.; Ronald H. Vernon, Ph.D.

Research Associate Professors: Yong-Gang Li, Ph.D.; David A. Okaya, Ph.D.; Ellen Platzman, Ph.D.

Research Assistant Professors: Ronald Biegel, Ph.D.; Ann E. Blythe, Ph.D.; Pamela Conrad, Ph.D.; Andrea Donnellan, Ph.D.; Hong-Chun Li, Ph.D.; Susan E. Owen, Ph.D.; Robert Rye, Ph.D.; Li Zhao, Ph.D.

Research Scientist: Shangde Luo, Ph.D.

W. M. Keck Foundation Emeritis Professor: Keiiti Aki, Ph.D.

Emeritus Professors: Alfred G. Fischer, Ph.D.; Donn S. Gorsline, Ph.D.; Bernard W. Pipkin, Ph.D.\*

\*Recipient of university-wide or college teaching award.

The Department of Earth Sciences includes a spectrum of disciplines focused on understanding the processes that influence the tectonics and environment of the planet, on using this understanding to read the record of earth history written in rocks and sediments, and on developing models that can be used to predict future changes due to natural phenomena and recent perturbations caused by humans. Issues of societal concern related to seismic risk, climate change, environmental contamination and other geologic hazards play an important role. Subdisciplines housed in the department include geophysics, geochemistry, geobiology, structural geology, petrology, marine geology, sedimentology, physical and chemical oceanography, paleoceanography and paleontology.

The department is committed to emphasizing both educational and research programs and views these efforts as complementary. Instruction is offered on several levels. These include introductory classes for non-science majors, undergraduate courses that are appropriate for undergraduates majoring in earth sciences or other science and engineering disciplines, and graduate classes appropriate for advanced degrees. A close working relationship exists between students and faculty members. Classes beyond the introductory level are usually small, permitting personalized instruction. Field trips are an important part of the instructional program. Two research centers are affiliated with the department: the Southern California Earthquake Center and the Wrigley Institute of Environmental Studies. The graduate program is closely linked with these research efforts, and both graduate and undergraduate students participate in research projects. Collaboration in both research and teaching has led to ties with other programs, including the Department of Biological Sciences, the graduate program in Ocean Sciences and several departments in the School of Engineering.

For students interested in pursuing careers in the earth and environmental sciences, the department offers B.A., B.S., M.S. and Ph.D. degrees. In addition, students may follow the geology concentration offered by the Environmental Studies Program. Many graduates now hold positions in industry as environmental consultants or petroleum geologists, in government as managers or researchers, and in academia as faculty and researchers. The B.A. degree is recommended for students interested in the earth sciences but who intend to pursue careers in other fields, such as business, law or education.

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The Los Angeles and Southern California areas have a diverse geology, enabling students to gain broad, first-hand knowledge of geological processes. The department conducts field trips to study Southern California geology, and has access to oceanographic vessels for marine research. Many state-of-theart laboratory instruments are available for use in research and instruction.

Proof of health insurance is mandatory when participation in field trips is required for credit in any earth sciences class.

#### **Honor Society**

The Department of Earth Sciences has one honor society: the Omega Chapter of Sigma Gamma Epsilon, the national honorary earth sciences fraternity. "Sig Gam" is an undergraduate organization which sponsors undergraduate activities within the department.

### Undergraduate Degrees

## Department Major Requirements for the Bachelor of Science in Geological Sciences

REQUIRED COURSES		UNITS
CHEM 105aLbL	General Chemistry, or	
CHEM 115aLbL	Advanced General	
	Chemistry	4-4
GEOL 105L	Planet Earth	4
GEOL 215abL	Mineralogy and	
	Petrology	4-4
GEOL 320L	Surficial Processes	
	and Stratigraphic	
	Systems	4
GEOL 321L	Structural Geology	
	and Tectonics	4
GEOL 333L	Paleontology and the	
	Evolution of Life	4
GEOL 412	Oceans, Climate, and	
	the Environment	4
GEOL 440	Geophysics and	
	Geoengineering	4
GEOL 460L	Geochemistry and	
	Hydrogeology	4
GEOL 465	Summer Field	
	Geology	4
GEOL 485ab	Senior Seminar	2-2
MATH 125	Calculus I	4
MATH 126	Calculus II	4
PHYS 135abL	Physics for the Life	
	Sciences, or	4-4
PHYS 151L	Fundamentals of	
	Physics I: Mechanics	
	and Thermodynamics	4
PHYS 152L	Fundamentals of	
	Physics II: Electricity	
	and Magnetism	4

## Department Major Requirements for the Bachelor of Arts in Earth Sciences

BEOLUBED COURSES

REQUIRED COURSES	UNITS
GEOL 105L	Planet Earth 4
GEOL 215abL	Mineralogy and
	Petrology 4-4
GEOL 320L	Surficial Processes and
	Stratigraphic Systems 4
GEOL 321L	Structural Geology and
	Tectonics 4
GEOL 333L	Paleontology and the
	Evolution of Life 4
•	ollowing upper division
courses in earth sci	ences:
GEOL 412	Oceans, Climate, and
	the Environment 4
GEOL 440	Geophysics and
	Geoengineering 4
GEOL 460L	Geochemistry and
	Hydrogeology 4
GEOL 465	Summer Field Geology 4
GEOL 485ab	Senior Seminar 2-2
Lower division cou	irses in other departments:
MATH 118x	Fundamental
	Principles of the
	Calculus, or
MATH 125	Calculus I 4
Any two of the foll	owing four courses:
CHEM 105aLbL	General Chemistry 4-4
PHYS 135abL	Physics for the Life
	Sciences 4-4

#### **Undergraduate Honors Program**

The department offers an honors program for students pursuing either a B.S. or a B.A. in Earth Sciences. Students wishing to participate in this program must complete GEOL 494x Senior Thesis. Honors will be awarded

upon successful completion of the thesis and attainment of an overall GPA of 3.0 and a GPA of 3.5 in courses in the major.

#### **Grade Point Average in Major Subject**

A grade of C or higher is required in each course in the earth sciences courses used to complete the department or physical sciences major.

#### Requirements for the Bachelor of Science in Physical Sciences

REQUIRED COURSES		UNITS
Lower division:		
CHEM 105aLbL	General Chemistry, or	
	Advanced General	
	Chemistry	4-4
GEOL 105L	Planet Earth	4
PHYS 151L	Fundamentals of	
	Physics I: Mechanics	
	and Thermodynamics	4
PHYS 152L	Fundamentals of	
	Physics II: Electricity	
	and Magnetism	4
PHYS 153L	Fundamentals of	
	Physics III: Optics and	
	Modern Physics	4
Upper division:		
Astronomy electiv	e*	4
Chemistry elective	e*	4
Earth Sciences ele	ective*	4
Physics elective*		4
Three additional e	electives from these fields	* 12
Other courses:		
MATH 125	Calculus I	4
MATH 126	Calculus II	4
MATH 226	Calculus III	4

<sup>\*</sup>Upper division courses must be applicable to majors in their respective departments.

Total units:

### Graduate Degrees

The department prepares professional earth scientists for careers in academia, government and industry. This preparation includes work toward a master's degree which is the accepted degree for full career development in industry and governmental areas, and the doctorate, which prepares students for careers in teaching and research in both basic and applied specializations. A wide range of specializations is offered in the department including sedimentary geology, paleobiology, paleoclimatology, paleoecology, micropaleontology, paleoceanography, geochemistry, geobiology, geophysics, geodesy, seismology, engineering geology and properties of earth materials, igneous and metamorphic petrology, structural geology and tectonics, geomorphology, and interdisciplinary options. Degrees in ocean sciences (through the Graduate Program in Ocean Sciences) are available; see page 377.

#### **Admission Requirements**

#### **Prerequisites**

An applicant for admission must have the equivalent of the courses in earth sciences, chemistry, mathematics, and physics required for the B.S. degree in geological sciences. Applicants with an undergraduate degree in science or engineering who lack required earth sciences courses will also be given consideration.

#### Criteria

The Department of Earth Sciences requires the following evidence for admission to its master's and doctoral programs: strong undergraduate background and a superior academic record as documented by GPAs in undergraduate and graduate work, Graduate Record Examinations scores in the verbal and quantitative General Test, and at least three letters of recommendation from undergraduate and graduate advisors and professors. The number of students accepted in any one year depends on available space in the department and acceptance for advisement by one or more professors.

Funding is offered for M.S. degrees only when completed en route to the pursuit of a Ph.D. degree.

#### Procedure

Applicants should contact the department office for a department admission package. This package outlines the various research programs offered and further details admission requirements. It also contains a required supplemental departmental application. The department admits students for both the fall and spring semesters; however, applicants for assistantships are encouraged to apply for the fall semester.

#### **Degree Requirements**

These degrees are under the jurisdiction of the Graduate School. Refer to the Requirements for Graduation section (page 81) and the Graduate School section of this catalogue (page 91) for general regulations. All courses applied toward the degrees must be courses accepted by the Graduate School.

#### Master of Science in Geological Sciences

Foreign Language/Research Tool Requirements
There is no language or research tool requirement for the master's degree.

#### Course Requirements

The M.S. degree in geological sciences requires 24 units of course work plus at least four thesis units. These restrictions apply: at least 16 units must be 500 level or higher; no more than eight units can be 590 Directed Research; and a maximum of four units, with superior grades, can be transferred from an accredited graduate school. Students are required to have an overall GPA of at least 3.0~(A=4.0) in all graduate work. Students are also required to attend a series of departmental seminars.

#### Thesis

Students should arrange for the appointment of a thesis advisor and committee after the first semester, or, at the latest, after the first year of graduate work. The thesis committee should consist of the advisor plus two other faculty members, all of whom are generally selected from the department faculty. Once the committee is arranged, the student may make formal application to the Graduate School for the M.S. degree.

### Doctor of Philosophy in Geological Sciences

#### Course Requirements

For students who have earned a master's degree, the minimum number of course credits required for the Ph.D. is 40 units. No more than four of these units may be earned in 794 Doctoral Dissertation. For students who have not earned a master's degree, the minimum number of course credits required is 60 units, including a maximum of eight units of 794 Doctoral Dissertation. The guidance committee may require additional course work to insure a sufficient background in the student's area of specialization. At least two-thirds of the number of units presented for the degree must be 500 level or higher. Although the official minimum GPA for all graduate work attempted at USC is 3.0, the department does not consider a doctoral candidate in good standing unless the graduate GPA is considerably higher than the minimum (approximately 3.25 or above in graduate courses taken within the department).

#### Screening Procedure

Students in the Ph.D. program must pass the screening procedure before their 25th unit of graduate credit. Screening consists of a review of the student's progress and is usually done by the chair following a written recommendation by the student's advisor(s).

#### Guidance Committee

The doctoral guidance committee is formed after the student has passed the screening procedure. The committee is appointed by the department with the advice of the student's research advisor. The five-member committee consists of the advisor, a minimum of three other members from the Department of Earth Sciences, and one from outside the department. The committee consults with the student, recommends an appropriate program of study and administers the written and oral qualifying examinations.

#### Qualifying Examination

This examination consists of two parts, one written and the other oral. The written exam, which precedes the oral, includes questions submitted by committee members on current geological problems and theory. The oral portion of the exam consists of the defense of two propositions written by the candidate prior to the oral exam. In addition, general questions are posed to test the student's breadth of scientific and earth science background. The student's performance is evaluated by the guidance committee, with a pass based on not more than one negative vote or abstention. Those who intend to take the exam must meet all the conditions specified in the section on general requirements for the Ph.D.

#### Defense of the Dissertation

When the candidate has passed the qualifying examination, a dissertation committee replaces the guidance committee. The latter is appointed by the advisor and guidance committee in conjunction with the student. The dissertation committee administers the final defense of the dissertation.

The defense takes place after the dissertation is substantially complete, and upon unanimous approval by the dissertation committee. It is conducted in the form of an open departmental seminar, but is evaluated by the dissertation committee alone.

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#### **Interdisciplinary Programs**

Interdisciplinary programs can be arranged for students also interested in astronomy, bioscience, chemistry, engineering, oceanography and physics. The Department of Earth Sciences maintains laboratories for micropaleontologic, paleobiologic, mineralogic, petrologic, geophysical, geochemical and oceanographic

research, and collections are available for comparative work in invertebrate paleontology. Students interested in systematic studies will find a wealth of material, available for comparative purposes, in the adjacent Los Angeles

County Museum. Facilities for research in sedimentation, oceanography, and marine geology are provided in the department and by the university's research fleet.

### Courses of Instruction

#### **EARTH SCIENCES (GEOL)**

The terms indicated are *expected* but are not *guaranteed*. For the courses offered during any given term, consult the *Schedule of Classes* 

**105Lg Planet Earth (4, FaSpSm)** Geologic structure and evolution of planet earth. Principles of plate tectonics, rocks and minerals, processes of mountain building, continent and ocean formation, earthquakes, volcanism, development of landforms by running water and glaciers. Lecture, 3 hours; laboratory, 2 hours. One all-day or two-day field trip required.

**107Lxg Oceanography (4, FaSp)** Physical, chemical, and geological character of the oceans and ocean basins. Origin of the oceans. Ocean processes and agents. Economic value of the oceans. Lecture, 3 hours; laboratory, 2 hours. One all-day field trip required. Not available for major credit to earth or geological sciences majors.

**108Lg Crises of a Planet (4, FaSpSm)** Impact of civilization on planet earth, and impact of earth's natural evolution on society: earthquakes, volcanism, landslides, floods, global warming, acid rain, groundwater depletion and pollution; mineral and fossil fuel depletion, formation of the ozone hole. Lecture, 3 hours; laboratory, 2 hours. One all-day or overnight field trip.

**125Lxg Earth History: A Planet and Its Evolution (4, FaSpSm)** Basic principles of physics, chemistry, biology, and mathematics used in evaluating clues written in the rock record, and the processes that have shaped our planet. Lecture, 3 hours; laboratory, 2 hours. At least one field trip required. Not available for major credit to earth or geological sciences majors.

**130Lxg The Nature of Scientific Inquiry (4, FaSp)** Examination of the scientific process: what constitutes science; evolution of ideas about the nature of space, time, matter, and complexity; paradigm shifts in the biological and earth sciences. Lecture, 3 hours; laboratory, 2 hours. Not available for major credit to earth or geological sciences majors.

**150Lxg Climate Change (4, FaSp)** Climate systems from the beginning of earth history to the present; tools and techniques used to reconstruct prehistoric climate records; effects of climate variations on development of life forms on earth. Not available for major credit to earth or geological sciences majors.

**215abL Mineralogy and Petrology (4-4, FaSp)** Introduction to the study of minerals and rocks; chemical bonding and crystal chemistry; mineral identification and paragenesis; rock identification and paragenesis; processes of formation of igneous, sedimentary, and metamorphic rocks. Lecture, 3 hours; laboratory, 6 hours; required field trips. *Recommended preparation:* GEOL 105*L; corequisite:* CHEM 105*aLg* or CHEM 115a*Lg.* 

**240Lxg Earthquakes (4, FaSpSm)** Causes of earthquakes and nature of large faults; earthquake hazard and risk; world's great earthquakes; understanding the Richter scale. Lecture, 3 hours; laboratory, 2 hours; one field trip required. Not available for major credit to earth or geological sciences majors.

**290L Special Laboratory (1, FaSp)** Laboratory component for GEOL 105*L*, GEOL 107*Lx*, GEOL 108*L*, GEOL 125*Lx*, GEOL 130*Lx*, GEOL 150*Lx*, or GEOL 240*Lx* for students with equivalent lecture credit from another institution.

**305Lx Introduction to Engineering Geology (4, Sp)** Principles of geology with emphasis on stratigraphy, structural geology and degradational processes; basic geologic considerations in civil engineering practice; introduction to mineralogy and petrology. Field trip required. Lecture, 3 hours; laboratory, 3 hours. Not available for major credit to earth or geological sci-

ences majors.

**320L Surficial Processes and Stratigraphic Systems (4, Fa)** Processes of erosion, sediment transport, and deposition that shape the land surface; landscape response to tectonism; recognition and interpretation of depositional environments in the stratigraphic record.
(Duplicates credit in former GEOL 334*L*, GEOL 451*L*.) *Prerequisite:* GEOL 215*bL*.

**321L Structural Geology and Tectonics (4, Sp)** Field and theoretical aspects of rock deformation, analysis of structural systems, and stress and strain; orogenic belts and plate tectonics; introduction to field techniques and construction of geologic maps. *Recommended preparation:* GEOL 320*L*.

**333L Paleontology and the Evolution of Life (4, Fa)** Origin and evolution of life; major marine fossil groups and their evolutionary history; utilization of fossils in age determinations; fossils and reconstructing ancient environments, geography and ecology. Lecture, 3 hours; laboratory, 3 hours; field trips.

**390 Special Problems (1-4)** Supervised individual studies. No more than one registration permitted. Enrollment by petition only.

**412** Oceans, Climate, and the Environment **(4, 5p)** Survey of physical, chemical, and geological oceanography emphasizing the role of the ocean in environmental problems, including modulation of climate and atmospheric composition, biogeochemical cycling, pollutant transport, paleoceanography, and paleoclimate; discussion section covers problem sets illustrating simple calculations. *Prerequisite:* CHEM 105*bL* or CHEM 115*bL*, MATH 126; *recommended preparation:* PHYS 151*Lg*, PHYS 152*L* or PHYS 135*abL*.

#### 440 Geophysics and Geoengineering (4, Sp)

Seismic wave propagation, modern seismic field instrumentation on land and at sea, seismic reflection survey and digital data processing, interpretation of seismic data for geologic structures, seismic signatures from oil reservoires: geometry and porosity, seismic refraction survey, gravity survey. A field trip. *Prerequisite*: MATH 126; *corequisite*: PHYS 135bL or PHYS 152L.

#### 441 Seismic Exploration Geophysics (4, FaSp)

Seismic wave theory, ray theory, reflection, refraction, data processing, signal enhancement, field instrumentation and techniques on land and at sea; geological interpretation of seismic data. One field trip.

#### 460L Geochemistry and Hydrogeology (4, Fa)

Composition and origin of the earth; principles of physical chemistry applied to aqueous systems; reaction-diffusion modeling; principles of hydrology; environmental problems. Lecture, 3 hours; laboratory/discussion, 2 hours. *Prerequisite*: CHEM 105*bL* or CHEM 115*bL* and MATH 126.

- **465** Summer Field Geology (4, Sm) (SS only) Four weeks of geological field mapping from a centrally located camp in the California Coast Ranges or Great Basin. *Recommended preparation:* GEOL 321L.
- **470** Environmental Hydrogeology (4, Irregular) Concepts in hydrogeology and their application to environmental problems. Topics include groundwater chemistry and hydrology, contaminants and their behavior. Guest lectures on regulations and remediation techniques. *Recommended preparation:* GEOL 460L.
- **474** Ecosystem Function and Earth Systems (4) Enroll in BISC 474*L*.
- **483 Geobiology and Astrobiology (4)** (Enroll in BISC 483)
- **485ab Senior Seminar (2-2, FaSp)** Analysis and discussion of selected topics in earth sciences; topics will be chosen by students and faculty to focus on areas of recent advances. Open to Senior Earth Sciences or Environmental Studies majors only. Graded IP.
- **490x Directed Research (2-8, max 8)** Writing of a thesis under individual faculty supervision. Not available for credit.
- **494x Senior Thesis (2, FaSp)** Writing of a thesis under individual faculty supervision. Not available for graduate credit.
- **499** Special Topics (2-4, max 8) Special topics in the earth sciences. Field trip required when appropriate to the topic. Departmental approval required.

#### 500 Marine Paleoecology (3, 2 years, Sp)

Principles of marine paleoecology; interrelationships between marine organisms and their environment in geologic time. *Prerequisite:* GEOL 333*L; recommended preparation:* GEOL 577*L.* 

- **501 Paleobiology (3, Fa)** Concepts and methods for functional morphologic analysis of fossil marine invertebrates. Systematics theory and methodology, macroevolution, and broad biotic trends in the Phanerozoic. *Recommended preparation:* GEOL 333L.
- **510L** Advanced Stratigraphic Field Methods (3) Stratigraphic field methods and computer-assisted data analysis. Field trips incorporating vertical and lateral facies analysis; collection of paleocurrent, fabric, paleomagnetic, photogeologic and compaction data. Lecture, 2 hours; laboratory, 2 hours; field trips. *Prerequisite:* GEOL 320L.
- **511L Depositional Systems (3)** Analysis of depositional systems, including conceptual methods of lithostratigraphy, biostratigraphy, chronostratigraphy, and paleoecology; description of major depositional environments. Lecture, 2 hours; laboratory, 2 hours.
- **512** Introduction to Chemical and Physical Oceanography (3, Fa) (Enroll in OS 512)
- **514** Marine Geology (3, Fa) Origin and characteristics of ocean basins; marine sedimentary environments; shoreline classification and character; evolution of oceanic features. Lecture, 3 hours; research conference, 1 hour.
- **520** Ichnology (3, 2 years, Fa) Ancient and recent borings and bioturbation structures and their utilization in stratigraphic, paleoenvironmental, paleoecological, sedimentological, and geochemical studies. *Recommended preparation:* GEOL 320L and GEOL 333L.
- **521L Advanced Structural Geology (3, FaSp)** Advanced field and theoretical aspects of rock deformation, strain and stress analyses, and evolution of structural systems. Includes lab, field trip(s), and class project.
- **530** Modern Perspectives on Crustal Dynamics (3, 2 years, Sp) Deformation mechanisms, strength and structure of the crust. Fractal scaling in structures and dynamic processes. Geodetic measurement of crustal deformation and spatio-temporal patterns of seismicity.
- **531 Plate Interactions: Geological Aspects (3, 2 years, Sp)** Principles and geometrics of plate tectonics; geologic characteristics of modern plate boundaries of divergent, convergent, transform type; ocean basin and orogen development from worldwide examples. Field trip.

532 Advanced Geologic Mapping (3, Fa)
Principles of mapping geologically complex
terranes of different structural style. Fieldwork will be coordinated with seminar review

terranes of different structural style. Fieldwork will be coordinated with seminar review of diverse structural phenomena. Field trips. *Recommended preparation:* GEOL 321*L*, GEOL 465.

- **533 Structural Evolution of Arcs (3, 3 years, Fa)** Examination of the physical characteristics of arcs, particularly structural behavior
- tics of arcs, particularly structural behavior at different crustal levels. Structural and thermal evolution of magma-country rock systems including pluton emplacement processes. Field trip. *Recommended preparation:* GEOL 215*bL*, GEOL 321*L*.
- **535L Microstructures and Deformation Mechanisms (3, 3 years, Fa)** Examination of deformation mechanisms and resulting microstructures in rocks; chemical and textural equilibrium; physical and chemical processes during fluid flow; prophyroblastmatrix relationships; interpretation of kinematic indicators. Laboratory. *Prerequisite:* GEOL 321*L*.
- **536** Principles of Geomagnetism and Paleomagnetism (3, 2 years, Sp) Historic geomagnetic field behavior, secular variation, rock magnetism, paleomagnetic techniques, magnetic polarity time scale, apparent-polarwander paths, and applications to stratigraphic and geotectonic studies. *Recommended preparation:* GEOL 440.
- **537 Rock Mechanics (3, 2 years, Sp)** Elasticity, fracture, and flow properties of rocks and minerals; effects of temperature, pressure, petrology, fractures, and interstitial fluids. Experimental techniques and geological applications.
- **538** Tectonic Evolution of Western North America (3, 2 years, Sp) Geosynclinal and orogenic development of western North America from the Precambrian to present, in the light of plate tectonics concepts. Field trips. *Recommended preparation:* GEOL 321*L*.
- **540 Geodynamics (3, 2 years, Fa)** Applications of continuum physics to geological problems; fundamental physical processes necessary for an understanding of plate tectonics; quantitative analysis of geological problems stressed. *Recommended preparation:* GEOL 440.
- 546 Reflection Seismology (3, 2 years, Fa)

Basic theory, field data acquisition, data processing, methods of inversion, and geological interpretations, using seismic reflection methodology. *Recommended preparation:* GEOL 440 or GEOL 551.

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- **550** Chemical Equilibrium and Disequilibrium in Geology (3, 2 years, Sp) Phase equilibria; phase diagrams; thermodynamics of aqueous and solid solutions; irreversible thermodynamics; kinetics, diffusion, and metasomatism, with applications to problems in petrology and geochemistry. *Prerequisite:* GEOL 460*L*.
- **551** Introduction to Seismology (3, 2 years, Fa) Basic elements of seismology for the study of the earth's interior and the tectonic process, utilizing observations of seismic waves.
- **552 Advanced Seismology (3)** Advanced methods of theoretical seismology for studying the generation of seismic waves from natural and artificial sources and the propagation through realistic earth models. *Prerequisite:* GEOL 551.
- **553** Physics of Earthquakes (3, 2 years, Fa) Basic physics of earthquakes and seismicity. Continuum elasticity; fracture mechanics; laboratory friction; damage rheology; physics of critical phenomena; spatio-temporal seismicity patterns; analysis of complex data sets. *Recommended preparation:* GEOL 537 and/or GEOL 551.
- **555 Paleoceanography (3)** Mesozoic and Cenozoic paleoceanography; analytical approaches applied to water mass history, paleocirculation, paleoproductivity, nutrient cycling, and paleotemperature reconstruction. Lecture, readings, and research project. *Recommended preparation:* GEOL 412 or GEOL 512 and GEOL 460*L*.
- **556 Active Tectonics (3, Sp)** Aspects of deformation and associated seismicity at active plate margins around the world. Includes review of plate tectonics, seismology, geodesy, paleomagnetism, geodynamics, Quaternary dating techniques, tectonic geomorphology, paleoseismology, and seismic hazard assessment. Two weekend field trips required. *Recommended preparation:* GEOL 530, GEOL 531; *prerequisite:* GEOL 321*L.*

- **560 Marine Geochemistry (3, 2 years, Sp)** Principles of chemical sedimentology and aquatic chemistry; diagenesis, authigenesis, and the geochemical cycle. *Prerequisite:* GEOL 460*L*.
- **564** Isotope Geochemistry (3, 2 years, Sp) Variations in the isotopic composition of elements in the earth's crust with applications to geological problems, including geochronology, geothermometry, ore genesis, and crustal evolution.
- **566 Geochemistry Seminar (1-4)** Current topics in geochemistry.
- **567 Stable Isotope Geochemistry (3)** Theoretical basis; nuclide nomenclature, partition function ratios, mechanisms and rates of isotope exchange; mass spectrometry and extraction techniques; application of stable isotopes to geologic problems.
- **568L Metamorphic Petrology (3, 2 years, Fa)** An introduction to advanced study of metamorphic mineral assemblages with use of experimental and field data. Lecture, 2-4 hours; laboratory to be arranged.
- **569L Igneous Petrology (3, 2 years, Fa)** Study of igneous and meta-igneous rocks from the basis of experimental and field data and theoretical considerations. Lecture, 2-4 hours, laboratory to be arranged.
- **570** Thermobarometry (3, 2 years, Fa) Derivation of temperature, pressure, and other intensive properties from igneous and metamorphic mineral data and assemblages. Theoretical aspects of phase equilibria and basis for extrapolation of experimental data and empirical calibrations. Lecture, 3 hours; practical exercises.
- **571abL Sedimentary Petrology (a: 3, Fa; b: 3, Sp)** Petrography, classification, and genesis of major sedimentary rock types. Recognition and significance of ancient and modern sedimentary environments. *a:* Carbonates and evaporites. *b:* Terrigeneous clastics and others. Lecture, 2 hours; laboratory, 2 hours.

577L Micropaleontology (3, 2 years, Fa)

Microscopic fossils, especially foraminifera, their classification, the common genera, morphology, evolutionary trends; laboratory and field techniques. Lecture, 2 hours; laboratory and field work, 6 hours. *Recommended preparation:* GEOL 333L.

- **590 Directed Research (1-12)** Research leading to the master's degree. Maximum units which may be applied to the degree to be determined by the department. Graded CR/NC.
- **594abz Master's Thesis (2-2-0)** Credit on acceptance of thesis. Graded IP/CR/NC.
- **599 Special Topics (2-4, max 9, Irregular)** Special topics in the earth sciences. Field trip required when appropriate to the topic. *Prerequisite:* departmental approval; second-year graduate standing normally required.
- **601** Seminar in Sedimentary Geology (1-3, max 6, Sp) Analysis and discussion of current topics in sedimentary geology; topics will be chosen by students and faculty to focus on areas of recent advances.
- **609** Seminar in Earthquake Physics (2, max **6**, FaSp) Current research on the physics governing earthquakes and faults, including results from continuum and fracture mechanics, statistical physics, lab experiments, and seismological observations.
- **650 Recent Advances in Paleontology (3)** Selected review of recent ideas in paleobiology, evolution, and paleoecology related to examining the current frontiers in paleontology.
- **790 Research (1-12)** Research leading to the doctorate. Maximum units which may be applied to the degree to be determined by the department. Graded CR/NC.
- **794abcdz Doctoral Dissertation (2-2-2-0)** Credit on acceptance of dissertation.

### **East Asian Area Studies**

VonKleinsmid Center Room 263 (213) 740-2991 FAX: (213) 740-8409 Email: easc@usc.edu www.usc.edu/dept/LAS/EASC

#### **Associated Faculty**

Professors: Jonathan Aronson (International Relations); Gordon M. Berger (History); Dominic Cheung (East Asian Languages and Cultures); Eugene Cooper (Anthropology); Robert Dekle (Economics); Roger V. Dingman (History); Murray Fromson (Journalism); Charlotte Furth (History); Eric Heikkila (Policy, Planning, and Development); David James (Cinema-Television); Nam-Kil Kim (East Asian Languages and Cultures); Dorinne Kondo (Anthropology); Audrey Li (East Asian Languages and Cultures and Linguistics); Jeffrey B. Nugent (*Economics*); Joan Piggott (*History*); William Rideout (Education); Stanley Rosen (Political Science); James Steele (Architecture); John Strauss (Economics); Kyu-Taik Sung (Social Work); Shui Yan Tang (Policy, Planning, and Development)

Associate Professors: David Bialock (East Asian Languages and Cultures); Bettine Birge (East Asian Languages and Cultures); Carolyn Cartier (Geography); Harrison Cheng (Economics); Meiling Cheng (Theatre); Joann Marie Farver (Psychology); Yasushi Hamao (Finance and Business Economics); George A. Hayden (East Asian Languages and Cultures); Hajime Hoji (East Asian Languages and Cultures and Linguistics); Velina Hasu Houston (Theatre); Kyung Moon Hwang (History); Saori Katada (International Relations); Lon Kurashige (History); Roger Moon (Economics); Jonathan Reynolds (Art History); Gary Seaman (Anthropology)

Assistant Professors: Insoo Cho (Art History); Ruth Gim Chung (Education); Youngheng Deng (Policy, Planning, and Development); Jeong Hyeok (Economics); Jinhee Kim (East Asian Languages and Cultures); Sonya Lee (Art History); Daniel Lynch (International Relations); Lori Meeks (Religion); Apichai Shipper (Political Science and International Relations)

Adjunct and Research Faculty: Hisako Asano (Adjunct Professor, Fine Arts); Baizhu Chen (Finance and Business Economics); Richard Drobnick (Vice Provost for International Affairs and Research Professor; Business Administration); Jack Lewis (Director, International Business Education and Research Program, Business Administration); Koichi Mera (Research Professor, Policy, Planning, and Development); Takahiro Miyao (Economics)

Librarians: Joy Kim (Curator, Korean Heritage Library); Kenneth Klein (Head, East Asian Library); Sun-Yoon Lee (Chinese Biographer); Lilian Yang (Korean Studies Librarian)

Emeritus Professors: Peter A. Berton (International Relations); Otto Schnepp (Chemistry); George O. Totten III (Political Science); John E. Wills, Jr. (History)

#### **Programs**

The East Asian Studies Center provides interdisciplinary studies of China, Japan and Korea. It offers an undergraduate major in East Asian Area Studies, the Master of Arts in East Asian Area Studies and the Master of Arts/ Master of Business Administration. Its faculty are professors from departments throughout the college and several professional schools who teach and engage in research on East Asia. The center's interdisciplinary approach allows students to acquire broad exposure to many ways of learning about the region.

The East Asian Studies Center promotes and coordinates teaching, research and development of academic programs concerning East Asia, regardless of discipline or school, on a university-wide basis. Visiting scholars may also be named from among persons outside the university who wish to do research at USC and contribute to the goals of the center.

The center administers the California Private Universities and Colleges (CALPUC) Japan Study program and cooperates with Overseas Studies to advise students participating in this program. Students may study in Japan at Waseda University in Tokyo; a one-semester program is also available at Tokyo International University just outside Tokyo. Students also have opportunities to study in China, Korea and Taiwan through programs administered by the Office of Overseas Studies. Any undergraduate student of good academic standing is eligible to participate in these study-abroad programs, for full academic credit at USC. USC financial aid is applicable to these study-abroad programs.

The center also promotes and coordinates academic exchange with other institutions with which USC maintains cooperative relations in the United States and abroad. The center serves, for example, as headquarters for the USC/UCLA Joint East Asian Language and Area Studies National Resource Center. Graduate students with special interests in East Asia may take courses at UCLA through USC and may also work, where appropriate, with certain UCLA faculty. UCLA graduate students may similarly take courses at USC and work with USC faculty, for credit at UCLA in East Asian studies. The center facilitates cooperation and provides graduate fellowships to students at both institutions.

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### Undergraduate Degrees

## B.A. in East Asian Area Studies Requirements

Requirements for the lower division are: EALC 110 and EASC 150 or the equivalent; a minimum of four courses in one East Asian language (or the proficiency equivalent); and seven upper division courses approved for the major in addition to the language courses used to meet the requirements. One lower division course other than EALC 110 and EASC 150 may be substituted for one of the seven upper division courses. Upper division courses must include those from at least three departments, one of which must be History. At least one course must be taken on two of the following: China, Japan or Korea.

## B.S., Business Administration (East Asian Studies)

Business and East Asia is a joint program consisting of courses offered by both the Marshall School of Business and the East Asian Studies Center. Students successfully completing the program receive a Bachelor of Science in Business Administration with an emphasis in East Asian Studies. The program is offered to freshmen admitted to the Marshall School of Business as Business Scholars. See the Marshall School of Business section of this catalogue (page 130) for requirements.

## Requirements for the Minor in East Asian Area Studies

The minor in East Asian Area Studies gives students the opportunity to supplement more narrowly defined departmental majors with a multidisciplinary focus on an area of increasingly great importance to our nation in general and our region in particular. There is no language requirement.

Twenty-four units are required from among the more than 120 courses offered on East Asia at the university. Students are required to take EALC 110 and EASC 150; and at least four upper-division four-unit courses (16 units). At least one of these courses must be from the History Department and one from the humanities area. At least one course must be taken on two of the following: China, Japan or Korea.

### Graduate Degrees

#### Master of Arts

The East Asian Studies Center offers an interdisciplinary master's degree in East Asian Area Studies. The program provides a wide range of language, cultural, social, historical, political and economic courses and faculty expertise; individual courses of study may be designed to meet both continuing academic and professional objectives. Students may concentrate primarily on one country (China, Japan, Korea) or develop region-wide expertise through a combination of course work and the thesis project.

#### **Admission Requirements**

Prerequisites

While an applicant for admission will normally have significant experience in East Asian language(s) and area studies as demonstrated through course work completed for the undergraduate degree, programs may be arranged for promising students without prior experience in East Asian studies. *There is no formal language requirement for admission.* 

#### Criteria

The student should have an undergraduate record satisfactory to the center. Three letters of recommendation from professors familiar with the applicant's academic performance should be sent to the center director. All applicants are required to take the verbal and quantitative general tests of the Graduate Record Examinations.

#### **Degree Requirements**

This degree is under the jurisdiction of the Graduate School. Refer to the Requirements for Graduation section (page 81) and the Graduate School section of this catalogue (page 91) for general regulations. All courses applied toward the degree must be courses acceptable to the Graduate School.

#### Foreign Language Requirement

Students must be able to demonstrate oral and written proficiency in Chinese, Korean or Japanese through the third year level (equivalent to six semesters) before the M.A. program is completed.

#### Course and Thesis Requirements

Six courses (24 units), four of which must be at the 500 level or above, plus the thesis (4 units) are required. All students must complete: (1) EASC 592; (2) EALC 531, EALC 532 or EALC 533; and (3) one other course from a College of Letters, Arts and Sciences department. The three additional courses (12 units) may be taken from college departments or professional schools. All courses must be approved by the center director or advisor. A maximum of two courses at the 400 level may be counted toward the degree. All students must register for EASC 594ab Master's Thesis for the thesis project.

#### Master of Arts/Master of Business Administration

The Marshall School of Business in conjunction with the East Asian Studies Center offers a joint M.A./M.B.A. degree that combines graduate business education with training in the cultures and societies of East Asia. Students enrolled in the joint degree program are required to complete a minimum of 72 units. All students must complete 48 units in the Marshall School of Business. Dual degree students may not count courses taken outside the Marshall School of Business toward the 48 units. In East Asian Area Studies, students have the option of taking five courses and writing a thesis (for a total of 24 units) or taking six courses and passing a comprehensive examination (for a total of 24 units).

Applicants for the joint M.A./M.B.A. are required to follow the admission procedures for the full-time M.B.A. program described on page 141. GRE scores are not required for admission into the joint program.

#### Required Courses

Required GSBA courses: all required courses in the M.B.A. core program.

REQUIRED EASC COURSES		UNITS
EASC 592	Proseminar on Issues and Trends in Contemporary East Asia	4

and one course from the following list:

Cultural/Historical	Foundations of East Asia
AHIS 518	Seminar in Chinese Art
AHIS 519	Seminar in Japanese Art
EALC 501	History of Chinese Literature
EALC 506	Selections from Classical
	Chinese Literature
EALC 515	Classical Japanese Poetics
EALC 531	Proseminar in Chinese
	Cultural History
EALC 532	Proseminar in Korean
	Cultural History
EALC 533	Proseminar in Japanese
	Cultural History
EALC 540	Japanese Thought: Cultural
	Topics
EALC 541	Seminar: Japan
EALC 543	Seminar: Japanese Literature
EALC 551	Seminar: China
EALC 553	Seminar: Chinese Literature

EALC 610	Seminar: Buddhism and the Literary Arts in Japan
HIST 535	Studies in Japanese History
HIST 536	Studies in Chinese History
HIST 540	Studies in Modern East
	Asian History
HIST 630	Seminar in Japanese History
HIST 635	Seminar in Chinese History

#### Elective Courses (Thesis Option)

During the second and third years of the program students must complete enough graduate units to bring the total number of units completed in the Marshall School of Business to 48, complete 12 units of East Asian Area Studies elective courses (three courses), and complete a four-unit thesis under the guidance of a faculty committee of three members. The subject will concern East Asia and may focus on business/finance.

#### Elective Courses (Comprehensive Examination Option)

During the second and third years of the program students must complete enough graduate units to bring the total number of units completed in the Marshall School of Business to 48, complete 16 units of East

Asian Area Studies elective courses (four courses) and must pass a comprehensive examination in East Asian Area Studies.

#### Foreign Language Requirement

Students must be able to demonstrate oral and written proficiency in Chinese, Japanese or Korean language through the third year level (equivalent to six semesters) before the joint M.A./M.B.A. program is completed. Language course work taken to meet this requirement will not count toward the minimum unit or course requirements for completion of the degree program. Therefore, students without sufficient undergraduate language course work, native speaker capability or other prior training, are advised that additional units and course work beyond the minimum 72 units may be required in order to satisfy the foreign language requirement. USC offers beginning, intermediate and advanced Chinese, Japanese and Korean language courses during the academic year (fall/spring) and intensive 10-week language programs during the summer that provide beginning and intermediate level instruction.

### Graduate Certificate

#### Requirements

Graduate students interested in East Asian Area Studies must be enrolled in an advanced degree program in the Graduate School or in a professional school at the university. While preparing for an M.A., Ph.D. or other graduate degree, they may earn a certificate in East Asian studies which certifies special area competence beyond discipline requirements. The certificate requirements provide the student with two options. The first requires that the student write a thesis

and take four graduate-credit courses in East Asian studies in any department. An oral examination is given on the thesis. The second option does not require a thesis. The student instead takes six graduate-credit courses in the East Asian area and takes an oral examination on three research papers and on relevant graduate work. As a part of both options some basic East Asian history and at least two years of study or the equivalent of an East Asian language are required. The

student makes the basic decisions on the program to be followed in consultation with a three-member interdisciplinary committee approved by the Director of the East Asian Studies Center.

For further information, interested students may write to: Director, East Asian Studies Center, THH 331C, University of Southern California, Los Angeles, CA 90089-4351.

#### Courses of Instruction

#### EAST ASIAN STUDIES (EASC)

The terms indicated are expected but are not guaranteed. For the courses offered during any given term, consult the Schedule of Classes.

150g East Asian Societies (4, FaSp) Main patterns of change in modern China, Japan, and Korea; historical framework and the insights of geography, economics, political science, and other disciplines.

#### 499 Special Topics (2-4, max 8, Irregular)

Interdisciplinary examination of various areas of East Asian studies.

#### 590 Directed Research (1-12, FaSpSm)

Research leading to the master's degree. Maximum units which may be applied to the degree to be determined by the department. Graded CR/NC.

591 Interdisciplinary Seminar (4, max 8, Irregular) An examination of a broad topic in the study of China, Korea, or Japan. Guest

speakers, student reports, papers. Readings in English and the appropriate Asian language(s). Prerequisite: departmental approval.

## 592 Proseminar on Issues and Trends in Contemporary East Asia (4, 2 years, Fa)

Introduction to graduate level study of policy issues and major trends in contemporary China, Japan, and Korea; contributions of various academic disciplines.

## 593x Understanding East Asia: An Introduction for Professional School Students (3, Sp)

Historical, social, political and cultural survey of China, Japan and Korea with focus on topics of particular relevance for business practitioners and other professionals. Not available for degree credit to East Asian Area Studies degree candidates.

# **594abz Master's Thesis (2-2-0, FaSpSm)** Credit on acceptance of thesis. Graded IP/CR/NC.

**599 Special Topics (2-4, max 8, FaSpSm)** Special topics in East Asian Area Studies.

## **East Asian Languages and Cultures**

Taper Hall of Humanities 226A (213) 740-3707 FAX: (213) 740-9295 Email: ealc@usc.edu www.usc.edu/dept/LAS/ealc/

Chair: Audrey Li, Ph.D.

#### **Faculty**

*Professors:* Dominic C.N. Cheung, Ph.D.; Nam-Kil Kim, Ph.D.; Audrey Li, Ph.D.

Associate Professors: David Bialock, Ph.D.; Bettine Birge, Ph.D.; George A. Hayden, Ph.D.; Hajime Hoji, Ph.D. (Linguistics) Assistant Professors: Jinhee Kim, Ph.D.; Sonya Lee, Ph.D.; Lori Meeks, Ph.D.

*Emeritus Professors:* Laurence G. Thompson, Ph.D.; Henry H.Y. Tiee, Ph.D.

*Emeritus Associate Professor:* Sumako Kimizuka, Ed.D.

Associated Faculty: Joan Piggott, Ph.D. (History)

East Asian Languages and Cultures offers undergraduate and master's programs in Chinese, Japanese and Korean studies and a Ph.D. with a concentration in either East Asian Linguistics or East Asian Literary and Cultural Studies. The department offers courses in East Asian languages, literatures, thought, religions and cultures. The department is distinct from the East Asian Studies Center, which is responsible for the administration of various programs related to East Asia.

Areas of concentration, leading either to the B.A. or M.A. degree, include one of the East Asian languages (Chinese, Japanese or Korean), applied linguistics, foreign language teaching, literature or area studies. Language competence and communication are stressed for all degrees. Directed readings are also offered.

## Undergraduate Degree

## B.A. in East Asian Languages and Cultures Requirements

For the lower division, two years of Chinese, Japanese or Korean language are required. For the upper division, 32 units, including the third year of language, are required. The 32 upper division courses must include one civilization course and one literature course in either Chinese, Japanese or Korean. One lower division course may be counted toward the 32 upper division unit requirement. One East Asian course from another department may be included in the 32 unit requirement, if approved by an advisor.

## East Asian Languages and Cultures Minor Requirements

For the lower division, two years of language in one of three languages (Chinese, Japanese and Korean) are required. For the upper

division, four 4-unit courses, including one civilization course and one literature course in either Chinese, Japanese or Korean are required.

#### **Study Abroad Programs**

East Asian Languages and Cultures majors and minors are encouraged to take advantage of the numerous semester and year-long study abroad opportunities sponsored by the office of Overseas Studies. Currently, the office offers programs in China (Beijing and Nanjing), Taiwan (Taipei), Korea (Seoul), and Japan (Tokyo, Nagoya). Each of the programs is affiliated with a world class institution, such as Waseda University in Tokyo, National Chengchi University in Tokyo, National Chengchi University in Taipei or Yonsei University in Seoul. Contact the Office of Overseas Studies at (213) 740-3636 for further details or visit them online at www.usc.edu/dept/LAS/overseas.

The majority of course work offered by these programs may be counted toward the EALC major or minor requirements. Students who receive major credit from any of these programs must still take at least eight units of non-language courses within EALC at the upper division level while at USC (specifically an EALC civilization and an EALC literature course). Students interested in attending one of these programs must meet with an EALC academic advisor to ensure that the courses enrolled in overseas will meet EALC major or minor requirements.

#### Bachelor of Arts with a Combined Major in Linguistics/East Asian Languages and Cultures

See Department of Linguistics, page 358.

### Graduate Degrees

## Master of Arts in East Asian Languages and Cultures

The Department of East Asian Languages and Cultures offers instruction in the languages, literatures and cultures of East Asia. The graduate program offers the master's degree in Chinese and Japanese. Programs of study may emphasize foreign language teaching, applied linguistics, literature, thought, religions or area studies.

Admission Requirements — Prerequisites
An applicant for admission will normally have the equivalent of an undergraduate major in East Asian languages and cultures at USC, but programs may be arranged for promising students who do not have the prerequisites. Such students may be required to make up the deficiencies.

#### Criteria

All applicants are required to take the Graduate Record Examinations verbal and quantitative General Test and submit their complete undergraduate record: at least three letters of recommendation and a statement of purpose should be sent to the chair of the department. Applicants are urged to submit written materials as supporting evidence.

#### Degree Requirements

These degrees are under the jurisdiction of the Graduate School. Refer to the Requirements for Graduation section (page 81) and the Graduate School section of this catalogue (page 91) for general regulations. All courses applied toward the degrees must be courses accepted by the Graduate School.

## Foreign Language Requirement

Competence is required in either Chinese or Japanese.

#### Course Requirements

Six courses, four of which must be at the 500-level or above, are required. Those students whose concentration is in language and literature should take a fourth year of language.

#### Final Research Paper

The research paper must demonstrate the student's ability to use source materials in the Asian language of his or her area.

## Doctor of Philosophy East Asian Linguistics Concentration

#### Requirements

A student's total graduate course work must be at least 60 units including the doctoral dissertation. Students must have: at least 24 units of courses from the East Asian linguistics core curriculum; at least four years of the student's East Asian language of specialization (or equivalent); and at least two years (or equivalent) of a second East Asian language. Note that only the fourth year of the language of specialization (8 units) may be applied to the 60 units.

#### Screening Procedure

Before a doctoral guidance committee can be established for students in the Ph.D. concentration and prior to the completion of 24 units of graduate work or the fourth semester of degree candidacy (whichever comes first), students must pass a screening procedure. This procedure consists of a review of the student's graduate work by a three-person committee of the departmental faculty and will be based on the following criteria: course work, including grades and papers; faculty recommendations; performance on a takehome examination; and evaluation of a research paper. The screening procedure is completed by the formation of a Ph.D. guidance committee. Refer to the Graduate School section of this catalogue, page 95, for specific direction on forming a guidance committee.

Petition to Take the Qualifying Examination
Sixty days prior to the proposed examination date, a petition to take the examination must be filed with the guidance committee chair and the Graduate School; the student cannot take the examination without approval of his or her Ph.D. guidance committee. The petition should include specification of two or three areas which must be related to the area of the student's specialization in which the student wishes to be examined. Prior to the qualifying examination, the student must submit to each member of the guidance committee a dissertation prospectus and an original research paper.

#### Qualifying Examinations

Ph.D. qualifying examinations are both written and oral. Once a student's petition to take the examinations has been approved, the guidance committee will set and administer the written examination. The areas to be examined are set by the guidance committee

in terms of the choice of specific languages (Chinese, Japanese, Korean) and the choice of linguistic concentrations, such as phonetics, morphology, syntax and historical studies. The written examination consists of a number of questions over the approved fields. Students will receive the qualifying paper and will have 30 days to answer the questions. An oral examination will be scheduled by the guidance committee two weeks after the written examination has been completed.

#### Foreign Language Requirements

All doctoral candidates must demonstrate competence in two East Asian languages. One can be satisfied by at least four years of the language of specialization and the other by at least two years of a second East Asian language. Additional language work may be required by the guidance committee in view of the student's proposed field of research. All language requirements must be completed at least 60 days before the qualifying examination is taken.

#### Dissertation

A dissertation must be submitted according to the policies and procedures described in the Graduate School section of this catalogue, page 95.

#### East Asian Linguistics Core Curriculum

REQUIREMENTS		UNITS
EALC 470	Introduction to East	
	Asian Linguistics	4
EALC 537	Structure of the	
	Korean Language	4
EALC 547	Structure of the	
	Japanese Language	4
EALC 557	Structure of the	
	Chinese Language	4
EALC 558	History of the	
	Chinese Language	4
EALC 560	Comparative Syntax	
	of the East Asian	
	Languages	4
EALC 561	Topics and Issues in	
	East Asian Linguistics	4
EALC 562	Teaching of the East	
	Asian Languages	4
EALC 580	Readings in East	
	Asian Linguistics	4
EALC 620	Seminar in East	
	Asian Linguistics	4
EALC 794abcdz	Doctoral	
	Dissertation 2-	-2-2-2-0

# Doctor of Philosophy East Asian Literary and Cultural Studies Concentration

Course Requirements

A student's total graduate course work must be at least 60 units including the doctoral dissertation. Of the 60 units, students must have: at least 24 units from the list under the East Asian literary and cultural studies core curriculum; and eight units earned from EALC 400 Classical Chinese I and EALC 402 Classical Chinese II. Students with M.A. degrees who have already been credited with 24 units or six courses (four of which must be at the 500 level or above) must accumulate 28 additional units before being admitted to the oral examinations. All students must have at least four years (or equivalent) of their language of specialization. Only the fourth year of the language of specialization may be applied to the 60 units. No more than five courses at the 400 level may be applied to the total requirement of 60 units. Students are encouraged (with advisor's approval) to take courses from other departments.

Screening Procedure and Qualifying Examination The screening procedure for continuation of candidacy for the Ph.D. degree consists of recommendations to the Literary and Cultural Studies Screening committee from those regular faculty who have instructed the candidate in his or her graduate course work to date; a student is either allowed or not allowed to continue in Ph.D. candidacy on the basis of cumulative course and examination work and these recommendations. The screening procedure must be completed prior to the student's completion of 24 units of graduate course work or fourth semester of degree candidacy (whichever comes first). The successful procedure is completed by formation of a Guidance Committee.

The qualifying procedure (which permits a graduate student to advance to the dissertation stage) consists of three field examinations and an oral dissertation topic presentation to the graduate faculty accompanied by a written dissertation proposal of 25-30 pages.

In the qualifying examination, candidates will ordinarily select three of the following fields: (1) Topics in Pre-modern Chinese Literature: (2) Topics in Pre-modern Japanese Literature; (3) Topics in Modern Chinese Literature; (4) Topics in Modern Japanese Literature; (5) Topics in Chinese Thought and Civilization; (6) Topics in Japanese Thought and Civilization. If approved by the Guidance Committee, students may be allowed to define one of their three fields from outside the above list. The qualifying procedure is completed by the formation of a Dissertation Committee.

#### Foreign Language Requirement

All doctoral candidates must have: (1) four years of their language of specialization; (2) one year of Classical Chinese (EALC 400, EALC 402); (3) a reading knowledge of French or German. Chinese majors must also complete two years of modern Japanese. The successful completion of EALC 400 and EALC 402 Classical Chinese satisfies the second language requirement for students of Japanese. Additional language work may be required by the guidance committee in view of the student's proposed field of research. All language requirements must be completed at least 60 days before the qualifying examination is taken.

#### Dissertation

Successful completion of the qualifying examination constitutes approval of the dissertation topic. The final copy of the dissertation must conform to the regulations of the Graduate School. The defense of the dissertation takes place after the readers have approved the dissertation in its final form. The format of the defense will be determined by the student's committee but normally consists of a brief lecture presenting the thesis and its conclusions followed by questioning from the committee.

East Asian Literary and Cultural Studies Core Curriculum

CHI TOUTH		
REQUIREMENTS	UN	ITS
EALC 500	Advanced Classical	
	Chinese I	4
EALC 501	History of Chinese	
	Literature	4
EALC 502	Advanced Classical	
	Chinese II	4
EALC 503	Chinese Poetry	4
EALC 504	Selections from	
	Modern Chinese	
	Literature	4
EALC 506	Selections from Classical	
	Chinese Literature	4
EALC 515	Classical Japanese Poetics	4
EALC 520	Modern Japanese	
	Literature	4
EALC 540	Japanese Thought:	
	Cultural Topics	4
EALC 541	Seminar: Japan	4
EALC 543	Seminar: Japanese	
	Literature	4
EALC 545	Japanese Literary	
	Criticism and Theory	4
EALC 551	Seminar: China	4
EALC 553	Seminar: Chinese	
	Literature	4
EALC 555	Chinese Literary	
	Criticism and Theory	4
EALC 565	Bibliography and	
	Research Methods in	
	Chinese Studies	4
EALC 610	Seminar: Buddhism	
	and the Literary	
	Arts in Japan	4
EALC 650	Research Seminar in	
P. F. C. F. C	Chinese Documents	4
EALC 794abcdz	Doctoral	
	Dissertation 2-2-2-2	<b>?-</b> ()

#### Certificate in Foreign-Language Teaching

The certificate in Foreign-Language Teaching provides certification in the theory and practice of second or foreign language teaching for student language teachers concurrently enrolled in graduate degree programs in foreign languages or related graduate programs at USC; for graduates of such programs who are teaching languages; for external candidates concurrently enrolled in similar programs at accredited colleges or universities; or for graduates of such programs who are teaching languages. The certificate is meant to supplement graduate study in the literature or linguistics of foreign languages. It is also meant to supplement classroom teaching. Refer to the Department of Spanish and Portuguese (page 427) for course work requirements.

#### Courses of Instruction

## EAST ASIAN LANGUAGES AND CULTURES (EALC)

The terms indicated are *expected* but are not *guaranteed*. For the courses offered during any given term, consult the *Schedule of Classes*.

- **102** Language, Art and Culture: Calligraphy **(2, FaSp)** This course introduces students to the origin of the basic Chinese scripts and the basic principles and styles of calligraphy.
- **104** Chinese I (4, FaSpSm) The sound system of modern Chinese; aural comprehension, oral expression, basic patterns, and writing system.
- **106** Chinese II (4, FaSpSm) Dialogue practice and conversation; reading of simple stories and essays; comparison of Chinese and English grammar; writing of paragraphs. *Prerequisite*: EALC 104.
- 108 Reading and Writing Chinese (4, FaSp)

The basics of reading and writing modern Chinese; intensive reading and writing of paragraphs, essays, and stories; extensive reading of beginner-level authentic materials.

- 110g East Asian Humanities: The Great Tradition (4, FaSp) Introduction to the major humanities traditions of China, Japan, and Korea through an examination of representative works drawn from literature, aesthetics, philosophy, religion, and historical writing.
- **115 Korean I (4, FaSpSm)** Aural comprehension and oral practice; the writing system; grammar drill, sentence patterns. Lecture, 5 hours; additional hours for drill and laboratory.
- **117 Korean II (4, FaSpSm)** Continuation of EALC 115. Progressive drill in dialogue, reading, and writing. Lecture, 5 hours; additional hours for drill and laboratory. *Prerequisite*: EALC 115.
- **120 Japanese I (4, FaSpSm)** Basic Japanese conversation practice, basic grammar and building proficiency of reading and writing Hiragana and Katakana (Japanese alphabetical systems).
- **122** Japanese II (4, FaSpSm) Continuation of EALC 120. Basic Japanese conversation practice, basic grammar and building proficiency of reading and writing Hiragana and Katakana and basic kanji. *Prerequisite*: EALC 120.

- **130g East Asian Ethical Thought (4, FaSp)** Introduction to the history of Chinese, Japanese, and Korean ethical thought; perspectives on human nature, historical writing, religious options, and aesthetic implications. Conducted in English.
- **134 Conversational Cantonese I (4)** The sound and tone system of Cantonese; aural comprehension and oral expression. Basic grammar. Not applicable to foreign language requirement of the college.
- **136** Conversational Cantonese II (4) Continuation of EALC 134, to improve facility in comprehension and expression. *Prerequisite:* EALC 134. Not applicable to foreign language requirement of the college.
- 145 Introduction to Traditional East Asian Literature and Culture (4, FaSp) Introduction to religious, literary and philosophical traditions of Japan, China, and Korea. With Japan as the focal point, the course will explore the articulation of otherness and cultural identity within the East Asian cultural sphere. Especial attention will be paid to the meaning of historical versus fictional narrative in East Asian culture; the function of gender in religious, philosophical, and aesthetic discourses; cultural perceptions of war; conceptions of nature and culture in literary and philosophical texts; the confrontation with modernity and ideas of self and otherness in modern fiction.
- **204** Chinese III (4, Fa) Conversational practice: reading of stories and essays; writing of short essays. *Prerequisite*: EALC 106.
- **206** Chinese IV (4, Sp) Continuation of 204, with emphasis on reading and writing, frequent interaction with native speakers. *Prerequisite:* EALC 204.
- **215 Korean III (4, Fa)** Drill to increase proficiency in dialogue, reading, and writing; intermediate level readings. *Prerequisite:* EALC 117.
- **217 Korean IV (4, Sp)** Advanced level reading of modern Korean and exercises in written composition. *Prerequisite:* EALC 215.
- **220** Japanese III (4, FaSpSm) Continuation of EALC 122. Conversation practice, basic to intermediate grammar, and building proficiency of reading and writing Hiragana and Katakana with additional kanji. *Prerequisite:* EALC 122.

- **222 Japanese IV (4, FaSpSm)** Continuation of EALC 220. More sophisticated grammar and vocabulary for natural conversation. Enhancing fundamental reading and writing skills, expanding the knowledge of kanji. *Prerequisite:* EALC 220.
- **264g** Asian Aesthetic and Literary Tradition **(4)** (Enroll in COLT 264g)
- **304 Advanced Modern Chinese I (4, Fa)** Reading selections from different styles of

Reading selections from different styles of modern Chinese writings, analysis of stylistic techniques and syntactic structure, composition, and translation. *Prerequisite:* EALC 206.

- **306** Advanced Modern Chinese II (4, Sp) Continuation of EALC 304; composition exercises in different styles of writing. *Prerequisite:* EALC 304.
- **315 Advanced Korean I (4, Fa)** Advanced reading in modern Korean materials; improvement of skills in conversation, composition, and translation. *Prerequisite:* EALC 217.
- **317 Advanced Korean II (4, Sp)** Continuation of EALC 315, with emphasis on the use of Chinese characters, translation, and composition exercises. *Prerequisite*: EALC 315.
- **318** Readings in Contemporary Korean **(4, FaSpSm)** Selected readings in a variety of Korean styles. Materials are from essays, short stories and newspapers. *Prerequisite*: EALC 217.
- **320** Advanced Japanese I **(4)** Strengthen intermediate Japanese language proficiency. Oral/aural communication skills as well as reading and writing skills. Promote an understanding of the present-day Japanese culture. *Prerequisite:* EALC 222.
- **322** Advanced Japanese II (4, FaSp) Continuation of EALC 320. Improve and strengthen abilities to speak, listen, read and write, coping with more involved materials and situation. *Prerequisite:* EALC 320.
- **332** Korean Literature in English Translation (4, Fa) Introduction to Korean literature, with discussion of critical approaches to literary discourse, historical contexts of literary production, and aspects of contemporary popular culture.
- **335m Literature of the Korean People (4, FaSp)** Examination of the literature of the Korean people, both native writings as well as works written outside of Korea. Focus on issues and topics central to the Korean-American experience, as well as experiences within Korea and throughout Asia.

- **340g Japanese Civilization (4, FaSp)** Survey of the main characteristics and development of art, literature, philosophy, religion, political and social institutions through different periods. Conducted in English.
- **342g** Japanese Literature and Culture **(4, FaSp)** Japanese literature from the earliest times to the present; development of prose, poetry and the novel; evolution of theatre; Japanese literature under Western influence. Conducted in English.
- **345 Korean Civilization (4)** Survey of the main characteristics and development of Korean art, literature, philosophy, religion, political and social institutions through different periods. Conducted in English.
- **350g Chinese Civilization (4, FaSp)** Characteristics and aspects of Chinese civilization; interpretation of philosophy, literature, religion, art, music. Conducted in English.
- **352g Chinese Literature and Culture (4, FaSp)** Readings of Chinese poetry, prose, novel and drama; influence of the West on Chinese literature and culture in modern times. Conducted in English.
- **354g Modern Chinese Literature in Translation (4)** Readings in modern Chinese poetry, fiction, and drama since 1919.
- **355 Studies in Chinese Thought (4)** Chinese thought, particularly as formulated in the three great traditions: Confucianism, Taoism, Buddhism.
- **365 Studies in Japanese Thought (4)** Influence of native traditions and imported Chinese traditions on Japanese civilization; religious, ethical, aesthetic, and political aspects.
- **375** Women and Gender in China: Past and Present (4) An examination of changes in sex roles and in constructs of the female as influenced by traditional Chinese thought and later social developments.
- **380** Cultural Topics in East Asian Literature **(4)** Selected themes, genres, and periods in East Asian literature, e.g., Taoism and Buddhism, women, folktales.
- **385** Readings in Korean Poetry (4) Texts will include sijo, kasa, changga and modern poetry, with emphasis on modern poetry. Readings will be in English and Korean. *Prerequisite:* EALC 217.
- **386** Readings in Modern Korean Literature **(4)** Selected readings from modern Korean short stories, novels, plays and essays. Readings will be in English and Korean. *Prerequisite*: EALC 217.

- **390 Special Problems (1-4)** Supervised, individual studies. No more than one registration permitted. Enrollment by petition only.
- **400 Classical Chinese I (4)** Introduction to the classical styles, selections from classical style writings, contrastive analysis of modern and classical Chinese, translation and writing practice. *Prerequisite:* EALC 206.
- **402 Classical Chinese II (4)** Continuation of EALC 400.
- **404** Advanced Modern Chinese III **(4, Fa)** Readings in modern Chinese literary, documentary, and epistolary styles; stylistic and syntactic analysis; composition; translation. *Prerequisite*: EALC 306.
- **406 Advanced Modern Chinese IV (4, Sp)** Continuation of EALC 404.
- **407** Newspaper and Documentary Chinese **(4)** Reading selections from newspaper articles and modern documents, analysis of structural patterns, and writing practice. *Prerequisite:* EALC 206.
- **410** Chinese-English Translation (4) Structure, vocabulary, and techniques of written translation and oral interpretation; classroom and laboratory practice; English-Chinese and Chinese-English. *Prerequisite:* departmental approval.
- **412ab Business Chinese (4-4)** *a:* Practice in the basic vocabulary and idioms of foreign trade and other commercial transactions in Mandarin. *Prerequisite:* EALC 206. *b:* Continuation of EALC 412*a.*
- **413 Business Japanese (4, Sp)** Practical Japanese business terms and their usage in a variety of business situations; cultural insights on Japanese customs that underline business transactions in Japan. *Prerequisite*: EALC 222.
- **415 Advanced Korean III (4, Fa)** Selected readings in Korean texts, pre-modern and modern, in various literary and non-fiction genres; focus on developing reading and translation skills. *Prerequisite:* EALC 317.
- **417 Advanced Korean IV (4, Sp)** Continuation of EALC 415.
- **418 Korean Writing in Mixed Script (4, FaSp)** Selected readings in Korean texts written in mixed script; a systematic study of Chinese characters and translation of text. *Prerequisite:* EALC 217.

- **419** Newspaper and Documentary Korean **(4, FaSp)** Selected readings from newspapers, magazines, and other journalistic publications; analysis of styles and practice in writing articles. *Prerequisite*: EALC 217.
- **422** Advanced Readings in Japanese I (4, Fa) Students develop advanced levels of Japanese linguistic knowledge and communication skills through speaking, listening, reading and writing activities using authentic Japanese texts and discourse. *Prerequisite*: EALC 322.
- **424** Advanced Readings in Japanese II **(4, 5p)** Continuation of EALC 422. Students continue to improve their Japanese language competence in the course of acquiring Japanese pragmatic skills and cultural knowledge.
- **426** Classical Japanese **(4)** Introduction to the fundamentals of classical grammar; readings from various classical works, both poetry and prose; translation practice. *Prerequisite*: EALC 322.
- **431 The Taoist Tradition (4)** Close reading of primary text(s) of early Chinese Taoist thinkers (in translation), along with analysis of relevant secondary scholarship. *Recommended preparation:* EALC 355 or REL 131.
- **440ab Japanese for Academic Research** (a: 4, Fa; b: 4, Sp) a: Develop skills necessary for academic reading, writing and presentations. Topics include literature, history, and social and cultural issues. *Prerequisite*: EALC 424. b: Continuation of EALC 400a. Further develop skills for academic research conducted in Japanese. Topics include literature, history, and social and cultural issues. *Prerequisite*: EALC 440a.
- **452** Chinese Fiction (4) Development of Chinese fiction and readings from English translations of major Chinese novels such as the Dream of the Red Chamber, All Men are Brothers, and others. Conducted in English.
- **455 Japanese Fiction (4)** Japanese fiction from early to modern times; literary, philosophical, and social aspects of tales and novels. Conducted in English.
- **460** Love, Self and Gender in Japanese Literature (4, Sp) Examines conceptions of love, self, gender, and sexuality in Japanese literature and culture of the modern and pre-modern periods with comparisons to European and Chinese literature.

#### 470 Introduction to East Asian Linguistics (4)

Survey of the sound systems, writing systems, grammatical systems, historical development, and social environments of the Chinese, Japanese, and Korean languages. *Prerequisite:* EALC 406 or EALC 417 or EALC 424 or departmental approval.

**490x Directed Research (2-8, max 8)** Individual research and readings. Not available for graduate credit. *Prerequisite*: departmental approval.

#### 499 Special Topics (2-4, max 8)

**500** Advanced Classical Chinese I (4) Reading in classical Chinese and practice in classical vocabulary and syntax, with emphasis on translation into English and modern Chinese. *Prerequisite:* EALC 402.

**501** History of Chinese Literature **(4)** An in-depth survey of literary development concerning periods, thought, genres, and sociocultural backgrounds in China. In English. *Prerequisite:* departmental approval.

**502** Advanced Classical Chinese II (4) Continuation of EALC 500. *Prerequisite:* EALC 500.

**503** Chinese Poetry (4) Literary studies of the theory and practice of Chinese poetry from major poets. *Prerequisite:* 4th year Chinese.

**504** Selections from Modern Chinese Literature (4) Literary currents and representative writings of the 20th century. *Prerequisite:* EALC 306 or departmental approval.

**506** Selections from Classical Chinese Literature **(4)** Writings of the important periods and genres of Chinese literary history. *Prerequisite:* EALC 406 or departmental approval.

**515** Classical Japanese Poetics (4) An analysis of major texts of the Japanese literary tradition from the 8th to the 16th century. *Prerequisite:* departmental approval.

**520 Modern Japanese Writers (4)** Selections illustrative of major literary trends and literary works since the Meiji Restoration. *Prerequisite:* EALC 422.

**522** Classical Japanese Writers (4) Writings representative of important periods and genres of Japanese literary history up to the Meiji Restoration. *Prerequisite:* EALC 426 or departmental approval.

**531 Proseminar in Chinese Cultural History (4)** Intensive readings in English concerning interpretive issues in the study of Chinese cultural history.

#### 532 Proseminar in Korean Cultural History

**(4)** Introduction to Korean cultural and social history through intensive reading of the English-language literature on Korean history and culture.

#### 533 Proseminar in Japanese Cultural

**History (4)** Intensive readings, chronologically arranged, in interpretive issues in the study of Japanese cultural history. Readings in English.

**535** Proseminar in Chinese Visual Culture **(4, FaSp)** Chinese visual culture through the complex interface of art and thought. Examines architectural layout, pictorial representation, decorative motif as part of cultural production that intertwines with intellectual trends

#### 537 Structure of the Korean Language (4)

Description and theoretical analysis of phonology, morphology and syntax of modern Korean; comprehensive view of the properties of the Korean structure. *Prerequisite:* EALC 470 or departmental approval.

**540** Japanese Thought: Cultural Topics (4) Seminar on the implications of major streams of thought in Japanese culture. *Prerequisite*: departmental approval.

**541 Seminar: Japan (4)** Social, economic, political, and cultural problems in modern Japan. Bibliographic and reference materials. *Prerequisite:* HIST 436.

**543 Seminar: Japanese Literature (4)** Readings in original texts in the works of selected major writers; lectures dealing with intellectual and cultural backgrounds of the periods and the authors. *Prerequisite:* EALC 520, EALC 522 or departmental approval.

545 Japanese Literary Criticism and Theory

**(4)** Representative theories of literature; history of classical and modern literary criticism. *Prerequisite:* EALC 520, EALC 522 or departmental approval.

547 Structure of the Japanese Language (4)

Descriptive analysis of phonetic, phonological, and grammatical structure of Japanese. Conducted in English. *Prerequisite*: EALC 470 or departmental approval.

**551 Seminar: China (4)** Individual research and seminar reports on selected phases of Chinese traditional civilization.

**553 Seminar: Chinese Literature (4)** Research in different genres of Chinese literature, traditional and modern.

555 Chinese Literary Criticism and Theory (4)

Classical and modern literary theories and criticism; comparisons with literary theory and criticism in the West.

556 Seminar on Women and the Family in

**China (4)** An introduction to the current state of research on women and the family in China, and training in feminist analytic approaches for further work in the China field of other areas. Departmental approval is required.

557 Structure of the Chinese Language (4)

Descriptive analysis of phonology, morphology, and syntax of modern Chinese. Conducted in English. *Prerequisite:* EALC 404 or departmental approval.

#### 558 History of the Chinese Language (4)

Evolution of the Chinese language from the earliest time to the present: lectures and the reading of texts. Conducted in English. *Prerequisite*: EALC 557.

**560** Comparative Syntax of East Asian Languages (4) Descriptive-comparative study of the Chinese, Japanese and Korean languages with an emphasis on their structures, range of properties, similarities and dissimilarities. *Prerequisite:* EALC 537 or EALC 547 or EALC 557 or departmental approval.

**561** Topics and Issues in East Asian Linguistics (4, max 12) Descriptive and theoretical analysis of the grammars of Chinese, Japanese, and Korean; emphasis on comparative studies of these languages and English.

562 Teaching of the East Asian Languages

**(4)** Materials and methods in teaching East Asian languages; application of methods and techniques of foreign/second language teaching to East Asian language teaching. *Prerequisite*: EALC 537 or EALC 547 or EALC 557 or departmental approval.

**565** Bibliography and Research Methods in Chinese Studies (4) An introduction to reference works and research methods in all fields on sinology; works in Chinese, Japanese and Western languages. *Prerequisite*: departmental approval.

#### 580 Readings in East Asian Linguistics (4)

Survey of some representative works in generative grammar since the mid '60s, including those that deal with similar phenomena in the contexts of more recent theoretical frameworks as well as non-generative grammatical works in Chinese, Japanese, and Korean.

**588ab Directed Readings (2-2)** Assigned readings according to individual needs.

**590 Directed Research (1-12)** Research leading to the master's degree. Maximum units which may be applied to the degree to be determined by the department. Graded CR/NC.

**594abz Master's Thesis (2-2-0)** Credit on acceptance of thesis. Graded IP/CR/NC.

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#### 599 Special Topics (2-4, max 8, FaSpSm)

Special topics in East Asian Languages and Cultures.

**610 Seminar: Buddhism and the Literary Arts in Japan (4)** Seminar on the impact of Buddhism on the literary tradition of medieval Japan. Selected topics. *Prerequisite:* departmental approval.

#### 620 Seminar in East Asian Linguistics (4)

Detailed theoretical discussions and empirical studies of the issues and development in East Asian linguistics.

**650** Research Seminar in Chinese Documents **(4)** An introduction to the different genres of documents for the study of Chinese civilization, and training in their use. *Prerequisite:* departmental approval.

#### 794abcdz Doctoral Dissertation (2-2-2-2-0)

Credit on acceptance of dissertation. Graded IP/CR/NC. *Prerequisite*: departmental approval.

### **Economics**

Kaprielian Hall 300 (213) 740-8335 FAX: (213) 740-8543 Email: econ@usc.edu

Chair: Robert Dekle, Ph.D.

#### Faculty

Robert R. and Katheryn A. Dockson Chair in Economics and International Relations: Todd Sandler, Ph.D.

King Faisal Chair in Islamic Thought and Culture: Timur Kuran, Ph.D.

*University Professor:* Richard A. Easterlin, Ph.D.\*

Professors: Jaksa Cvitanic, Ph.D. (Mathematics); Robert Dekle, Ph.D.; Richard H. Day, Ph.D.; Thomas Gilligan, Ph.D. (Business); Peter Gordon, Ph.D. (Policy, Planning, and Development); Cheng Hsiao, Ph.D.; Ayse Imrohoroglu, Ph.D. (Business); Selahattin Imrohoroglu, Ph.D. (Business); W. Bentley MacLeod, Ph.D.; Michael J. P. Magill, Ph.D.; John Matsusaka, Ph.D. (Business); Kevin Murphy, Ph.D. (Business); Jeffrey B. Nugent, Ph.D.\*; M. Hashem Pesaran, Ph.D.; Harry W. Richardson, M.A. (Policy, Planning, and Development); Geert Ridder, Ph.D.; John Strauss, Ph.D.; Guofu Tan, Ph.D.; Donald E. Yett, Ph.D.

Associate Professors: Caroline Betts, Ph.D.; Juan Carrillo, Ph.D.; Harrison Hsueh-Cheng Cheng, Ph.D.; Michael E. DePrano, Ph.D.; Hyungsik Roger Moon, Ph.D.; B. Peter Rosendorff, Ph.D. (International Relations)

Assistant Professors: Isabelle Brocas, Ph.D.; Hyeok Jeong, Ph.D.; Yong Jin Kim, Ph.D.; Guillaume Vandenbroucke, Ph.D.; Fernando Zapatero, Ph.D. (Business)

Senior Lecturer: Nake Kamrany, Ph.D.\*

Emeritus Professor: Aurelius Morgner, Ph.D.

\*Recipient of university-wide or college teaching award.

#### **Undergraduate Programs**

The economics curriculum is oriented toward a general, liberal education. The study of economics requires adequate preparation in mathematics and statistics. The department offers a B.A. degree in economics, a B.A. degree in social sciences, a B.S. in Economics/Mathematics and a minor in economics. Both B.A. degrees require a total of 32 upper division units for the major. Economics majors with an overall GPA of 3.5 or higher can apply to the department's B.A./M.A. program.

#### **Graduate Programs**

The department offers a Master of Arts in Economics, a Master of Arts in Economic Developmental Programming, a Master of Science in Mathematical Finance, dual degrees with the USC Gould School of Law and the School of Policy, Planning, and Development, a Doctor of Philosophy in Economics, a Doctor of Philosophy in Pharmaceutical Economics and Policy and a Doctor of Philosophy in Political Economy and Public Policy.

## Undergraduate Degrees

#### Advisement

Upon declaring a major or minor in economics, students should consult with the department's undergraduate advisor. Students can check their academic progress on the USCweb under Oasis.

## Major Requirements for the Bachelor of Arts In Economics

Students are required to take ECON 203, ECON 205, ECON 303, ECON 305, ECON 317, ECON 414 and four economics elective courses. Of the four elective courses (300 level or above) a minimum of two must be economics courses at the 400 level or higher.

The remaining two economics courses must be approved by the department's director of undergraduate studies. A grade of C (2.0) or better is required for each of the core courses ECON 303, ECON 305, ECON 317 and ECON 414. MATH 118x or MATH 125 is required for the major; students are advised to meet the requirement by their sophomore year. Majors are also required to take at least one two-unit course on computing chosen from ITP 101x, ITP 110x or CSCI 101L.

#### Requirements for the Bachelor of Arts, Social Sciences, with an Emphasis in Economics

Students are required to take ECON 203, ECON 205, ECON 303, ECON 305 and three economics elective courses numbered 300 or 400. A grade of C (2.0) or better is required for each of the core courses ECON 303 and ECON 305. MATH 118x or MATH 125 is required and an additional 12 units of upper division courses from departments in the social sciences (anthropology, geography, international relations, history, political science, psychology, sociology).

#### **Accelerated Dual Degree in Economics**

This accelerated 144-unit program permits superior students to complete all requirements for both the B.A. and M.A. degrees in economics. Admission to this program may take place any time after completing MATH 125 and at least four 300/400 level economics courses which include two core courses. To be eligible for admission, students must have at least a 3.5 overall grade point average and demonstrate outstanding performance in economics and mathematics courses.

Students are required to take at least 60 units in economics, including all required courses of the department's B.A. degree except ECON 414, and all the required courses of the economics M.A. degree. Students are also required to take MATH 126, MATH 226 and must fulfill the general education, writing, foreign language and diversity requirements.

## Requirements for the Bachelor of Science in Economics/Mathematics

Students are required to take seven courses in economics, seven courses in mathematics and one course in computer programming languages. Pre-major requirement: MATH 125 or equivalent.

*In Economics:* ECON 203, ECON 205, ECON 303, ECON 305, ECON 414 and at least two other ECON courses at the 400 level or above

In Mathematics: MATH 126 or MATH 127; MATH 225 or MATH 245; MATH 226 or MATH 227; MATH 407, MATH 408 and at least two other MATH courses at the 400 level or above

*In Computing:* At least one course chosen from ITP 110x, ITP 150x, ITP 165x; CSCI 101L

Electives must be approved by the program advisors.

#### Dual B.S./M.S. in Economics-Mathematics/Mathematical Finance

This accelerated 150-unit program permits superior students to complete all requirements for the combined Economics/Mathematics

Bachelor of Science degree and the Master of Science in Mathematical Finance within a period of 8 to 10 semesters. Admission to this program may take place any time after completing at least two 300/400 level economics courses and MATH 407. A minimum overall GPA of 3.5 is required for admission. Premajor requirement: MATH 125 or equivalent.

Students are required to take the following undergraduate level courses, in addition to standard university requirements for a bachelor's degree:

Economics: ECON 203, ECON 205, ECON 303, ECON 305; Electives: at least two other ECON courses at the 400 level or above.

Mathematics: MATH 126 or MATH 127, MATH 225 or MATH 245, MATH 226 or MATH 227, MATH 407; Electives: at least two other MATH courses at the 400 level or above.

Computing: at least one course from ITP 110x, ITP 150x, ITP 165x; CSCI 101L.

In addition, students are required to satisfy all the requirements of the Master of Science in Mathematical Finance degree. Electives have to be approved by program advisors.

#### **Minor in Economics**

Students from all disciplines will benefit from an economics minor. The economics minor is offered in three tracks. Each track is designed to help the student explore a coherent area of economic thought and methodology. Students minoring in economics must maintain at least a 2.0 GPA (cumulative) in courses taken for the minor.

The minor includes the core courses ECON 203, ECON 205, ECON 303 or ECON 305, MATH 118x or MATH 125 plus three courses chosen from one of the following tracks:

#### Law and Political Economy

This track introduces students to the economic theory that underlies the economic

choices made by individuals and the ways in which law and policy combine to regulate such behavior. Economic models of individual choice, contracts, and law are analyzed in courses in this track. Choose three courses from: ECON 317, ECON 330, ECON 332, ECON 336, ECON 434.

#### Finance and Money

This track guides students through the economic thought and theory that underlie the importance of money. Courses cover topics that shed light on the ways in which institutions, individual preferences and financial markets affect the allocation and investment of money. Choose three courses from: ECON 317, ECON 350, ECON 357, ECON 360, ECON 450, ECON 452, ECON 457.

#### International Economics

This track concentrates on the foundations, complexities and importance of the global economy as well as the role of economics and political economy in societies outside of the United States. Choose three courses from: ECON 317, ECON 330, ECON 340, ECON 342, ECON 343, ECON 346, ECON 450.

#### **Undergraduate Honors Program**

The department offers an honors program. First and second semester seniors can enroll in ECON 495 Honors Thesis. Honors will be awarded upon completion of the thesis, an overall GPA of 3.0 or higher and a major GPA of 3.5.

## **Department Policy Regarding Transfer Credits**

Students who have taken courses equivalent to ECON 303, ECON 305, ECON 317 or ECON 414 from an economics department at another four-year college or from a program deemed comparable by the director of undergraduate studies, can earn transfer credits provided they received a B (3.0) or better in the courses.

### Graduate Degrees

The graduate program in economics is designed to prepare students for careers in teaching, research, industry and government. The department emphasizes economic theory and econometrics; applied economic analysis, including microeconomics, macroeconomics, international and development economics, urban and regional economics; and political economy.

#### **Admission Requirements**

#### Prerequisites

The typical applicant for admission will normally have completed an undergraduate major in economics. Minimal prerequisites for admission to a master's degree program include courses in intermediate microeconomic and macroeconomic theory, a year of calculus, and a semester of statistics. Applicants for the Ph.D. program are normally expected to have completed more than the minimum, particularly in the areas of mathematics and statistics.

#### Criteria

The Graduate Record Examinations General Test, three letters of recommendation and the student's statement of purpose are required. The letters and statement should be sent directly to the Director of Graduate Admissions, Department of Economics, KAP 300, University of Southern California, Los Angeles, CA 90089-0253. International applicants are required to take the TOEFL examination. In addition, applicants for financial aid are advised to take the GRE Economics Subject Test and international students must have a TSE score of 200. Admission is based on the appropriateness and quality of completed course work, GRE scores and the letters of recommendation.

#### Procedure

Application deadlines are normally April 15 for the fall semester and November 1 for the spring. Completed fellowship and assistantship applications are due by February 1. Except for unusual cases, students are permitted to begin Ph.D. programs only during the fall semester.

#### Placement Examinations

Prior to registration, all entering graduate students are required to take the Economics Department placement examinations in general economic theory and the basic principles of algebra, calculus and statistics. Depending on the outcome of these examinations, deficiency course work yielding no credit toward graduate degrees may be required. Students whose native language is other than English will be required to take an English placement examination. Course work in English may be required.

#### **Degree Requirements**

These degrees are under the jurisdiction of the Graduate School. Refer to the Requirements for Graduation section (page 81) and the Graduate School section of this catalogue (page 91) for general regulations. All courses applied toward the degrees must be courses accepted by the Graduate School.

Foreign Language/Research Tool Requirements
There is no foreign language requirement.
However, competence in the use of one computer programming language is required for all graduate degrees offered through the Department of Economics, except the Ph.D. in Political Economy and Public Policy. Such competence can be demonstrated either by course work or examination. Students in master's programs must meet this requirement before starting the thesis or taking the comprehensive examination; students in the Ph.D. program must complete it before taking the qualifying examination.

#### Master of Arts in Economics

Thesis Option Requirements

At least 24 units (usually six courses; at least four must be in economics at the graduate level) and completion of an acceptable thesis accompanied by registration in ECON 594ab is required. Requirements include the following courses in economics:

REQUIRED COURSES	U	NITS
ECON 417	Statistics for Economists	4
ECON 500	Microeconomic Analysis	
	and Policy, or	
ECON 503	Microeconomic Theory I	4
ECON 501	Macroeconomic Analysis	
	and Policy, or	
ECON 505	Macroeconomic Theory I	4
ECON 511	Econometric Methods,	4-4
	or	
ECON 513	Practice of Econometrics	4
ECON 594ab	Master's Thesis	2-2

Comprehensive Examination Option Requirements At least 32 units (usually eight courses; at least six must be in economics at the graduate level), and satisfactory performance on a comprehensive examination in economic theory is required.

REQUIRED COURSES	UNITS
ECON 417	Statistics for Economists 4
ECON 500	Microeconomic Analysis
	and Policy, or
ECON 503	Microeconomic Theory I 4
ECON 501	Macroeconomic Analysis
	and Policy, or
ECON 505	Macroeconomic Theory I 4
ECON 511	Econometric Methods, 4-4
	or
ECON 513	Practice of Econometrics 4

Not more than 4 units may be ECON 590; 590 units cannot be counted as part of the required minimum of graduate level courses specified above.

## Master of Arts in Economic Developmental Programming

This degree program is designed to provide advanced training in the basic tools of development programming and their application to practical problems of developing countries. The program is structured to enable well-prepared students entering in May to finish the following summer. Requirements include the following courses in economics:

REQUIRED COURSES UN		ITS
ECON 401	Mathematical Methods in	
	Economics	4
ECON 500	Microeconomic Analysis	
	and Policy, or	
ECON 503	Microeconomic Theory I	4

ECON 501	Macroeconomic Analysis	
	and Policy, or	
ECON 505	Macroeconomic Theory I	4
ECON 502	Mathematical Methods in	
	Dynamic Economics, or	
ECON 607	Topics in Dynamic	
	Optimization, or	
ECON 615	Applied Econometrics	4
ECON 511	Econometric Methods	4
ECON 513	Practice of Econometrics	4
ECON 523	Economic History and	
	Development, or	
ECON 537	Contracts, Organizations,	
	and Institutions, or	
ECON 541	Economic Development,	
	or	
ECON 634	Political Economy of	
	Institutions, or	
ECON 644	Economic Development	
	Programming and Policy	
	Planning	4
ECON 650	International Trade Theory,	
	or	
ECON 651	International Monetary	
	Theory	4
ECON 590	Directed Research, or	
ECON 692	Seminar in Economic	
	Development 2-	8

In addition, a total of three courses in one of several designated options in economics, international relations, law, urban planning and development, demography, or business administration is required. In certain cases units can be granted for internship work. The total unit requirements are 32-48, including a comprehensive examination or a thesis.

For a detailed description of the program and its requirements see *Master of Arts in Economic Developmental Programming*, available from the Department of Economics faculty advisor.

#### Master of Science in Mathematical Finance

The objective of this master of science program is to produce graduates with a rigorous foundation in the economic theory and mathematical modeling of financial markets. The program creates an integrated curriculum spanning four disciplines: economics, mathematics, econometrics/statistics and computational/numerical analysis. The program is designed for recent graduates in the fields of applied mathematics, physics and engineering — or for graduates in economics, business and finance with strong mathematical backgrounds - who wish to pursue hightech finance careers in financial institutions, industry or government. The program should also be attractive to gifted undergraduates who are able to complete a combined B.A./ M.S. degree with specialization in financial mathematics in five years.

#### Admission Requirements

Refer to the Requirements for Graduation section (page 81) and the Graduate School section of this catalogue for general regulations (page 91). All applicants must take the GRE General Test. Complete transcripts of undergraduate and any graduate level courses are required, as well as a statement of purpose and three recommendation letters. A substantial undergraduate background in mathematics is required, which should include one semester of real analysis or advanced calculus, one semester of linear algebra and one semester of advanced probability/statistics. Candidates with weaker backgrounds may be required to take mathematics classes prior to admission to the program. An undergraduate knowledge of microeconomics and of macroeconomics, and partial differential equations is helpful, although it is not required for admission. Some experience in Matlab and C/C++ programming is also useful.

### Foreign Language Requirement

FINANCIAL ECONOMICS AND ECONOMETRICS

There is no foreign language requirement.

#### Course Requirements

Thirty units of course work are required. Students are required to complete a final project integrating material from all the courses. The program consists of:

UNITS

3

ECON 659	Economics of Financial	4
C	Markets I	4
two courses from:		
ECON 613	Economic and Financial	
	Time Series I	4
ECON 614	Economic and Financial	
	Time Series II	4
ECON 652	Economics of Financial	
	Markets II	4
THEORY OF STOCHASTI	C PROCESSES	UNITS
		0
MATH 503	Stochastic Calculus for	
MATH 503	Stochastic Calculus for Finance	3
		3
one course from:		3
one course from: MATH 505b	Finance	
one course from: MATH 505b MATH 506	Finance Applied Probability	3
MATH 503 one course from: MATH 505b MATH 506 MATH 509	Finance Applied Probability Stochastic Processes	3

STATISTICS (CHOOSE ONE)		
ECON 614	Economic and Financial	
	Time Series II	4
MATH 508	Filtering Theory	3
MATH 512	Financial Informatics and	l
	Simulation	3
MATH 541ab	Introduction to	
	Mathematical Statistics	3-3
MATH 542L	Analysis of Variance and	
	Design	3
MATH 543L	Nonparametric	
	Statistics	3
MATH 547	Methods of Statistical	

Inference

MATH 650	Seminar in Statistical	
	Consulting	3
PM 511abL	Data Analysis	3
PM 544L	Multivariate Analysis	3
NUMERICAL/OPTIM	IZATION METHODS (CHOOSE ON	E)
MATH 458	Numerical Methods	3
MATH 501	Numerical Analysis and	
	Computation	3
MATH 502ab	Numerical Analysis	3-3
MATH 504ab	Numerical Solution of	
	Ordinary and Partial	
	Differential Equations	3-3
MATH 585	Mathematical Theory of	
	Optimal Control	3
PM 520L	Advanced Statistical	
	Computing	3

## COMPUTATIONAL AND EMPIRICAL FINANCE (CHOOSE TWO)

ECON 695	Internship in Mathematica	ıl
	Finance	4
FBE 535	Applied Finance in Fixed	
	Income Securities	3
FBE 554	Trading and Exchanges	3
FBE 555	Investment Analysis and	
	Portfolio Management	3
FBE 559	Management of Financial	
	Risk	3
FBE 589	Mortgages and Mortgage-	
	Backed Securities and	
	Markets	3
FBE 599	Special Topics	1-3
MATH 512	Financial Informatics and	
	Simulation (Computer Lal	os
	and Practitioner Seminar)	3
MATH 590	Directed Research 1	-12

The courses in statistics/numerical/ optimization methods and computational and empircal finance are considered electives and have to be approved for each student by the program advisors. Other electives might be approved by the advisors.

#### Juris Doctor/Master of Arts in Economics

Students are required to complete 90 units of law and economics course work, four units of which must constitute a thesis acceptable to the faculties of the USC Gould School of Law and the Department of Economics. Before enrolling in economics courses, students must have completed an undergraduate course in probability and statistical inference (e.g., BUAD 310). Students with undergraduate degrees in such disciplines as business, economics, mathematics and psychology will usually have taken such a course as part of their undergraduate program.

First Year: Required Law School courses.

SECOND AND THIRD YEARS:		JNITS
ECON 500	Microeconomic Analysis	
ECON 511	and Policy Econometric Methods, or	4
ECON 513	Practice of Econometrics	4

Two Additional Graduate Level Courses in Economics (eight units): ECON 680 Industrial Organization and ECON 681 Economics of Regulated Industries are recommended, but the student is free to choose any graduate level courses other than ECON 590 or 790 in consultation with the program advisor. ECON 401 Mathematical Models in Economics may be substituted for one of these courses, and ECON 417 Statistics for Economics or ECON 414 Introduction to Econometrics may be substituted for the other. (These three courses are applicable toward graduate credit.)

Four Units of Thesis: The thesis must be acceptable to both the faculty of the Law School and the faculty of the Department of Economics.

Thirty-nine Units of Law Courses: including one course in a subject matter related to economics (including but not necessarily limited to Taxation, International Business Transactions, Natural Resources Law, Antitrust Law I, Antitrust Law II, Regulated Industries, Labor Law, Administrative Process, Taxation of Corporations or Land Use Seminar and Land Finance Seminar). In addition to the LSAT, students interested in this dual degree program are required to take the aptitude and advanced economic portions of the Graduate Record Examinations (GRE).

## Dual Master of Arts in Economics and Master of Planning

The School of Policy, Planning, and Development and the Department of Economics jointly offer a two-year program leading to the M.Pl. and M.A. degrees. Applicants must apply to the School of Policy, Planning, and Development and the Graduate School and meet the admission requirements of both.

#### Requirements

Requirements for completion of the dual degree program are 56 units, including 24 units in economics and 32 units in planning, as follows:

ECONOMICS		UNITS
ECON 500	Microeconomic	
	Analysis and Policy	4
ECON 501	Macroeconomic	
	Analysis and Policy	4
ECON 513	The Practice of	
	Econometrics	4
ECON 594abz	Master's Thesis	2-2-0
Electives	Economics	8

POLICY, PLANNING, AND DEVELOPMENT UNI		UNITS
PPD 500	Cross-Sectoral	
	Governance	4
PPD 524	Planning Theory	2
PPD 526	Comparative Internati	onal
	Development	2
PPD 527	The Social Context	
	of Planning	2
PPD 529	Legal Environment	
	of Planning	2

Note: 2-unit courses may be offered in seven-and-a-half week blocks.

*Laboratory/Workshops:* PPD 531L (4, 4) or PPD 532L (4, 4) to total eight units.

*Electives:* 14 units of electives taken within the School of Policy, Planning, and Development.

Thesis: A thesis is required on a subject interrelating economics and urban planning and development. Students must register in a minimum of four units of ECON 594abz (2-2-0) and maintain continuous registration until completion of the thesis.

Dual degree students, like all other M.Pl. students, must take a comprehensive examination and fulfill the internship requirement.

During the summer after the first year of graduate study, the student normally serves an internship in a planning organization. The student must complete a thesis acceptable to both faculties.

#### **Doctor of Philosophy in Economics**

The Ph.D. in Economics requires 60 units of graduate level courses numbered 500 or higher (excluding ECON 500, ECON 501, ECON 590, ECON 690, ECON 691, ECON 692, ECON 693, ECON 694, ECON 790 and ECON 794).

REQUIRED COURSES	UNITS

The following cou	irses must be taken within th	ne
first 36 units of gra	aduate level courses:	
ECON 503	Microeconomic Theory I	4
ECON 505	Macroeconomic Theory I	4
ECON 511	Econometric Methods	4
ECON 514	Probability and Statistics	
	for Economists	4
ECON 603	Microeconomic Theory II	4
ECON 605	Macroeconomic Theory II	4

ADDITIONAL REQUIR	ED UNITS	UNITS
A minimum of 6	units selected from the	
following:		
ECON 690	Seminar in Economic	
	Theory	2-8
ECON 691	Seminar in Econometric	s 2-8
ECON 692	Seminar in Economic	
	Development	2-8
ECON 693	Seminar in Applied	
	Economics and Public	
	Policy	2-8
ECON 694	Seminar in Dynamic	
	Economics	2-8

# A minimum of 4 units of ECON 794abcdz Doctoral Dissertation 2-12

Students must take a core theory examination immediately after the completion of ECON 503, ECON 505, ECON 603 and ECON 605 in order to continue in the Ph.D. program. There is also a breadth requirement which may be satisfied by taking either ECON 523 Economic History and Development or ECON 527 Classical Economic Theory and Its Critics or ECON 538 Values and Social Analysis.

After passing the core theory examination, the student should consult the director of graduate studies on the appointment of a Ph.D. guidance committee. The student should complete two advanced fields of study with the approval of the guidance committee and the director of graduate studies. The requirements for completing each advanced field of study consist of (1) at least two courses numbered 600 or higher in that field with a minimum grade of A- in each, (2) satisfactory completion of one of the seminars related to the field and (3) presentation of a research paper in a class or seminar. In addition, the student should complete a minor field which consists of a course numbered 600 or higher with a minimum grade of B. The signing of the student's Permission to Take the Qualifying Examination form will signify the satisfactory completion of the field requirements.

The remainder of the courses to total 60 units must be preapproved by the guidance committee. However, not more than four units of ECON 590 and/or 790 can be taken in each semester. Courses taken outside the department or USC cannot count toward the completion of a field and are not allowed before at least one advanced field is completed. Waivers to the course requirements based on equivalent work at another university may be made upon petition to the director of graduate studies up to a maximum of 12 units. Waivers for any other reason require the approval of the department graduate committee.

Grade Point Average Requirements

In addition to the Graduate School requirements, a minimum GPA of 3.0 on all course work taken toward the 60 units requirement must be achieved. ECON 615 or a higher level course in econometrics must be completed with a grade of B or better.

#### Screening Procedure

Students desiring the Ph.D. must undergo a screening procedure before completing more than 24 units of graduate level courses. The process involves a review of the student's course grades, performance on the core theory examination, and demonstrated research ability. Students who pass the screening procedure are permitted to continue studies toward the Ph.D. degree.

#### Core Theory Examination

Before beginning the third semester of graduate study, the student must pass a written examination in general economic theory including applications. A maximum of two attempts is allowed. Not taking the examination at a given due time is considered as failing the examination once. The core theory examination is offered twice every year during the summer session. Any exceptions are subject to approval of the director of graduate studies.

#### Empirical Research Paper

During the summer after the fourth semester of study, the student must submit an empirical paper using quantitative methods to the examination committee. The paper may use field, experimental or simulated data. In this paper, the student should demonstrate competence in using a computer programming language and software.

#### Research Paper

During the summer after the sixth semester of study, the student must submit a research paper to a committee of faculty. The paper must be of publishable quality.

#### Seminar Requirements

Every student is required to take and satisfactorily complete three, two-unit research seminars chosen from ECON 690, ECON 691, ECON 692, ECON 693 and ECON 694. The same seminar may be taken more than once. Before completing the dissertation, the student must present at least one original research paper in a seminar of the student's choice.

#### Dissertation Proposal Preparation

The student is required to write a research proposal on a topic suitable for a dissertation. Normally, the chair of the student's guidance committee directs this work. The written proposal is presented and critiqued during the qualifying examination.

#### Qualifying Examination

Upon successful completion of course and grade requirements, the paper requirement, and the core theory examination, the student takes an examination, which focuses on the presentation and defense of the written dissertation proposal. After passing this examination, the student is admitted to candidacy for the Ph.D. degree. This examination must be taken not later than the end of the seventh semester of study.

#### Doctoral Dissertation

After admission to candidacy, the student forms a dissertation committee composed of three faculty members, one of whom must be from an outside department. The chair of this committee is the dissertation supervisor. The student must register in sequence for ECON 794abcdz Doctoral Dissertation each semester, excluding summer sessions, until the dissertation and all other degree requirements are completed.

The dissertation is defended in an oral examination administered by the dissertation committee when the committee agrees that the student has completed the research and a satisfactory draft of the dissertation has been written. If the committee agrees to pass the student, all suggested extensions, modifications, and corrections are incorporated into a final draft which must be approved by all members of the committee.

It is the student's responsibility to see that the proper paperwork is submitted to the Graduate School upon completion of each requirement for the Ph.D. degree.

#### Doctor of Philosophy in Pharmaceutical Economics and Policy

The Department of Economics and the Department of Pharmaceutical Economics and Policy (School of Pharmacy) jointly offer a program of study leading to the Ph.D. degree and to the M.A. degree in the process of work toward the Ph.D. degree. Applicants must apply to the Graduate School and meet the admissions requirements of both academic units.

Required courses include both core requirements and area requirements. Core requirements include courses in economic theory, econometrics, and research methods. Area requirements include courses in health economics, pharmaceutical economics, welfare theory and applied econometrics.

For a detailed description of this program, see the School of Pharmacy section of this catalogue, page 771.

# Doctor of Philosophy in Political Economy and Public Policy

The Department of Economics, the Department of Political Science and the School of International Relations jointly offer a program of study leading to the Ph.D. degree and to the M.A. degree in the process of work toward the Ph.D. degree. Applicants must apply to the Graduate School and meet the admission requirements of all three academic units.

Required courses include both core requirements and area requirements. Core requirements include courses in economic theory and history of economic theory; history of political thought; scope, methodology and research methods; and political economy and public policy. Area requirements include courses selected from the following three areas of concentration: comparative and developmental political economy; politics, economics and the policy process; and international political economics. There is no computer programming requirement for this degree.

For a detailed description of this program, see the Political Economy and Public Policy section of this catalogue, page 392.

### Courses of Instruction

#### **ECONOMICS (ECON)**

The terms indicated are *expected* but are not *guaranteed*. For the courses offered during any given term, consult the *Schedule of Classes*.

#### 203 Principles of Microeconomics (4, FaSp)

Behavior of firms and consumers, functions of the price system, competition and monopoly, labor markets, poverty, government regulation, international trade, and the environment.

#### 205 Principles of Macroeconomics (4, FaSp)

Unemployment, inflation and output determination and links. Effects of government taxation and spending on growth, investment, saving, consumption, and trade.

#### 238xg Political Economy and Social Issues

(4, Fa) Contending politico-economic perspectives in modern Western thought: conservatism, liberalism, radicalism, and their relevance for contemporary policy issues including government and markets, class, race, gender, poverty and inequality. Not available for major credit to economics majors. *Concurrent enrollment:* WRIT 140.

#### 303 Intermediate Microeconomic Theory

**(4, FaSp)** Decision-making by business firms, consumer preferences and behavior, uncertainty, competition, monopoly, labor and resource markets, efficient resource allocation, externalities, and government policy. *Prerequisite:* ECON 203; MATH 118x or MATH 125; *corequisite:* ECON 205.

#### 305 Intermediate Macroeconomic Theory

**(4, FaSp)** The determinants of aggregate income, employment, and inflation; economic fluctuations; fiscal and monetary policy; financial markets; the national debt. *Prerequisite*: ECON 203 and ECON 205; MATH 118x or MATH 125.

**317** Introduction to Statistics for Economists (4, FaSp) Introduction to statistical methods appropriate for analyzing economic data: probability theory, random variables and probability distributions, sampling, estimation, statistical inference. *Prerequisite:* MATH 118x or MATH 125.

#### 330 The Political Economy of Institutions

**(4)** Social functions served by the rules, laws, regulations, and customs that constrain human activity. Processes whereby such institutions adapt, or fail to adapt, to changing circumstances. *Prerequisite:* ECON 203.

**332** Contracts, Organizations and Institutions (4) Contract law and economic organization, determinants of firm boundaries, transaction cost economics, agency theory, incomplete contracting, business strategy, bureaucracy, institutional environment, politics and property rights. *Prerequisite*: ECON 203.

#### 336 The Political Economy of Values (4)

Psychological foundations of human values and preferences. The role of values in organizational success, social order, and economic development. The political economy of shaping, reshaping, protecting, and destroying values. *Prerequisite:* ECON 203.

- 338 Political Economy and Social Issues
- **(4, 5p)** Contending politico-economic perspectives in modern Western thought and culture; absolutist, liberal, democratic, Marxist, anarchist, and other traditions, topics and issues. (Duplicates credit in former ECON 121x.) *Prerequisite:* ECON 205.
- 340 Economics of Less Developed Countries
- **(4)** Causes of economic underdevelopment: historical, institutional, structural, ideological, technological, cultural. Patterns and theories of development. Role of government, international trade, and education in economic growth. *Prerequisite*: ECON 203 or ECON 205.
- **342** Economic Development of the Middle East (4) Historical and comparative analysis of economies of Middle Eastern countries: institutions, resources, trade, finance, income distribution, population, migration. *Prerequisite*: ECON 203 or ECON 205.
- 343 Economic Development of East Asia (4)

Contemporary economic problems of East Asian countries: management, labor, technology, trade, investment. Determinants of their high growth rates in the late 20th century. *Prerequisite:* ECON 203 or ECON 205.

- **348** Current Problems of the American Economy (4, Fa) A comprehensive investigation of problems stemming from changing composition of the work force, urban decline, new technologies, inequalities, ethnic relations, government deficits. Prospects for continued growth. *Prerequisite*: ECON 203 or ECON 205.
- **350** The World Economy (4, SpSm) International cooperation and conflict in the world economy. Global economic problems of growth and development, trade and finance, migration, economic stability, and the environment. *Prerequisite:* ECON 203 or ECON 205.
- **357 Money, Credit, and Banking (4)** The money, bond, stock, and other financial markets; portfolio choice; determinants of asset prices and interest rates; inflation; interactions between financial markets and government policies. *Prerequisite*: ECON 203 and ECON 205.
- **360 Public Finance (4)** Role of the government; income and corporate taxation; direct versus indirect taxation; optimal tax structure; public goods; public sector pricing; public debt and macroeconomic stability. *Prerequisite*: ECON 203 and ECON 205.
- **366 Urban Economics (4)** Urban trends and problems, including changing urban form and function, urban public finance, housing, renewal, poverty, race, transportation, and the environment. *Prerequisite:* ECON 203 and ECON 205.

- 387x Economics for Natural Resources and the Environment (4, FaSp) (Enroll in ENST 387x)
- **390 Special Problems (1-4)** Supervised, individual studies. No more than one registration permitted. Enrollment by petition only.
- **395 Economic Policy Issues (4)** Selected policy dilemmas, including welfare reform, urban renewal, government budget deficits, regulation and deregulation, environmental problems, immigration, and global development. Lectures by leading authorities and weekly discussion sessions. *Prerequisite:* ECON 203 and ECON 205 and departmental approval.
- **401 Mathematical Methods in Economics (4, Fa)** Introduction to quantitative methods for analyzing economic equilibria; comparative statics and dynamics. Utility theory, consumer behavior, and profit maximization.

Model formulation in micro and macroeconomics. *Prerequisite:* ECON 303.

- **404 Games and Economics (4)** Analysis of strategic economic interactions. Topics include bargaining, insurance, patents, voting, environmental depletion, strategic trade, learning, reputation, strikes, corporate takeovers, and the provision of public goods. *Prerequisite:* ECON 303.
- 414 Introduction to Econometrics (4, FaSp)

Application of statistical methods to economic data: estimating economic relationships using regression analysis, testing hypotheses involving economic behavior, forecasting economic variables. *Prerequisite*: ECON 317.

- **417 Statistics for Economists (4)** Introduction to mathematical statistics, including random variable, families of distributions, sampling, maximum likelihood and other methods of estimation, statistical inference. *Prerequisite:* ECON 317; ECON 401 or MATH 226.
- **419 Forecasting (4)** Trends, time-series models, low-cost forecasting methods, regression models, evaluation and combination of forecasts. Applications in business and economics. *Prerequisite:* ECON 317; *corequisite:* ECON 417.
- **426 History of Economic Thought (4)** Major contributions to economics from Adam Smith to the present, notably classical economics and its 19th century critics, neo-classical economics and its 20th century critics. (Duplicates credit in former ECON 326.) *Prerequisite:* ECON 303 or ECON 305.

**434 Economic Analysis of Law (4)** Common law and property; rationing of justice, resource allocation between prevention and enforcement; division of decision making between public and private sectors. *Prerequisite*: ECON 303.

#### 446 Comparative Economic Systems (4)

Comparative analysis of the theory and practice of classic and contemporary economic systems; capitalism, Marxism, socialism, fascism, communism. Market and planning systems in selected countries. (Duplicates credit in former ECON 346.) *Prerequisite:* ECON 303 or ECON 305.

- **450** International Trade **(4)** Determinants and economic consequences of international trade patterns; effects of trade restrictions and trading blocs; trade negotiations and arrangements. *Prerequisite:* ECON 303.
- **451** The Politics of International Trade **(4)** (Enroll in IR 430.)
- **452** International Finance **(4)** Consequences of trade deficits; theories of capital and currency markets, exchange rate regimes, and international monetary coordination. *Prerequisite*: ECON 305.
- **457 Financial Markets (4)** General equilibrium analysis of economies with financial markets; decision making under uncertainty; methods of risk reduction; portfolio theory and valuation of securities; efficiency of security markets. *Prerequisite*: ECON 303.
- **471 Economics of Labor Markets and Human Capital (4)** A human capital interpretation of labor demand and supply; wage determination, differentials, and discrimination; job turnover and occupational mobility; unions and collective bargaining. *Prerequisite*: ECON 303.
- **472** Economics of Medical Care (4) Health as an investment in human capital; analysis of the demand for and supply of health services and manpower; health insurance; cost-effectiveness analysis; market structures and the pricing of medical services. *Prerequisite*: ECON 303.
- **473x Population Economics (4)** Socioeconomic causes and effects of changes in fertility, migration and mortality; sex roles, labor force patterns, economic development, marriage, divorce, population policy. Not available for graduate credit. *Prerequisite:* ECON 303.

- 480 Economics of Industrial Organization
- **(4)** Pricing and resource allocation in imperfectly competitive markets; monopoly regulation, collusion, cartels, mergers and antitrust; patents and development incentives; industry case studies. *Prerequisite*: ECON 303.
- **481 Economics of Mass Communications Industries (4)** Industrial organization of the mass communications industries; concentration, regulation, and economic efficiency in print, film, and electronic broadcast media. *Prerequisite*: ECON 303.
- **487 Resource and Environmental Economics (4)** Management and extraction of renewable and non-renewable natural resources; environmental externalities and regulation of air, water, and land pollution; market incentives versus direct regulation. *Prerequisite:* ECON 303.
- **490x Directed Research (2-8, max 8, FaSpSm)** Supervised individual research. Not available for graduate credit. Requires departmental approval.
- **495 Honors Thesis (4)** Individual research supervised by a faculty advisor. Successful completion required for departmental honors degree.
- **499** Special Topics (2-4, max 8, FaSpSm) Selected topics in economic theory, history, or policy.
- **500** Microeconomic Analysis and Policy **(4, Fa)** Theories of the household and the firm; product and factor markets; perfect and imperfect competition; welfare criteria. *Prerequisite:* ECON 303 and ECON 305; *corequisite:* ECON 401.
- **501** Macroeconomic Analysis and Policy **(4, 5p)** Theories of aggregate economic activity; design and use of macroeconometric models; stabilization and control of inflation, unemployment, and growth. *Prerequisite:* ECON 303, ECON 305, and ECON 401.
- **502 Mathematical Methods in Dynamic Economics (4, SpSm)** Movement of economic systems over time; differential and difference equations; introduction to the optimal control of economic processes; dynamic programming and optimal strategies; selected applications. *Prerequisite:* ECON 401.
- **503 Microeconomic Theory I (4, Fa)** Optimization of the consumer and the firm; duality and imputed value; perfect and imperfect competition in product and factor markets. *Prerequisite:* ECON 401; *recommended preparation:* ECON 500.

- **505 Macroeconomic Theory I (4, Fa)** Aggregate demand, supply and government policy; theories of economic growth and business cycles; static and dynamic implications of government policies. *Prerequisite:* ECON 401; *recommended preparation:* ECON 501, ECON 502.
- **511 Econometric Methods (4, Sp)** Review of statistical methods of estimation and inference, linear regression with multicollinearity and serial correlation; multivariate regression and simultaneous equations.
- **513 Practice of Econometrics (4)** Application of econometric tools using standard econometric software packages for microcomputers; empirical applications to selected economic problems of estimation and inference. *Prerequisite:* ECON 401 or departmental approval.
- **514** Probability and Statistics for Economists **(4, Fa)** Introduction to probability theory and statistical inference to prepare students for graduate courses in econometrics and economic theory; probability, random variables, distributions, estimation, testing, asymptotics. *Prerequisite*: ECON 417, MATH 226.
- **523** Economic History and Development (4) Historical trends in developed and developing societies in various aspects of modernization such as human resources, capital, technology, resource allocation, income distribution, international relations. *Prerequisite:* ECON 303 or departmental approval.
- **527** Classical Economic Theory and Its Critics (4) Classical economic theory; its precursors, main contributors, extensions, and critics; focus upon the writings and ideas of Smith, Say, Malthus, Ricardo, Mill, and Marx. *Prerequisite:* ECON 303 and ECON 305 or departmental approval.
- **537** Contracts, Organizations, and Institutions (4) Information, property rights, bargaining, transaction costs, incentives, freeriding and contracting in organizations; the nature of cooperation; bureaucracies. *Prerequisite*: ECON 303 or departmental approval.
- **538 Values and Social Analysis (4)** Factors that make values an essential feature of human society; how values develop, change, and are abandoned; role of values in economic development. *Prerequisite:* ECON 303 or departmental approval.
- **539 Political Economy (4)** (Enroll in PEPP 539)

- **541 Economic Development (4)** Development, underdevelopment and the problems thereof; agriculture, industry, trade, population, human capital, capital formation; structural, technological, environmental and institutional changes; political economy of the state. *Prerequisite:* ECON 303 and ECON 305 or departmental approval.
- 546 Comparative Economic Systems I (4) Comparative review and critique of major theories of economic organization (capitalism versus collectivism), recent literature, criteria, and programs of national economic planning; control and reform. *Prerequisite:* ECON 303 and ECON 305 or departmental approval.
- **587** Advanced Natural Resource and Environmental Economics (4, Irregular) Covers the application of microeconomic theory to the management of natural resources, pollution, and environmental hazards. *Prerequisite*: ECON 487, ECON 500 or departmental approval.
- **590 Directed Research (1-12, FaSpSm)** Research leading to the master's degree. Maximum units which may be applied to the degree to be determined by the department. Graded CR/NC.
- **594abz Master's Thesis (2-2-0, FaSpSm)** Credit on acceptance of thesis. Graded IP/CR/NC.
- **599** Special Topics (2-4, max 8, FaSpSm) Selected topics in economics as developed by the instructor. *Prerequisite:* departmental approval.
- **600 Economics of Choice (4)** Reviews the normative and positive theories of choice drawing upon recent theoretical and empirical work in cognitive and evolutionary psychology, artificial intelligence, linguistics and economics. *Prerequisite:* ECON 500.
- **603 Microeconomic Theory II (4, Sp)** General equilibrium theory; existence, uniqueness, and stability; welfare economics; social choice; dynamic models and uncertainty; special topics. *Prerequisite*: ECON 503.
- **604 Game Theory (4)** Strategies and equilibrium concepts; dynamic and repeated games; incomplete information and learning in games. *Prerequisite:* ECON 500 or ECON 503.
- **605 Macroeconomic Theory II (4, Sp)** Macroeconomic theory based on the concepts of optimal growth and intertemporal equilibrium; overlapping generations models; recent developments in macroeconomic theory. *Prerequisite:* ECON 503 and ECON 505.

**606 Complex Economic Dynamics (4)** Stability and instability, cycles, chaotic fluctuations, and evolving structure in economic processes. *Prerequisite:* ECON 502.

#### 607 Topics in Dynamic Optimization (4)

Theory and numerical methods for dynamic optimization and control; selected applications in economic analysis and econometrics. *Prerequisite*: ECON 502 and knowledge of FORTRAN.

#### 609 Adaptive, Evolutionary Economics (4)

Partial information, imperfect decisionmaking, incomplete coordination of production and exchange; adaptation to economic experience; evolution of market and government institutions. *Prerequisite*: ECON 503 and ECON 505 or departmental approval.

**612 Econometric Theory (4)** Inference and prediction, generalized and restricted least square, specification analysis, multivariate and seemingly unrelated regressions, simultaneous equations techniques, dynamic models, instrumental variable estimation. *Prerequisite:* ECON 511.

#### 613 Economic and Financial Time Series I

**(4, Fa)** Simultaneous equation models, dynamic structural econometric models, vector autoregressions, causality, forecasting, univariate and multivariate nonstationary time series, tests for unit roots, cointegration, autoregressive conditional heteroscedasticity models, time series models with changes in regime. *Prerequisite:* ECON 511.

# **614** Economic and Financial Time Series II **(4, Sp)** Stock returns, predictability and volatility, random walk and variance-bounds tests, estimation of capital asset, multifactor, and derivative pricing models, term structure of interest rates. *Prerequisite:* ECON 511.

**615 Applied Econometrics (4, Fa)** Use of quantitative models to describe and forecast economic activity; estimation and application of such models to selected policy problems. *Prerequisite:* ECON 511.

**616 Experimental Economics (4)** Laboratory methods for testing economic theory; experimental comparison of alternative market and non-market institutions; identification of behavioral responses to alternative regulations. *Prerequisite:* ECON 500 or ECON 503.

**633** Law and Economics (4, Sp) ( $Enroll\ in\ LAW\ 633$ )

#### 634 Political Economy of Institutions (4)

The functions of laws, rules, customs, conventions, and other restrictions on economic and social activity. Theories of institutional evolution. (Duplicates credit in former ECON 534.) *Prerequisite:* ECON 500 or ECON 503.

**639** Contemporary Economic Policy: Theory and Practice **(4)** History and analysis of the fundamental continuing policy issues: recession, inflation, public debt, regulation, international competition, energy resources and environmental issues, welfare and income distribution. *Prerequisite*: ECON 500 and ECON 501 or departmental approval.

**644** Economic Development Programming and Policy Planning (4) Model construction and application to policy and planning: open economy macroeconomics, trade and investment, institutions, technology, income inequality, environment, policy reforms, political economy. *Prerequisite:* ECON 501 or ECON 505; ECON 500 or ECON 503.

**650** International Trade Theory (4) General equilibrium theory applied to theory and practice of commercial policy, economic growth, and trade. *Prerequisite:* ECON 500 or ECON 503.

**651** International Monetary Theory (4) Balance of payments concepts and measures; price theory and the foreign exchange market; international monetary systems; adjustment mechanisms; speculation and official intervention. *Prerequisite:* ECON 500 or ECON 503 and ECON 501 or ECON 505.

## **652 Economics of Financial Markets II (4, Sp)** Financial market equilibrium and partial

Financial market equilibrium and partial equilibrium asset pricing in discrete and continuous time; properties of equilibria with and without complete markets; theory of option prices; Black-Scholes pricing formula; term structure of interest rates; hedging strategies and managing market risk using options, futures and swaps; hedging exchange-rates risks. (Duplicates credit in former ECON 700.) *Prerequisite:* ECON 503.

#### 653 Empirical International Economics (4)

Empirical treatment of advanced topics in international finance including the determination of real and nominal exchange rates; stabilization policies in developing currencies and currency crisis models. Econometric methods in analyzing foreign exchange data and in forecasting. *Prerequisite:* ECON 501, ECON 513; recommended preparation: ECON 625, ECON 651.

#### 657 Monetary Theory and Policy I (4)

Money-credit creation; money demand; monetary aspects of general equilibrium and disequilibrium; conceptual problems of money and exchange. *Prerequisite*: ECON 500 or ECON 503 and ECON 501 or ECON 505.

#### 659 Economics of Financial Markets I (4, Fa)

Equilibrium model of finance economy; absence of arbitrage; complete and incomplete markets; asset pricing theory; representative agent pricing. Capital Asset Pricing Model, martingale property of security prices. *Prerequisite:* ECON 503.

**660 Public Finance (4)** Externalities; welfare economics of government supply of services; incidence and effects of taxes; program budgeting; benefit-cost analysis; debt. *Prerequisite:* ECON 500 or ECON 503, and ECON 501 or ECON 505.

#### 671 Economics of Labor and Human Capital

**(4)** A human capital interpretation of labor demand and supply; wage determination, differentials, and discrimination; job turnover and occupational mobility; unions and collective bargaining. *Prerequisite:* ECON 500 or ECON 503.

**672** Economics of Medical Care (4) Medical care as an investment in human capital; analysis of the demand for and supply of health services and labor; health insurance; cost-effectiveness analysis; market structures and the pricing of medical services. *Prerequisite*: ECON 500.

**680** Industrial Organization (4) Decision making, economic behavior and organization in firms; types of competition and market structure; property rights, nonprofit decision making. *Prerequisite*: ECON 500 or ECON 503.

#### 681 Economics of Regulated Industries (4)

Theories and methods of government regulation; effects of regulation on various industries; behavior of regulatory agencies. *Prerequisite*: ECON 500 or ECON 503.

#### 688 Empirical Industrial Organization (4, Sp)

Econometric analysis of industrial organization issues including industry regulation and deregulation, collusions and pricing in differentiated oligopolistic markets, entry and exit, auction mechanisms, contractual relationships. *Prerequisite:* ECON 503, ECON 511; recommended preparation: ECON 600, ECON 603, ECON 612, ECON 615, ECON 680.

**690** Seminar in Economic Theory (2, max 8, FaSp) Current research in economic theory presented by faculty, students and outside scholars. Graded CR/NC. *Prerequisite*: departmental approval.

#### 691 Seminar in Econometrics (2, max 8,

**FaSp)** Current research in econometrics presented by faculty, students and outside scholars. Graded CR/NC. *Prerequisite*: departmental approval.

# **692** Seminar in Economic Development (2, max 8, FaSp) Current research in international, regional, and urban development economics presented by faculty, students and outside scholars. Graded CR/NC. *Prerequisite*: departmental approval.

# **693** Seminar in Applied Economics and Public Policy (2, max 8, FaSp) Current research in applied microeconomics, macroeconomics and public policy presented by faculty, students and outside scholars. Graded CR/NC. *Prerequisite:* departmental approval.

#### 694 Seminar in Dynamic Economics

(2, max 8, FaSp) Topics in dynamic economics involving business fluctuations, economic growth and development, micro-economic adjustments and market mechanisms; related quantitative and qualitative methods; empirical research involving economic change.

Graded CR/NC.

# **695** Internship in Mathematical Finance **(4, 5m)** Internship for students in the Mathematical Finance master's program. Practical training in real market environments. Realworld first-hand experience in implementing trading strategies. Application of mathemati-

cal finance to real financial markets.

#### 715 Advanced Topics in Econometrics (4)

Time-series methods; aggregation; structural models and methods such as factor analysis and multiple indicator models; various special topics. *Prerequisite*: ECON 612 and ECON 613.

**790 Research (1-12, FaSpSm)** Research leading to the doctorate. Maximum units which may be applied to the degree to be determined by the department. Graded CR/NC.

**794abcdz Doctoral Dissertation (2-2-2-0, FaSpSm)** Credit on acceptance of dissertation. Graded IP/CR/NC.

## **English**

Taper Hall of Humanities 404 (213) 740-2808 Email: ayala@college.usc.edu www.usc.edu/dept/LAS/english

Chair: Joseph A. Boone, Ph.D.

#### Faculty

Aerol Arnold Chair in English: James R. Kincaid, Ph.D.\*

Leo S. Bing Chair in English and American Literature: Paul Alkon, Ph.D.

Leo S. Bing Chair in English and American Literature and University Professor: Leo B. Braudy, Ph.D.

Florence R. Scott Professorship in English: Tania Modleski, Ph.D.

USC Associates' Chair in Humanities: John Carlos Rowe, Ph.D.

Professors: Joseph A. Boone, Ph.D.; T. Coraghessan Boyle, Ph.D.; Joseph A. Dane, Ph.D.; Percival Everett, A.M.; Lawrence D. Green, Ph.D.; Judith Halberstam, Ph.D.; Carla Kaplan, Ph.D.; David C. Lloyd, Ph.D.; Carol Muske-Dukes, M.F.A.\*; David Román, Ph.D.\*; Hilary M. Schor, Ph.D.; Bruce R. Smith, Ph.D.; David St. John, M.F.A.; Daniel Tiffany, Ph.D.

Associate Professors: Robert J. Dilligan, Ph.D.; Judith Jackson Fossett, Ph.D.\*; Alice Gambrell, Ph.D.\*; Thomas Gustafson, Ph.D.\*; William R. Handley, Ph.D.; Heather James, Ph.D.\*; Anthony Kemp, Ph.D.; Susan McCabe, Ph.D.; Teresa McKenna, Ph.D.; Fred Moten, Ph.D.; Viet Nguyen, Ph.D.\*; David Rollo, Ph.D.\*; Margaret Russett, Ph.D.

Assistant Professors: Emily Anderson, Ph.D.; Aimee Bender, M.F.A.; Mark Irwin, Ph.D.; Rebecca Lemon, Ph.D.; Cynthia Young, Ph.D. Scholar in Residence: Marjorie Perloff, Ph.D.

Emeritus Leo S. Bing Professor: Jay Martin, Ph.D.

*Emeritus Bruce R. McElderry Professor:* W. Ross Winterowd, Ph.D.

Emeritus Professors: Charles B. Berryman, Ph.D.; Allan Casson, Ph.D.\*; Donald C. Freeman, Ph.D.; Ronald Gottesman, Ph.D.; Charles Metzger, Ph.D.; Max F. Schulz, Ph.D.; Virginia J. Tufte, Ph.D.\*

Emeritus Associate Professors: William H. Brown, Ph.D.; David Eggenschwiler, Ph.D.; Stephen C. Moore, Ph.D.

\*Recipient of university-wide or college teaching award.

## Undergraduate Degrees

#### **Undergraduate Programs**

With nearly 40 full-time faculty, the Department of English offers courses a broad range of courses in English, American and Anglophone literature of all periods and genres, but also in related areas such as creative and expository writing, literature and visual arts, ethnic literature and cultural studies, the history of the English language and of literary criticism, and literary and cultural theory. Class sizes are kept at 25 to enable full discussion (16 in creative writing workshops),

and faculty are available for advisement. Instructors assign extensive reading and writing in order to help students become perceptive readers, critical thinkers and strong writers – skills that are their own lasting rewards and that also help prepare students for several areas of graduate study and for a number of professional and creative pursuits.

#### Advisement

All students are assigned a faculty advisor with whom they should meet once a semester before registering for courses. Together with the director of undergraduate studies and the department's undergraduate staff advisor, who students should consult about such matters as departmental clearances and course substitutions, faculty advisors help students shape their major according to their evolving interests and the major's requirements.

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# Major Requirements for the Bachelor of Arts in English

Undergraduate majors in English are required to take 10 courses (for a total of 40 units) for a B.A. in English or for a B.A. in English with an emphasis in Creative Writing. The major requirements are flexible enough to allow an in-depth exploration in any field of literary or cultural study - such as American or British literature, Renaissance or African American literature - while providing historical breadth. The creative writing emphasis has several of the same requirements as the B.A. in English, in addition to which students will enroll in at least three, but no more than four, beginning, intermediate or advanced workshops in both poetry and fiction.

All majors must take three introductory survey courses, including at least two among the survey sequence ENGL 261, ENGL 262 and ENGL 263. One of the courses may be a 100-300 level course that introduces students to a particular genre or to the study of literature generally. Students should take at least two introductory courses before enrolling in upper-division electives or creative writing workshops.

In addition to three introductory courses, seven upper-division courses are required. For the B.A. in English, those seven courses must include two courses in literature written before 1800, one course in 19th century literature and one course in American literature. For the B.A. in English with an emphasis in creative writing, students must take at least three, but no more than four, creative writing workshops, with at least one in poetry and at least one in fiction. The remaining three or four upper-division courses must include at least one in literature written before 1900 and one in literature written after 1900.

#### Requirements for a Minor in English

The Department of English offers a minor in English that requires 28 units, or seven courses, including at least two introductory courses (among ENGL 261, ENGL 262 and ENGL 263) and at least four upper-division courses. Among upper-division courses, one must be in literature written before 1800 and one in American literature. An English minor may enroll in no more than two creative writing workshops.

#### **Double Majors**

The department strongly encourages majoring in both English and in another department in the College of Letters, Arts and Sciences or in another school of the university.

#### **English Honors Program**

Candidates for the B.A. in English can receive a designation on their transcripts of departmental honors by successfully completing a program of three course: ENGL 395, ENGL 495 and the writing of a senior honors thesis (ENGL 491 or ENGL 496), only two of which may count toward the 40 units required for the major. Admission to the program is granted by the director in the fall semester of a student's junior year and requires a minimum GPA of 3.0 overall and 3.5 in English courses. Students are advised that if they wish to study overseas, they should plan to do so before starting the honors program and will need to make arrangements to apply for the program if they are overseas in the fall semester of the junior year. For additional information, contact a departmental advisor or the director of undergraduate studies.

#### **Teaching Credential Requirements**

Credential requirements in California and elsewhere are complex and changeable. Students interested in preparing for public school teaching should contact the Credentials Office, Rossier School of Education (or refer to page 508), and the undergraduate advisor in the English department for up-to-date information. The English department usually offers courses that satisfy most, if not all, of these requirements.

## Graduate Degrees

#### **Admission Requirements**

Requirements for admission to study in the department of English include: scores satisfactory to the department in both the verbal and quantitative General Test and the literature Subject Test of the Graduate Record Examinations; evidence of competence in writing English and interpreting English literature, as demonstrated by two samples of written work by the applicant on literary subjects; a satisfactory written statement by the applicant of aims and interests in graduate work; letters of recommendation from at least three college instructors (English instructors preferred); and grades satisfactory to the department earned by the applicant at other institutions.

#### **Degree Requirements**

These degrees are under the jurisdiction of the Graduate School. Refer to the Graduate School section of this catalogue (page 91) for general regulations. All courses applied toward the degrees must be courses accepted by the Graduate School.

#### Master of Arts in English

The department does not accept applicants for a Master of Arts degree. All graduate work in English at USC is taken as part of a Ph.D. program, and the M.A. in English is intended only as a transitional degree in the process of completing requirements for the Ph.D.

A student admitted to the graduate program may choose later to earn a terminal M.A. degree, or may be invited by the department to attempt a terminal degree. The terminal M.A. in English may be earned by completing 30 units (normally eight courses) of graduate study in English or in other departments at USC (as approved by the graduate director) with an accumulated GPA of at least 3.0, and by passing a comprehensive examination designed by the graduate studies committee for each student at the end of his or her last semester. A maximum of four units of 590 Directed Research and four transfer units may count toward the 30 units minimum required for the M.A. degree.

#### Doctor of Philosophy in English

Students may earn the Ph.D. in English by successfully completing requirements in the English and American Literature track.

#### **English and American Literature**

This track prepares students for research and teaching in all areas of English and American literary studies. The program offers the study of texts in their historical and cultural contexts as well as theoretical, interdisciplinary and cross-cultural approaches to literature.

Graduate Curriculum and Unit Requirements
The graduate curriculum is divided into
500-level foundation courses and 600-level
advanced courses. The 500-level courses
offer fundamental work in theory; in rhetoric,
linguistics and literature (RLL); and in the
history of British and American literatures
and cultures. The 600-level courses feature
advanced studies in theory and RLL, core
requirements in film and literature, interdisciplinary studies, transhistorical studies in
genres and sub-genres, individual writers,
gender studies, multi-cultural literatures and
societies, and special topics. Although students will normally take 500-level courses

leading up to the screening procedure (see Screening Procedure) and 600-level courses thereafter, students, after consultation with their advisors, may be permitted to take 600-level courses in the first semesters of their graduate training.

Occasionally students who lack adequate undergraduate training in any given area may be required by the graduate director to enroll in appropriate 400-level courses.

The student's course work must total at least 64 units. No more than 8 units of 794 Doctoral Dissertation and no more than four units of 790 Research may count toward the 64 units. A maximum of 12 transfer units, approved by the graduate director, is allowed toward the 64 units minimum required by the Ph.D. (see Transfer of Credit).

#### Advisement

The student will be assigned a faculty mentor in his or her first semester in the graduate program and will be encouraged in subsequent semesters to begin putting together an informal guidance committee. The makeup of the guidance committee may change as the interests of the student change. The faculty mentor and informal guidance committee will assist the student in planning a program of study appropriate to the student's interests leading to the Screening procedure.

#### Screening Procedure

At the end of the student's fourth semester (second semester for students who enter with an M.A. degree or near equivalent), the student will sit for a departmental examination, which is part of a comprehensive screening procedure. Rarely, and only with the approval of the graduate director and the graduate committee, will a student be allowed to postpone the departmental examination and the screening procedure, and then only for one year. Prior to the screening procedure, the student will be allowed to take a maximum of four units of independent study (ENGL 590), and that independent study will normally be used to prepare for the departmental examination; all other units must be in the 500- or (when appropriate) 600-level seminar.

#### Guidance Committee

Immediately following successful completion of the screening procedure, the student will nominate formally a five-member guidance committee, including a chair and three other members from the English Department who are in the student's areas of interest and on outside member from another Ph.D.-granting department. The committee must be in place and approved by the Graduate School at the time the student chooses a dissertation topic, writes the dissertation prospectus and schedules a qualifying examination.

#### Qualifying Examination

Following completion of course work, the student must sit for a qualifying examination, at a time mutually agreed upon by the student and the guidance committee. This is a field examination given in the subject of the student's proposed dissertation research. No less than one month before the qualifying examination, the student will submit to the guidance committee a dissertation prospectus. The prospectus, it is understood, will not be a polished dissertation proposal, but at a minimum it should display a strong knowledge of the subject, much of the relevant secondary material and other contexts crucial to the writing of the dissertation, and should present a workable plan of attack as well as a reasonably sophisticated understanding of the theoretical assumptions involved in the subject.

The qualifying examination will consist of both written and oral portions. It will focus on the dissertation area and its contexts with the specific format and content of the examination being negotiated among the student and all members of the examination committee. Upon successful completion of the qualifying examination, the student proceeds to the writing of the doctoral dissertation.

#### Dissertation

The final stage of the program is the submission of a dissertation that makes an original and substantial contribution to its field of study. Dissertations being written in the department are now richly varied, and this diversity is encouraged.

#### Foreign Language

Ph.D. students are required to demonstrate proficiency in at least one foreign language. This may be demonstrated by completing a course in the literature of that language at the 400 or 500 level (with a grade of B [3.0] or better), or by passing a foreign language exam that tests proficiency in reading comprehension and translation. Ph.D. students may also be required to demonstrate proficiency in additional languages, as determined by the guidance committee in view of the student's proposed field of research.

# Doctor of Philosophy in Literature and Creative Writing

The program provides dual emphasis in literature and creative writing, culminating in the dissertation, which combines critical analysis with creative originality. Roughly half of the dissertation is based on original research, that is to say, research contributing to knowledge which enriches or changes the field. Doctoral candidates not only read and write texts as finished products of scholarship in researching their creative work's literary and historical milieu, but also consider the text as writers

create it, then compose texts as writers, a process that goes to the source of the study of literature and of literature itself. This integration of literature and creative writing is reflected in the structure of the dissertation, which introduces the creative work within a context of critical inquiry, bringing together the examination and embodiment of the literary act, a new model of scholarship and creative innovation.

Ph.D. candidates in Literature and Creative Writing must pass the same departmental screening examination taken by Ph.D. candidates in Literature who are not working in the area of creative writing. The exam tests students in various areas of emphasis (British literature, American literature, poetry, prose, etc.) and literature and historical periods as a measure of their preparedness to undertake independent research.

The Literature and Creative Writing student takes 64 units in all, 32 in literature, 24 in creative writing workshops and seminars and 8 units of dissertation studies credits.

#### Admission Requirements

Requirements for admission to study in the department of English include: scores satisfactory to the department in both the verbal and quantitative General Test and the literature Subject Test of the Graduate Record Examinations; evidence of experience and ability in creative writing, as demonstrated by a creative writing sample; evidence of competence in writing English and interpreting English literature, as demonstrated by a sample of written work by the applicant on literary subjects; a satisfactory written statement by the applicant of aims and interests in graduate work; letters of recommendation from at least three college instructors; and grades satisfactory to the department earned by the applicant at other institutions. This program will accept applicants with B.A. degrees or transfer students with an M.A. or M.F.A. in Creative Writing.

#### Degree Requirements

These degrees are under the jurisdiction of the Graduate School. Refer to the Graduate School section of this catalogue (page 91) for general regulations. All courses applied toward the degrees must be courses accepted by the Graduate School.

Graduate Curriculum and Unit Requirements
The graduate curriculum is divided into
500-level foundation courses and 600-level
advanced courses. The 500-level courses
offer fundamental work in theory and in the
history of British and American literatures
and cultures. The 600-level courses feature
advanced studies in theory, creative writing
seminars and workshops and special topics.

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Although students will normally take 500-level courses leading up to the screening procedure (see Screening Procedure) and 600-level courses thereafter, students after consultation with their advisors may be permitted to take 600-level courses in the first semester of their graduate training.

The student's course work must total at least 64 units. No more than eight units of 794 Doctoral Dissertation and no more than four units of 790 Research may count toward the 64 units. A maximum of 12 transfer units, approved by the graduate director, is allowed toward the 64 units minimum required by the Ph.D. (see Transfer of Course Work, page 80).

#### **Advisement**

The student will be assigned a faculty mentor in his or her first semester in the graduate program and will be encouraged in subsequent semesters to begin putting together an informal guidance committee. The makeup of the guidance committee may change as the interests of the student change. The faculty mentor and informal guidance committee will assist the student in planning a program of study appropriate to the student's interests leading to the screening procedure.

#### Screening Procedure

At the end of the student's fourth semester (second semester for students who enter with an M.A. or M.F.A. degree or near equivalent), the student will sit for a departmental examination, which is part of a comprehensive screening procedure. Rarely, and only with the approval of the graduate director and the graduate committee, will a student be allowed to postpone the departmental examination and the screening procedure, and then only for one year. Prior to the screening procedure, the student will be allowed to take a maximum of four units of independent study (ENGL 590), and that independent study will normally be used to prepare for the departmental examination; all other units must be in the 500- or 600-level seminar.

#### Guidance Committee

Immediately following successful completion of the screening procedure, the student will nominate formally a five-member guidance committee, including a chair and three other members from the English Department who are in the student's areas of interest and an outside member from another Ph.D.-granting department.

The committee must be in place and approved by the Graduate School at the time the student chooses a dissertation topic, writes the dissertation prospectus and schedules a qualifying examination.

#### Qualifying Examination

Following completion of course work, the student must sit for a qualifying examination, at a time mutually agreed upon by the student and the guidance committee.

This is a field examination given in the subject of the student's proposed dissertation research. No less than one month before the qualifying examination, the student will submit to the guidance committee a dissertation prospectus. The prospectus, it is understood, will not be a polished dissertation proposal, but at a minimum it should display a strong knowledge of the subject, much of the relevant secondary material and other contexts crucial to the writing of the dissertation, and should present a workable plan of attack as well as a reasonably sophisticated understanding of the theoretical assumptions involved in the subject.

The qualifying examination will consist of both written and oral portions with special emphasis areas in creative writing. It will focus on the dissertation area and its contexts with the specific format and content of the examination being negotiated among the student and all members of the examination committee. Upon successful completion of the qualifying examination the student proceeds to the writing of the doctoral dissertation.

#### Dissertation

The final stage of the program is the submission of a creative dissertation that makes an original, substantial and publishable contribution to creative literature: a book of poems, a novel, a collection of short stories.

#### Foreign Language

Ph.D. students are required to demonstrate proficiency in at least one foreign language. This may be demonstrated by completing a course in the literature of that language at the 400 or 500 level (with a grade of B [3.0] or better) or by passing a foreign language exam that tests proficiency in reading comprehension and translation. Ph.D. students may also be required to demonstrate proficiency in additional languages, as determined by the guidance committee in view of the student's proposed field of research.

#### **Common Requirements**

Transfer of Credit

A Transfer Credit Statement is prepared by the Degree Progress Department for students admitted to full graduate standing. The application of any available transfer credit is contingent on successful completion of the screening exam and is determined by the director of graduate studies no later than the end of the second year according to the following guidelines: credit will only be allowed for courses (1) from accredited graduate schools; (2) of grade B (3.0 on a four-point scale) or better; (3) constituting a fair and reasonable equivalent to current USC course work at the graduate level and fitting into the program for the degree; and (4) approved by the Graduate School. Graduate transfer credit will not be granted for life experience, credit by examination, non-credit extension courses, correspondence courses or thesis course supervision.

The maximum number of transfer credits which may be applied toward the Master of Arts degree is four units. The maximum number of transfer credits which may be applied toward the Ph.D. degree is 12 units. The Graduate School stipulates that transfer units must have been completed within 10 years of admission for the doctoral program to be applied toward the degree.

#### Experience in Teaching

This requirement may be fulfilled by two to four years' service as a teaching assistant in the Writing Program or equivalent experience as determined by the director of the Graduate Studies Program.

#### Graduate Activity and Support

The English Department is committed to the development of its graduate students as professionals. To this end, the department provides a number of opportunities for professional activity. In addition, the Association of English Graduate Students (A.E.G.S.) hosts a variety of lectures, discussions and forums throughout the year. To support the student's professional activities outside of USC, the department also provides some funding for travel to conferences and professional meetings, along with a full range of placement, advising and support activities. Graduate creative writing students will host lectures, discussions and forums in poetry and fiction studies.

#### Courses of Instruction

#### **ENGLISH (ENGL)**

The terms indicated are *expected* but are not *guaranteed*. For the courses offered during any given term, consult the *Schedule of Classes*.

**261** English Literature to 1800 (4, FaSpSm) Intensive reading of major writers to 1800.

**262** English Literature since **1800 (4, FaSpSm)** Intensive reading of major writers, 1800-1950.

**263 American Literature (4, FaSpSm)** Intensive reading of representative writers.

**285**m African American Popular Culture (4, Sp) (Enroll in AMST 285m)

**303** Introduction to Fiction Writing (4, FaSp) Introduction to the techniques and practice of writing prose fiction.

**304** Introduction to Poetry Writing (4, FaSp) Introduction to the techniques and practice of writing poetry.

**350** Literature of California (4) Novels, stories, essays, poems, and plays written in and about California from the Gold Rush to the present.

**375 Science Fiction (4, Irregular)** Investigation of the scope and possibilities of British and American science fiction as a genre, with some attention to its historical development.

**390** Special Problems (1-4, FaSp) Supervised, individual studies. No more than one registration permitted. Enrollment by petition only.

#### 392 Visual and Popular Culture (4, FaSp)

Course in the theory and practices of "popular culture," highlighting modern and contemporary culture, film, video and popular music, as well as narrative forms.

**395** Junior Honors Seminar (4, Sp) Selected subjects; offered in spring only and restricted to honors students.

**400** Advanced Expository Writing (2-4, Fa) Intensive practice intended to develop a high level of competence in writing expository prose.

#### 401 The Rhetoric of Written Composition (4)

Theories of rhetoric as they apply to written composition, with emphasis upon pedagogical applications. The course is designed for but not limited to prospective teachers of English.

**405 Fiction Writing (4, max 8, FaSp)** A practical course in composition of prose fiction. *Prerequisite:* ENGL 303.

**406 Poetry Writing (4, max 8, FaSp)** A practical course in poetry writing. *Prerequisite:* ENGL 304.

**407 Advanced Fiction Writing (4, max 8, FaSp)** *Prerequisite:* ENGL 405 and/or departmental approval.

**408** Advanced Poetry Writing (4, max 8, FaSp) *Prerequisite*: ENGL 406 and/or departmental approval.

**409** The English Language **(4)** Instruction in the major grammatical systems of the English language, with particular emphasis on their relevance to language activities in the elementary classroom.

**410 History and Grammar of Modern English (4, Irregular)** History and grammar of modern English as described by current linguistics; comparison with traditional grammar; application of grammar to stylistic analysis.

#### 412 Analysis of Written Persuasion

**(4, Irregular)** Persuasive discourse, including structure, intention, and figurative language; analysis of texts in various humanistic, scientific, and socio-scientific disciplines.

**420** English Literature of the Middle Ages (1100-1500) (4, Irregular) Selected studies in major figures, genres, and themes of Middle English literature to Malory, with special emphasis on Chaucer. *Prerequisite:* ENGL 261.

#### 421 English Literature of the 16th Century

**(4)** Selected studies in the non-dramatic literature of Renaissance England, with emphasis on Sidney, Spenser, and Shakespeare. *Prerequisite:* ENGL 261.

422 English Literature of the 17th Century

**(4)** Selected studies of prose and poetry in the age of Bacon, Donne, Jonson, Herbert, Browne, Marvell, and Milton. *Prerequisite:* ENGL 261.

**423** English Literature of the 18th Century (1660-1780) (4) Selected studies in poetry, prose, and fiction of such writers as Defoe, Dryden, Fielding, Richardson, Pope, Swift, and Johnson. *Prerequisite:* ENGL 261.

**424** English Literature of the Romantic Age (1780-1832) (4) Selected studies in major writers, including Blake, Austen, Wordsworth, Coleridge, Byron, Mary Shelley, P.B. Shelley, and Keats. *Prerequisite:* ENGL 262.

**425** English Literature of the Victorian Age (1832-1890) (4) Selected studies in the prose and poetry of such figures as Tennyson, Dickens, the Brontes, the Brownings, Hopkins, Arnold, Ruskin, and Newman. *Prerequisite:* ENGL 262.

426 Modern English Literature (1890-1945)

**(4)** Studies in English literary modernism, including the prose of Conrad, Joyce, and Woolf and the poetry of Pound, Eliot, Yeats, and Auden. *Prerequisite:* ENGL 262.

**430 Shakespeare (4, FaSp)** Major history plays, comedies, and tragedies.

440 American Literature to 1865 (4, FaSp)

American poetry and prose to the Civil War with special attention to Irving, Cooper, Poe, Hawthorne, Emerson, Thoreau, Melville, and Whitman. *Corequisite:* ENGL 263.

**441 American Literature, 1865 to 1920 (4, FaSp)** American poetry and prose with

special attention to Twain, James, Dickinson, Henry Adams, Crane, and Dreiser. *Corequisite:* ENGL 263.

**442** American Literature, 1920 to the Present (4, FaSp) American poetry, fiction, and drama since World War I with special attention to Eliot, Frost, Hemingway, Fitzgerald, O'Neill, Stevens, Faulkner, and Nabokov. *Corequisite:* ENGL 263.

**445m The Literatures of America: Cross- Cultural Perspectives (4)** Introduction to African-American, Chicano, Asian-American, and Native-American literatures — and to the literary diversity of American cultures.

446 African-American Poetry and Drama (4)

Survey of black poetry and plays in America from the Emancipation to the present, with special emphasis on the new poets and dramatists of the current "Black revolution."

**447m African-American Narrative (4)** Development of the novel in African-American literature beginning with the anti-slavery fiction of William W. Brown and his pre-Emancipation contemporaries and concluding with the emerging novelists of the late sixties.

#### 448m Chicano and Latino Literature (4)

Development of the poetry, essay, short story, and novel of the Chicano and Latino peoples of the United States, with particular emphasis on the differentiating characteristics between the multiple cultures that constitute the Latino populations.

English 299

- **449m Asian-American Literature (4, Irregular)** Survey of Asian-American literature from the earliest time to the present; development of prose, poetry, and novel.
- **451** Periods and Genres in American Literature (4, max 8, Irregular) A concentrated reading and criticism of the works of one period or one genre of American literature; for example, colonial literature, the American Renaissance, American poetry, American drama.
- **452 Modern Poetry (4)** Study of poetry written in English from 1900 to 1945, with special emphasis on American modernists of the first two decades. *Recommended preparation:* ENGL 262, ENGL 263.
- **454** Aesthetic Philosophy and Theory **(4)** (Enroll in COLT 454)
- **455 Contemporary Prose (4)** Study of prose written in English since 1945, principally fiction of the past two decades.
- **456 Contemporary Poetry (4)** Study of poetry written in English since 1945, with special emphasis on the last two decades.
- **461** English Drama to 1800 (4, Irregular) Representative plays, especially those of the Elizabethan, Jacobean, and Restoration periods. *Corequisite*: ENGL 261.
- **462** British and American Drama 1800-1950 (*4*, Irregular) Representative plays of England, Ireland, and the United States, especially those written after 1890. *Corequisite:* ENGL 262.
- **463 Contemporary Drama (4)** Selected British, Irish, and American drama from the post World War II period (1945 to the present).
- **465** The English Novel to 1800 (4) Theory and practice of fiction in works of writers such as Defoe, Richardson, Fielding, Sterne, Burney, and Smollett. *Corequisite:* ENGL 261.
- 466 The 19th Century English Novel (4)

Theory and practice of fiction in works of major writers such as Austen, Dickens, Thackeray, George Eliot, Meredith, and Hardy. *Corequisite*: ENGL 262.

- **467** The Modern Novel (4, Irregular) Studies of the narrative experiments and innovations in fiction following the realist novel; emphasis on gender, empire and class and the pluralities of "modernisms."
- **469** Women in English Literature before **1800 (4)** English poetry, plays, novels, and discursive prose by and about women from 1375 to 1800.

- **470** Women in English and American Literature after 1800 (4) Women as writers and as subjects, with special emphasis on feminist and liberationist traditions and on changing female images after 1800.
- **471 Literary Genres and Film (4, Irregular)** Literary studies in the relationship between fiction and drama and their adaptation as films.
- **472** Literature and Related Arts (4, Irregular) An examination of how literature and related arts intersect in a particular cultural milieu. Selected topics.
- **473** Literature and Society (4) Theoretical and applied studies of literature in English as social activity and cultural production; its expression of, and influence upon, social values, concepts, and behavior.
- 474m Literature, Nationality and Otherness
- (4) English literature written about or in the British colonies and their post-colonial nations, including African, Asian, Pacific, and American countries. Emphasis on texts by other than British and United States authors. Completion of general education literature requirement highly recommended.
- **475** Politics and the Novel (4) (Enroll in COLT 475)
- **476m Images of Women in Contemporary Culture (4)** Representations of women and gender relations in contemporary literature and mass culture, using the tools of feminist, literary, and political theory.
- **478m Sexual/Textual Diversity (4)** Questions of gay and lesbian identity, expression and experience in a variety of literary and cultural forms; emphasis on sexual politics, equality and difference.
- **479 History of Literary Criticism (4)** Philosophies of literary criticism from Plato to the end of the 19th century; the relationship between literary criticism and its contemporary literature.
- **480 Modern Literary Criticism: Theory and Practice (4)** Analysis of philosophies and methods of modern schools of criticism; writing critical essays.
- **481 Narrative Forms in Literature and Film (4)** Critical approaches to narrative form in literature and film; readings and films from several genres and periods, emphasis on gender, ethnic, and cultural studies.
- **490x Directed Research (2-8, max 8, FaSp)** Individual research and readings. Not available for graduate credit. *Prerequisite:* departmental approval.

- **491 Senior Seminar in Literary Studies (4)** Selected problems in literary history and criticism.
- **495** Senior Honors Seminar (4, Fa) Advanced seminar involving extensive reading, research, and discussions. Selected subjects; offered in Fall only and restricted to Honors students.
- **496** Senior Honors Thesis (4, Sp) Seminar in workshop form to accompany completion of Senior Honors Thesis. Bi-weekly meetings to complete thesis according to contract. *Prerequisite:* ENGL 395, ENGL 495.
- **499** Special Topics (2-4, max 8, FaSp) Studies in the works of one or more authors, or in the development of a theme or genre.
- **501** History of Literary and Cultural Theory **(4)** The assumptions and practices of major theorists and theoretical schools from Plato to literary modernism.
- **502** Contemporary Literary and Cultural Theory **(4)** The assumptions and practices of major post-modern theorists and theoretical schools.
- **503** Theories of History, Ideology and Politics **(4)** The principal ways in which history, ideology, and politics have informed the study of literary and cultural discourse.
- **504** Theories of Race, Class, and Gender (4) The principal methods and assumptions by which race, class, and gender have been studied in reference to literary and cultural discourse.
- **505** Rhetoric to **1700 (4)** The cultural history of rhetoric (theories, practices, teaching) from the early Greeks through the beginnings of rationalism.
- **506** Rhetoric and Composition, 1700 to the **Present (4)** The cultural history of rhetoric and composition (theories, practices, teaching) from the beginnings of rationalism to the present.
- **507 Rhetoric and Language (4)** Examination of critical and linguistic theories; may include the changing structures of English discourse, cognitive poetics, and discourse analysis.
- **510** Medieval English Literatures and Cultures (4, max 12) Investigations of chivalry and romance, allegory, drama, popular literature in the Middle Ages, the reception of medieval literature, and other topics.
- **520** Renaissance English Literatures and Cultures (4, max 12) Studies in poetry and patronage, the popular tradition in literature and drama, the social and sexual dynamics of comedy, historical and cultural uses of genres, among other topics.

- **530** Restoration and 18th Century British Literatures and Cultures (4, max 12) Studies in prose, poetry, drama, and culture of the period 1660-1800.
- **540 19th Century British Literatures and Cultures (4, max 12)** Studies in the Romantics and Victorians, gender and genre, the new woman and the novel, authorship and the marketplace, science, imperialism, the crisis of narrative, and other topics.
- **550 20th Century British Literatures and Cultures (4, max 12)** Studies in literary modernism, critical scrutiny and moral seriousness, poetry and politics, the Irish revival, and other topics.
- **560** Early American Literatures and Cultures (4, max 12) Studies in the literature of discovery, exploration and conquest, the Puritan migration, literary genres in Colonial America, history and myth of American origins, and other topics.
- **563** Poetry and Prose Into Drama (4, Fa) (Enroll in THTR 501)
- **570 18th Century American Literatures** and Cultures (4, max 12) Studies in the rhetoric, literature, and language of the prerevolutionary and revolutionary periods, narrative and polemical writing, the American Enlightenment, and other topics.
- **580 19th Century American Literatures** and Cultures (4, max 12) Studies in canonic and non-canonic literature in the American Renaissance, cultural nationalism, the consequences of race, immigration, expansion, urbanization, science, and the marketplace, and other topics.
- **590 Directed Research (1-12)** Research leading to the master's degree. Maximum units which may be applied to the degree to be determined by the department. Graded CR/NC.
- **591 20th Century American Literatures and Cultures (4, max 12)** Studies in rural and urban fictions, modernism, the shift from imagism and symbolism to confessional poetry, recovered writers, hemispheric traditions, literature and kindred arts, and other topics.

- **592** Contemporary British and American Literatures and Cultures (4, max 12) Studies in contemporary women and ethnic writers, "extra-literary" forms (journalism, autobiography), the theatre of the absurd, post-modern fabulations, and other modes and issues since World War II.
- **595** Literary Studies Across Cultures (4, max 12) Studies in Empire and Commonwealth literatures, post-colonialism, American hemispheric connections, African-American literary discourse, Asian-American writers, dialects and the folk, and other topics.
- **599** Special Topics (2-4, max 8) Thematic, theoretical, or experimental studies in British and American literatures and cultures. (Duplicates credit in former ENGL 699.)
- **605** The History of Rhetoric (4, max 12) Studies in European and American rhetoric and their contexts.
- **606** Rhetoric and the Teaching of Writing **(4, max 12)** Studies in the rhetoric of written composition, critical theory and pedagogy, and other topics.
- **610** Theory and Criticism (4, max 12) Studies in meaning and meaning-making, form, comparative theory, theories of history and culture, theory in the classroom, and other topics.
- **620** Literature and Interdisciplinary Studies **(4, max 12)** Issues and theory of studying literature in relation to history, science, politics, psychology, religion, sociology, media, the visual arts, and other disciplines.
- **630 Studies in Gender (4, max 12)** History and ideology of gender studies, feminist theory, gay and lesbian discourse, and other studies in feminisms and masculinities in relation to literature.
- **640 Individual Writers (4, max 12)** Studies in major and minor, canonic and non-canonic writers.

- 650 Multicultural Literary Studies (4, max 12) Theories of race and ethnicity, cul-
- **max 12)** Theories of race and ethnicity, cultural imperialism, discourse of power and class, literatures of the Americas, and other topics.
- **660 Studies in Genre (4, max 12)** History, transformation, and theory of genre; studies in epic, lyric, drama, comedy, tragedy, the novel, biography, essay, and other forms.
- 678 Seminar in Film Theory and Genre Specificity (4)  $(Enroll\ in\ CTCS\ 678)$
- **679** Seminar in Genre and/or Narrative Theory **(4)** (Enroll in CTCS 679)
- **695 Graduate Fiction Form and Theory (4, max 12)** Seminar. Studies in fiction form and function or critical theory. Open only to Creative Writing Ph.D. degree candidates.
- **696** Graduate Poetry Writing Workshop (4, max 12) Intensive practicum in advanced level poetry writing, intended to develop high level creative compositional ability. Open only to Creative Writing Ph.D. degree candidates.
- **697 Graduate Fiction Writing Workshop (4, max 12)** Intensive practicum in advanced level fiction writing, intended to develop high level creative compositional ability. Open only to Creative Writing Ph.D. degree candidates.
- **698** Graduate Poetry Form and Theory **(4, max 12)** Seminar. Studies in poetry form and function or critical theory. Open only to Creative Writing Ph.D. students.
- **790 Research (1-12)** Research leading to the doctorate. Maximum units which may be applied to the degree to be determined by the department. Graded CR/NC.
- **794abcdz Doctoral Dissertation (2-2-2-2-0)** Credit on acceptance of dissertation. Graded IP/CR/NC.

### **Environmental Studies**

Hancock Building 232 (213) 740-7770 FAX: 740-8566 Email: environ@rcf.usc.edu www.usc.edu/dept/LAS/enviro

Interim Director: Jane M. Cody, Ph.D., Associate Dean for Academic Programs

The Environmental Studies Program offers students a range of options for studies related to the environment. Available degree programs in Environmental Studies include a Bachelor of Arts and a Bachelor of Science, and minors in social sciences, natural sciences and environmental planning and development. A Master of Arts degree in environmental studies and a Master of Science in environmental risk analysis are also awarded.

The Bachelor of Arts program emphasizes studies in the societal aspects of environmental issues, along with a core set of courses in the basic sciences. This option emphasizes studies in the general social sciences, and includes areas of emphasis in business, geography, and public policy and management. Students can also pursue a general social sciences track.

The Bachelor of Science program contains areas of emphasis in biology, chemistry or earth sciences, together with a core set of courses in the social sciences. The three minor degree programs provide students with primary interests in other majors an opportunity to incorporate an environmental theme into their undergraduate studies.

All programs are highly interdisciplinary with faculty and courses drawn from many departments in the College of Letters, Arts and Sciences, the Marshall School of Business, School of Engineering and the School of Policy, Planning, and Development. A special effort is made to provide students with experience in dealing with actual environmental problems and policies through senior seminars, directed research projects with faculty, internships with government agencies and private corporations, the Santa Catalina Island semester and the School for Field Studies programs abroad.

The Master of Arts degree program in environmental studies is also interdisciplinary and focuses on public policy and its related facets. Those who graduate with an M.A. in environmental studies are well prepared to pursue careers in policy, planning or management in the public, private or nonprofit sector in either this country or abroad. In addition, the curriculum provides students with a foundation for acquiring a Ph.D. in environmental studies or a related field, or a law degree. Individuals who are already employed in the pollution control and remediation field will find the M.A. degree attractive as well. Upon completion of the graduate program, students will possess extensive knowledge of environmental science, environmental statistics and economics, law and regulation, policy and planning, development and economic growth, and global issues and problems.

The Master of Science degree in Environmental Risk Analysis focuses on providing advanced professional training for students with a B.S. degree in natural sciences or engineering. Students will pursue a core program

encompassing science, engineering and finance supplemented with important skills courses in risk assessment, statistics and computer modeling and simulations. Those who graduate with the M.S. degree will be well prepared to pursue professional careers in business and industry which build on their degrees in the natural sciences. This degree will produce individuals with the analytical and problem-solving skills of natural scientists combined with the necessary training in finance and management needed in the business world.

#### **Catalina Semester**

This expanded program is specifically designed for both environmental studies and biological sciences majors and for students in any field who want to minor in environmental studies. The semester is sponsored by the USC Wrigley Institute for Environmental Studies and held at USC's Philip K. Wrigley Marine Science Center on Catalina Island each fall and spring semester. The courses are taught by USC faculty and are specialized to take advantage of the unique facilities and settings of Catalina Island. Students generally enroll in 16 units.

Students will live on Catalina Island for the entire semester (with two breaks). Rates for room and board at the USC Wrigley Marine Science Center are comparable to those on campus.

For more information, students should contact their advisor or the USC Wrigley Institute Offices at Alan Hancock Foundation 232 on the University Park campus, (213) 740-6780.

## Undergraduate Degrees

## **Bachelor of Arts in Environmental Studies:** Social Sciences

R	REQUIRED CORE COURSES				
E	BISC 120L	General Biology:			
		Organismal Biology and			
		Evolution	4		
E	BISC 220L	General Biology: Cell			
		Biology and Physiology	4		
Е	BISC 315L	Introduction to			
		Ecology	4		
(	CHEM 105aLbL	General Chemistry	4-4		

ENE 201	Environmental Quality Control and Management:	
	A Global Approach	4
ENST 100	Introduction to	
	Environmental	
	Studies	4
ENST 495	Senior Seminar in	
	Environmental	
	Studies	4
GEOL 105L	Planet Earth	4

ONE ELECTIVE STAT	ONE ELECTIVE STATISTICS					
COURSE CHOSEN F	ROM:	UNITS				
ECON 317	Introduction to Statistics for Economists	4				
PSYC 274	Statistics I	4				
SOCI 314	Sociological Statistics	4				

FIVE ELECTIVE COURSES CHOSEN FROM (NO MORE THAN TWO IN A		ENE 201	Control and Management:		Internship STUDENTS MUST REGISTER FOR TWO UNITS: UNIT			
SINGLE DEPARTMENT	¯):	UNITS	D. 1000	A Global Approach	4	GEOG 397	Applied Geography	
ENST 387x	Economics for Natural Resources and the		ENST 100	Introduction to Environmental Studies	4	POSC 395	Internship Directed	
	Environment, or		ENST 495	Senior Seminar in		1 000 070	Governmental and	
ECON 487	Resource and			Environmental			Political Leadership	
	Environmental			Studies	4		Internship	
	Economics	4					•	
ENST 420	Water Quality Policy		TWO ELECTIVE CO			Darkalay of Auto	in Environmental Stu	d:
	and Regulation	4	BUSINESS CHOSEN		UNITS	Geography	in Environmental Stu	aies:
ENST 430	Air Quality Policy and		BUAD 310	Applied Business Statis	tics 4	REQUIRED CORE COL	IDCEC	UNIT
DN 1077 440	Health	4		(BUAD 310 can be				01111
ENST 440	Environmental Risk	4		used to satisfy the		BISC 120L	General Biology:	1
GEOG 255	Assessment American	4	BUAD 351	statistics requirement)			Organismal Biology and Evolution	
GEOG 255	Environmentalism	4	DUAD 331	Economic Analysis for Business Decisions	4	BISC 220L	General Biology: Cell	4
GEOG 345	Conservation of	4	IOM 425	Quality Management	4	DISC 220L	Biology and Physiology	
GEOG 545	Natural Resources	4	IOM 441	Management of Service		BISC 315L	Introduction to	
GEOG 350	Race and	•	10.01	Operations	4	DISCOUSE	Ecology	4
020000	Environmentalism	4	MOR 421	Social and Ethical		CHEM 105aLbL	General Chemistry	4-4
GEOG 360	Environmental Disaster			Issues in Business	4	ENST 100	Introduction to	
GEOG 477	Water Resources	4					Environmental	
IR 323	Politics of Global		ONE ELECTIVE STA				Studies	4
	Environment	4	COURSE CHOSEN I	ROM:	UNITS	ENST 495	Senior Seminar in	
IR 422	Ecological Security		ECON 317	Introduction to			Environmental	
	and Global Politics	4		Statistics for			Studies	4
POSC 347	Environmental Law	4		Economists	4	GEOG 281L	Environmental	
POSC 436	Environmental Politics	4	PSYC 274	Statistics I	4		Geographic	
SWMS 415	Ecofeminism	4	SOCI 314	Sociological Statistics	4		Information Systems	4
			TWO ELECTIVE CO	URSES CHOSEN		GEOG 365L	Fundamentals of	
Internship			FROM (NO MORE			GEOG 101	Weather and Climate	4
-	SISTER FOR TWO UNITS:	UNITS	SINGLE DEPARTME		UNITS	GEOG 392	Geographical Analysis	4
GEOG 397	Applied Geography		ENST 387x	Economics for Natural	·	GEOG 393 GEOL 105L	Field Techniques Planet Earth	4
GEOG 397	Internship	2	ENST 30/X	Resources and the		GEOL 103L	I latict Earth	-
POSC 395	Directed	_		Environment, or		AND TWO OF THE FO	LLOWING FOUR COURSES:	UNIT
	Governmental and		ECON 487	Resource and		GEOG 350	Race and	
	Political Leadership			Environmental Econon	nics 4		Environmentalism	4
	Internship	2	ENST 420	Water Quality Policy		GEOG 360	Environmental	
				and Regulation	4		Disasters	4
Rachelor of Arts	in Environmental Stud	lioc.	ENST 430	Air Quality Policy and		GEOG 419	Environment	
Business	ili Elivirolillelitai Stut	nes.		Health	4		and Health	4
REQUIRED CORE COL	IDCEC	UNITS	ENST 440	Environmental Risk		GEOG 477	Water Resources	4
		UNITS	CD C C	Assessment	4			
BISC 120L	General Biology:		GEOG 255	American	4	One of the two	ptional geography cour	ses
	Organismal Biology and Evolution		CEOC 245	Environmentalism Conservation of	4		n the list of required co	
BISC 220L	General Biology: Cell	4	GEOG 345	Natural Resources	4		an additional optional e	
DISC 220L	Biology and Physiology	4	GEOG 350	Race and	4		r the following two elec	
BISC 315L	Introduction to	7	GEOG 330	Environmentalism	4	courses.		
DISC STSL	Ecology, or		GEOG 360	Environmental	7			
GEOL 105L	Planet Earth	4	020000	Disasters	4	TWO ELECTIVE COUR	SES CHOSEN	
BUAD 302	Business	•	GEOG 477	Water Resources	4	FROM (NO MORE TH	AN ONE IN A	
20112 002	Communication	4	IR 323	Politics of Global	•	SINGLE DEPARTMENT	T):	UNIT
BUAD 304	Organizational			Environment	4	ENE 201	Environmental	
	Behavior	4	IR 422	Ecological Security			Quality Control and	
BUAD 307	Marketing			and Global Politics	4		Management: A Global	
	Fundamentals	4	POSC 347	Environmental Law	4		Approach	4
BUAD 403	Legal Environment		POSC 436	Environmental Politics		ENE 400	Environmental	
	of Business	4	SWMS 415	Ecofeminism	4		Engineering Principles	3
CHEM 105aLbL	General Chemistry	4-4				ENST 387x	Economics for Natural Resources and the	
							Environment, or	
						ECON 487	Resource and Environ-	
							mental Economics	4

ENST 420	Water Quality Policy and Regulation	4	TWO ELECTIVE COUR			ENST 495	Senior Seminar in Environmental Studies	4
ENST 430	Air Quality Policy and		SINGLE DEPARTMENT		UNITS	MATH 125	Calculus I	4
ENIOTE 440	Health	4	ENE 201	Environmental		MATH 126	Calculus II, or	
ENST 440	Environmental Risk Assessment	4		Quality Control and		MATH 208x	Elementary Probability and Statistics	4
IR 323	Politics of Global	•		Management: A Global Approach	4	PHYS 135abL	Physics for the	
	Environment	4	ENE 400	Environmental	+		Life Sciences	4-4
IR 422	Ecological Security	4		Engineering Principles	3			
POSC 347	and Global Politics Environmental Law	4 4	ENST 387x	Economics for Natural		ONE COURSE FROM:	~ .	UNITS
POSC 436	Environmental Politics	4		Resources and the Environment, or		BISC 325 ENE 400	Genetics Environmental	4
SWMS 415	Ecofeminism	4	ECON 487	Resource and		ENE 400	Engineering Principles	3
I				Environmental		GEOL 105L	Planet Earth	4
Internship STUDENTS MUST REG	GISTER FOR TWO UNITS: UI	NITS	DN 10FF 420	Economics	4	GEOL 412	Oceans, Climate, and	
GEOG 397	Applied Geography		ENST 420	Water Quality Policy and Regulation	4	GEOL 460L	the Environment Geochemistry and	4
GEOG 371	Internship	2	ENST 430	Air Quality Policy and	7	GEOL 400L	Hydrogeology	4
	•			Health	4		, 0 0,	
Bachelor of Arts	in Environmental Studie	s:	ENST 440	Environmental Risk	4	FOUR ELECTIVE COUP	RSES CHOSEN	
Public Policy and			GEOG 255	Assessment American	4	FROM (NO MORE THA		
REQUIRED CORE COL	JRSES UI	VITS	GEOG 255	Environmentalism	4	SINGLE DEPARTMENT	):	UNITS
BISC 120L	General Biology:		GEOG 345	Conservation of		ENST 387x	Economics for Natural	
	Organismal Biology and Evolution	4	GEOG 350	Natural Resources Race and	4		Resources and the Environment, or	
BISC 220L	General Biology: Cell	4	GEOG 350	Environmentalism	4	ECON 487	Resource and	
	Biology and Physiology	4	GEOG 360	Environmental			Environmental	
BISC 315L	Introduction to		67.00 IFF	Disasters	4	D1 10F2 440	Economics	4
CHEM 105aLbI	Ecology General Chemistry	4 4-4	GEOG 477 IR 323	Water Resources Politics of Global	4	ENST 420	Water Quality Policy and Regulation	4
ENST 100	Introduction to		IX 323	Environment	4	ENST 430	Air Quality Policy and	7
	Environmental Studies	4	IR 422	Ecological Security			Health	4
ENST 495	Senior Seminar in	4	DOGG 247	and Global Politics	4	ENST 440	Environmental Risk	4
GEOL 105L	Environmental Studies Planet Earth	4 4	POSC 347 POSC 436	Environmental Law Environmental Politics	4 4	GEOG 255	Assessment American	4
PPD 320	Organizational Behavior	•	SWMS 415	Ecofeminism	4		Environmentalism	4
DDD 455	in Public Administration	4				GEOG 345	Conservation of	
PPD 357 PPD 402	Government and Business Management of Public and		Internship			GEOG 350	Natural Resources Race and	4
1110 402	Nonprofit Organizations	4	STUDENTS MUST REG	ISTER FOR TWO UNITS IN:	UNITS	GEOG 550	Environmentalism	4
PPD 404x	Statistics for Policy,		PPD 401	Public Policy,		GEOG 360	Environmental	
	Planning, and Development	4		Management and Planning Practices:		GEOG 370	Disasters Marine and Coastal	4
	Development	4		Internship Seminar	2	GEOG 370	Zone Geography	4
T. 1.0 E. E. E. T. 1.1. E. C. 1.1.				1		GEOG 477	Water Resources	4
TWO ELECTIVE COUR PUBLIC POLICY AND			Bachelor of Scien	nce in Environmental		IR 323	Politics of Global	4
CHOSEN FROM:	U	NITS	Studies: Biology			IR 422	Environment Ecological Security	4
PPD 220	Simulated Policymaking		REQUIRED CORE COU	RSES	UNITS		and Global Politics	4
	in Urban Systems:		BISC 120L	General Biology:		POSC 347	Environmental Law	4
PPD 313	Theory and Practice Finance of the Public	4		Organismal Biology and Evolution	4	POSC 436 SWMS 415	Environmental Politics Ecofeminism	4 4
FFD 313	Sector	4	BISC 220L	General Biology: Cell	+	5WW5 413	Ecoleminism	+
PPD 316	Human Resource			Biology and Physiology	4	ONE OF THE FOLLOW	ING MAY BE INCLUDED	
	Management for Public	4	BISC 300L	Introduction to	4		OURSES BY STUDENTS	
PPD 318	Organizations Financial Accounting	4	BISC 315L	Microbiology Introduction to	4	WHO DO NOT SELECT		UNITS
010	in Public and Nonprofit			Ecology	4	ECON 317	Introduction to	
DDD 402	Organizations	4	BISC 320L	Molecular Biology	4		Statistics for	
PPD 403	Management Analysis I	4	BISC 330L CHEM 105aLbL	Biochemistry General Chemistry	4 4-4	PSYC 274	Economists Statistics I	4 4
PPD 407	Financial Management	7	CHEM 322abL	Organic Chemistry	4-4	SOCI 314	Sociological Statistics	4
	of Public and Nonprofit		ENST 100	Introduction to			9	
PPD 473	Organizations Public Policy and Planning	4		Environmental Studies	4			
11104/3	Analysis	4						
	•							

	ence in Environmental		IR 422	Ecological Security	4	ENST 420	Water Quality Policy	4
Studies: Chemis	•		POSC 347	and Global Politics Environmental Law	4	ENIOTE 420	and Regulation Air Quality Policy	4
REQUIRED CORE COL	JRSES	UNITS	POSC 347 POSC 436		4	ENST 430	and Health	4
BISC 120L	General Biology: Organismal Biology and		SWMS 415	Environmental Politics Ecofeminism	4 4	ENST 440	Environmental Risk	4
	Evolution	4				CEOC 255	Assessment	4
BISC 220L	General Biology: Cell		ONE OF THE FOLLOW		UNITS	GEOG 255	American Environmentalism	4
	Biology and Physiology	4	INCLUDED AMONG T			GEOG 345	Conservation of	+
BISC 315L	Introduction to		ECON 317	Introduction to Statistic		GEOG 545	Natural Resources	4
OHEN LAST LAR	Ecology	4	) (   FITTI   200	for Economists	4	GEOG 350	Race and	
	General Chemistry	4-4	MATH 208x	Elementary	4		Environmentalism	4
CHEM 300L CHEM 322abL	Analytical Chemistry Organic Chemistry	4 4-4	PSYC 274	Probability and Statistic Statistics I	es 4 4	GEOG 360	Environmental Disaster	
ENST 100	Introduction to	4-4	SOCI 314	Sociological Statistics	4	GEOG 370	Marine and Coastal	
E1 <b>\</b> 31 100	Environmental Studies	4	30CI 314	Sociological Statistics	-		Zone Geography	4
ENST 495	Senior Seminar in	•				GEOG 477	Water Resources	4
	Environmental Studies	4		nce in Environmental		IR 323	Politics of Global	
MATH 125	Calculus I	4	Studies: Earth S			TD 111	Environment	4
MATH 126	Calculus II	4	REQUIRED CORE COL	JRSES	UNITS	IR 422	Ecological Security	
PHYS 135abL	Physics for the		BISC 120L	General Biology:		POSC 347	and Global Politics	4
	Life Sciences	4-4		Organismal Biology and		POSC 347 POSC 436	Environmental Law Environmental Politics	4
ONE COURSE FROM	AMONG.	UNITS		Evolution	4	SWMS 415	Ecofeminism Ecofeminism	4
			BISC 220L	General Biology: Cell		5WW5 415	Ecoleminism	7
CHEM 430a	Physical Chemistry	4	P.T.O.O. A. (#7	Biology and Physiology	4	ONE OF THE FOLLO	WING MAY BE INCLUDED	
CHEM 453	Advanced Inorganic		BISC 315L	Introduction to	4		COURSES BY STUDENTS	
ENIE 400	Chemistry	4	ENIE 400	Ecology, or	4	WHO DO NOT SELE		UNITS
ENE 400	Environmental Engineering Principles	3	ENE 400	Environmental Engineering Principles	3	ECON 317	Introduction to	
	Engineering Finicipies	3	CHEM 105aL bL	General Chemistry	4-4	ECON 317	Statistics for	
ONE COURSE FROM	AMONG:	UNITS	ENST 100	Introduction to	7-7		Economists	4
ENE 428	Air Pollution Fundamen	tals 3	21.01.100	Environmental Studies	4	PSYC 274	Statistics I	4
ENE 429	Air Pollution Control	3	ENST 495	Senior Seminar in		SOCI 314	Sociological Statistics	4
GEOL 105L	Planet Earth	4		Environmental Studies	4		<u> </u>	
GEOL 412	Oceans, Climate, and		GEOL 105L	Planet Earth	4	Da maina manata d	Can Alaa Balinan in	
	the Environment	4	GEOL 215abL	Mineralogy and		•	for the Minor in Social Sciences	
GEOL 460L	Geochemistry and			Petrology	4-4	REQUIRED CORE CO		UNITS
	Hydrogeology	4	GEOL 460L	Geochemistry and				UNITS
FOUR ELECTIVE COU	RSES CHOSEN		MATELL 105	Hydrogeology	4	ENST 100	Introduction to	4
FROM (NO MORE TH			MATH 125	Calculus I Calculus II, or	4		Environmental Studies	4
SINGLE DEPARTMENT	Γ):	UNITS	MATH 126 MATH 208x	Elementary Probability		AND TWO OF THE F	OLLOWING:	UNITS
ENST 387x	Economics for Natural		MATTI 400X	and Statistics	4	BISC 120L	General Biology:	
DI 101 00/A	Resources and the		PHYS 135abL	Physics for the		D10G 120E	Organismal Biology and	
	Environment, or		11110 100401	Life Sciences	4-4		Evolution	4
ECON 487	Resource and					BISC 315L	Introduction to	
	Environmental		TWO OF THE FOLLOW	VING FOUR COURSES:	UNITS		Ecology	4
	Economics	4	GEOL 320L	Surficial Processes		CHEM 105aL	General Chemistry	4
ENST 420	Water Quality Policy			and Stratigraphic Syster	ns 4	CHEM 105bL	General Chemistry	4
	and Regulation	4	GEOL 321L	Structural Geology		ENE 201	Environmental Quality	
ENST 430	Air Quality Policy and		oper	and Tectonics	4		Control and Manageme	
DNIOTE 440	Health	4	GEOL 412	Oceans, Climate,	4	OPOL 1051	A Global Approach	4
ENST 440	Environmental Risk	4	CEOL 440	and the Environment	4	GEOL 105L	Planet Earth	4
GEOG 255	Assessment American	4	GEOL 440	Geophysics and Geoengineering	4	ONE ELECTIVE STAT	ISTICS COURSE	
GEOG 255	Environmentalism	4		Geoengmeering	4	CHOSEN FROM:		UNITS
GEOG 345	Conservation of	7	FOUR ELECTIVE COU	RSES CHOSEN		ECON 317	Introduction to	
GLOG 515	Natural Resources	4	FROM (NO MORE TH	AN TWO IN A		EGOIVSIA	Statistics for	
GEOG 350	Race and	•	SINGLE DEPARTMENT	Γ):	UNITS		Economists	4
	Environmentalism	4	ENST 387x	Economics for Natural		GEOG 392	Geographical Analysis	4
GEOG 360	Environmental Disaster			Resources and the		PSYC 274	Statistics I	4
GEOG 370	Marine and Coastal			Environment, or		SOCI 314	Sociological Statistics	4
	Zone Geography	4	ECON 487	Resource and				
GEOG 477	Water Resources	4		Environmental				
IR 323	Politics of Global			Economics	4			
	Environment	4						

FOUR ELECTIVE SO			ONE ELECTIVE COU		UNITS	ENE 201	Environmental Quality Control and Management:	
THAN ONE IN A SIM	IGLE DEPARTMENT,		CHEM 300L	Analytical Chemistry	4		A Global Approach	4
EXCLUDING THE IN		UNITS	CHEM 322aL	Organic Chemistry	4	GEOL 105L	Planet Earth	4
ENE 400*	Environmental	2	ENE 428	Air Pollution	2	ONE METHODS CO	OURSE CHOSEN FROM: UNI	ITS
ENIOT 207	Engineering Principles Economics for Natural	3	ENIE 420	Fundamentals	3			_
ENST 387x	Resources and the		ENE 429	Air Pollution Control Oceans, Climate,	3	GEOG 281L	Environmental	
	Environment, or		GEOL 412	and the Environment	4		Geographic Information Systems	4
ECON 487	Resource and Environ-		GEOL 460L	Geochemistry and	7	PPD 404x	Statistics for Policy,	7
EGOIN 407	mental Economics	4	GEOL 400L	Hydrogeology	4	1110 4042	Planning, and	
ENST 420	Water Quality Policy	7		Trydrogeology	7		Development	4
21101 120	and Regulation	4	THREE ELECTIVE SO	CIAL SCIENCES		PPD 429	Urban Design Practicum	4
ENST 430	Air Quality Policy and		COURSES CHOSEN	FROM (NO MORE		112 .47	Croun Design Fraction	·
	Health	4	THAN ONE FROM A	SINGLE DEPARTMENT):	UNITS	TWO PLANNING A	ND DEVELOPMENT PROCESS	
ENST 440	Environmental Risk		ENST 387x	Economics for Natural		AND POLITICS COL	JRSES CHOSEN FROM: UNI	ITS
	Assessment	4		Resources and the		PPD 227	Urban Planning and	
GEOG 345	Conservation of			Environment, or			Development	4
	Natural Resources	4	ECON 487	Resource and Environ-		PPD 302	Urban Sleuths:	
GEOG 350	Race and			mental Economics	4		Exploring People and	
	Environmentalism	4	ENST 420	Water Quality Policy			Places in Cities	4
GEOG 360	Environmental			and Regulation	4	PPD 443	Sustainability Planning	4
	Disasters	4	ENST 430	Air Quality Policy and		ONE ELECTIVE COL	URSE CHOSEN FROM: UNI	ITC
GEOG 397	Applied Geography			Health	4			113
D000 404	Internship, or		ENST 440	Environmental Risk		ENE 400*	Environmental	
POSC 395	Directed Governmental		OF 00 445	Assessment	4	DN 107D 207	Engineering Principles	3
	and Political Leadership		GEOG 345	Conservation of		ENST 387x	Economics for Natural	
GEOG 477	Internship	4	CEOC 250	Natural Resources	4		Resources and the	
GEOG 477	Water Resources Politics of Global	4	GEOG 350	Race and	4	ECON 407	Environment, or	
IR 323	Environment	4	GEOG 360	Environmentalism Environmental	4	ECON 487	Resource and Environ- mental Economics	4
IR 422	Ecological Security	4	GEOG 300	Disasters	4	ENST 420	Water Quality Policy	4
110 422	and Global Politics	4	GEOG 477	Water Resources	4	ENS1 440	and Regulation	4
POSC 347	Environmental Law	4	IR 323	Politics of Global	•	ENST 430	Air Quality Policy and	
POSC 436	Environmental Politics	4	111 020	Environment	4	21101 100	Health	4
SWMS 415	Ecofeminism	4	IR 422	Ecological Security		ENST 440	Environmental Risk	·
				and Global Politics	4		Assessment	4
	r of both physics and math an	d one	POSC 347	Environmental Law	4	GEOG 345	Conservation of Natural	
semester of chemi	stry.		POSC 436	<b>Environmental Politics</b>	4		Resources	4
B	Consider Batherints		SWMS 415	Ecofeminism	4	GEOG 350	Race and	
	for the Minor in		*D '				Environmentalism	4
REQUIRED CORE CO	Natural Sciences	UNITS	semester of chemi	r of both physics and math an	a one	GEOG 360	Environmental Disasters	4
	JUKSES	UNITS	semester of chemic	Stry.		GEOG 397	Applied Geography	
ENST 100	Introduction to		Requirements	for the Minor in			Internship	4
	Environmental Studies	4		Planning and Developn	nent	GEOG 410	Urban Geography	4
THREE OF THE FOL	I OWING:	UNITS	REQUIRED COURSE	•	UNITS	GEOG 477	Water Resources	4
						IR 323	Politics of Global	
BISC 120L	General Biology:		ENST 100	Introduction to	4	ID 422	Environment	4
	Organismal Biology and		DDD 204	Environmental Studies	4	IR 422	Ecological Security and	4
BISC 315L	Evolution Introduction to	4	PPD 304	Property Rights, Governance and the		POSC 347	Global Politics Environmental Law	4
DISC 313L		4		Environment	4	POSC 347 POSC 395	Directed Governmental	4
CHEM 105aL	Ecology General Chemistry	4 4		Environment	4	1 030 373	and Political Leadership	
CHEM 105aL	General Chemistry	4	TWO COURSES CHO	OSEN FROM:	UNITS		Internship	4
ENE 400*	Environmental	7	BISC 120L	General Biology:		POSC 436	Environmental Politics	4
2112 100	Engineering Principles	3	DIOC 140H	Organismal Biology and		SWMS 415	Ecofeminism	4
GEOL 105L	Planet Earth	4		Evolution	4	511110 115		
	VAA	•	BISC 315L	Introduction to Ecology		Total units	31-3	33
			CHEM 105aL	General Chemistry	4		ar of both physics and math and on	
						*Podrings one ve	ar at both physics and math and on	

<sup>\*</sup>Requires one year of both physics and math and one semester of chemistry.

### Graduate Degrees

#### **Master of Arts in Environmental Studies**

The master's degree program in environmental studies focuses on issues and problems concerning public policy. A main goal of the graduate program is to educate students who already have a good grounding in the natural sciences about central theories, concepts and principles in public policy. A minimum of 41 units is required to receive an M.A. in environmental studies.

All students have a common point of entry into the graduate program. ENST 500 Introduction to Environmental Studies is broad and interdisciplinary. It provides students with an introduction to the field and to the different concentrations in the program. POSC 546 Seminar in Environmental Policy represents the second required core course. It offers students an overview of environmental politics, policy and regulations. Environmental science courses — ENST 501, ENST 502, ENST 503 and ENST 504 expose students to critical scientific principles, concepts and issues related to pollution control, remediation and ecology. Students must also obtain a background in statistics and economics by taking ENST 510 Statistics for Environmental Analysis (or an equivalent course in the social sciences) and ECON 487 Resource and Environmental Economics. Finally, all students must complete the capstone course, ENST 595 Graduate Seminar in Environmental Studies.

Students who enroll in the master's degree program must pursue one of three concentrations: global environmental issues and development; law, policy and management; and environmental planning and analysis. Each one differs in professional training and educational focus and, perhaps most importantly, exposes students to fields and areas of knowledge that are closely and critically connected to today's most vexing environmental policy problems.

The concentration in global environmental issues and development introduces students to the social, political and economic dynamics that underlie regional and global environmental problems and seeks to unravel the complex interrelationships between political economy, population growth and development in the Pacific Rim and elsewhere in the world.

The concentration in law, policy and management is intended for those who wish to work (or already work) in government agencies, private companies and non-profit organizations (e.g., environmental groups). Students

learn about the interconnections that exist between law, public policymaking, management (i.e., the administration of human and financial resources) and environmental issues.

The third concentration, environmental planning and analysis, is for students who wish to study technical matters related to land use planning and analysis. This concentration seeks to train students who wish to work (or who are already working) for planning departments, planning commissions and consulting firms.

A master's thesis is not required for the M.A. degree.

Required Courses and Concentrations
A minimum of 41 units is required. All courses are four units unless otherwise noted.

# Core introductory course:

ENST 500	Introduction to				
	Environmental Studies	4			
ENVIRONMENTAL	SCIENCE UN	IITS			
ENST 501*	Environmental Science I	2			
ENST 503	Environmental Science II	2			
ENST 502	Environmental Science				
	Seminar I	1			
ENST 504	Environmental Science				
	Seminar II	1			
ENST 595	Graduate Seminar in				
	Environmental Studies	4			
Environmental	regulation and policy course:				
POSC 546	Seminar in Environmental				
	Policy	4			

\*ENST 502 and 504 are corequisites for ENST 501 and 503, respectively, and ENST 501 is a prerequisite for ENST 503.

#### SKILLS COURSES (8 UNITS):

Natural resource	e economics course:	
ECON 487	Resource and	
	Environmental Economics	4
Statistics course	:: Students select one of the	
following:		
ENST 510	Statistics for	
	Environmental Analysis	4
GEOG 592	Quantitative Methods	
	in Geography	4
IR 514	Multivariate Analysis	4
POSC 500	Methods of Political	
	Science	4
POSC 600	Seminar in Advanced	
	Research Methods	4
SOCI 521	Quantitative Methods	
	and Statistics	4

#### Admission Requirements

Students who wish to enter the Master of Arts program in environmental studies are expected to have a GPA of at least 3.0 (A = 4.0). Students with a baccalaureate degree in any major will be admitted into the program as long as they have completed a year of biology, a year of chemistry, a course in earth sciences and a course in each of the following areas: a course in either earth, life, or physical sciences or engineering; a course in statistics (or calculus); and an introductory human environment, social ecology or environmental studies course in the social sciences. It is recommended that students take a science course in ecology and a course in economics at the undergraduate level prior to applying for admission. The director of the Environmental Studies Program will consider relevant course work and work experience as a possible substitute for the required and recommended course work.

#### Selection Criteria

Selection for graduate study is based on letters of reference, the student's previous academic record, the Graduate Record Examinations and a statement of purpose for graduate study.

#### Application Procedure

Applicants should contact the Environmental Studies Program office for an admission package. All applicants should return their applications by March 1 for full consideration. The following components of the application are required: (1) a completed USC Application for Admission to Graduate Studies, (2) official transcripts of all undergraduate and graduate course work taken to date, (3) the results of the General Test of the GRE or notification of when it will be taken and that a request has been made to send the results to USC and (4) at least three letters of recommendation from persons directly familiar with the student's academic work and potential for successful graduate study.

#### Advisement

Advisement for the graduate program in environmental studies is viewed as an ongoing process. Before entering graduate school and during the first months of graduate school, each student should work with the director of the Environmental Studies Program on devising a plan for completing his or her course work.

#### Degree Requirements

The master's degree in environmental studies is under the jurisdiction of the Graduate School. Refer to the Requirements for Graduation section (page 81) and the Graduate School section of this catalogue (page 91) for general regulations. All courses applied toward the degree must be courses accepted by the Graduate School.

# Master of Science, Environmental Risk Analysis

The focus of the M.S., Environmental Risk Analysis degree is on advanced training for students with an existing science background. Students will enter the M.S. program with a B.S. degree in a core natural science field or in engineering, environmental science and certain fields of geography. Students take a core curriculum in science, engineering and finance, which is supplemented by important tools courses in risk assessment, statistics and computer modeling. Students learn about the basics of environmental science in a twosemester combination of courses and seminars (ENST 501, ENST 502, ENST 503, ENST 504). An advanced environmental science seminar (ENST 505ab) is offered in a twosemester sequence and ties together science, technology and finance with risk assessment and policy. The first semester of the course is devoted to analyzing case studies taken from business, industry and government. During the second semester students work on a project that employs the tools they have acquired in linking science, policy, technology and finance.

A master's thesis is not required for the M.S. degree. The M.S. degree in environmental risk analysis will give students the quantitative skills needed to understand and assess environmental risks and to use that information in business, industry, government and society.

#### Required Courses

A minimum of 48 units is required.

ENVIRONMENTAL RISK ANALYSIS		
ENST 530	Environmental Risk Analysis	4
ENVIRONMENTAL SO	CIENCE	UNITS
ENST 501*	Environmental Science I	2
ENST 503	Environmental Science I	I 2
ENST 502	Environmental Science	
	Seminar I	1
ENST 504	Environmental Science	
	Seminar II	1
ENST 505ab	Advanced Environmenta	1
	Science Seminar	2-2

\*ENST 502 and 504 are corequisites for ENST 501 and 503, respectively, and ENST 501 is a prerequisite for ENST 503.

#### NATURAL SCIENCE

One graduate-level science course from outside undergraduate major and two graduate-level science courses

FINANCE	UNITS
GSBA 510	Accounting Concepts and
	Financing Reporting 3
GSBA 543	Managerial Perspectives, or
MOR 569	Negotiation and
	Deal-Making 3
GSBA 548	Corporate Finance 3
TECHNICAL SKILLS	UNITS
ENST 510	Statistics for
	Environmental Analysis 4
0 1 1	

One modeling course
Two technology/engineering courses

#### Admission Requirements

Students who wish to enter the Master of Science program in environmental risk analysis are expected to have a GPA of at least 3.0 (A = 4.0). Students with a baccalaureate degree in the natural sciences, mathematics, environmental science, geography and engineering will be admitted into the program. It is recommended that students have completed an introductory human environment, social ecology or environmental studies course in the social sciences as well as a course in economics and/or environmental

policy. The director of the Environmental Studies Program will consider relevant course work and work experience as a possible substitute for the required and recommended course work.

#### Selection Criteria

Selection for graduate study is based on letters of reference, the student's previous academic record, the Graduate Record Examinations and a statement of purpose of graduate study.

#### Application Procedure

Applicants should contact the Environmental Studies Program office for an admission package. All applicants should return their applications by March 1 for full consideration. The following components of the application are required: (1) a completed USC Application for Admission to Graduate Studies; (2) official transcripts of all undergraduate and graduate course work taken to date; (3) the results of the General Test of the GRE or notification of when it will be taken and that a request has been made to send the results to USC; and (4) at least three letters of recommendation from persons directly familiar with the student's academic work and potential for successful graduate study.

#### Advisement

Advisement for the graduate program in environmental studies is viewed as an ongoing process. Before entering graduate school and during the first months of graduate school, each student should work with the director of the Environmental Studies Program on devising a plan for completing his or her course work.

#### Degree Requirements

The master's degree in environmental risk analysis is under the jurisdiction of the Graduate School. Refer to the Requirements for Graduation section (page 81) and the Graduate School section of this catalogue (page 91) for general regulations. All courses applied toward the degree must be courses accepted by the Graduate School.

## Courses of Instruction

#### **ENVIRONMENTAL STUDIES (ENST)**

The terms indicated are *expected* but are not *guaranteed*. For the courses offered during any given term, consult the *Schedule of Classes*.

#### 100 Introduction to Environmental Studies

**(4, 5p)** Gateway to the majors and minors in Environmental Studies. Provides students with an overview of how government agencies and societal institutions address (or fail to address) the interrelated social and scientific aspects of environmental problems and policies.

#### 150xg Environmental Issues in Society

**(4, Fa)** Exploration of the major social, political, economic, religious, and philosophical disagreements that exist between scholars, leaders, and citizens concerning today's most serious environmental issues and problems. Not available for major or minor credit to environmental studies majors and minors. *Concurrent enrollment:* WRIT 140.

- 201 Environmental Quality Control and Management: A Global Approach (4) (Enroll in ENE 201)
- **255 American Environmentalism (4)** (Enroll in GEOG 255)
- **260Lg Natural Hazards (4)** (Enroll in GEOG 260Lg)
- **323 Politics of Global Environment (4)** (Enroll in IR 323)
- **345** Conservation of Natural Resources (4) (Enroll in GEOG 345)
- **347 Environmental Law (4)** (Enroll in POSC 347)
- **350m Race and Environmentalism (4)** (Enroll in GEOG 350*m*)
- **360 Environmental Disasters (4)** (Enroll in GEOG 360)
- **373L Conservation Biology (4)** (Enroll in BISC 373*L*)
- **387x Economics for Natural Resources and the Environment (4)** An introduction to the economic tools and issues that affect natural resource use and environmental management. Not available for major credit.
- **390** Special Problems (1-4) Supervised, individual studies. No more than one registration permitted. Enrollment by petition only.
- **396** Directed Governmental and Political Leadership Internship (2-8, max 8) (Enroll in POSC 395)
- **400 Environmental Engineering Principles (3)** (Enroll in ENE 400)
- **401** Public Policy, Management, and Planning Practices: Internship Seminar (2, FaSpSm) (Enroll in PPD 401)
- 415 Ecofeminism (4) (Enroll in SWMS 415)
- **420 Water Quality Policy and Regulation (4, 2 years, Fa)** Presents an overview of issues related to water quality and regulation at the local, state, and national level. *Recommended preparation:* ENST 100.
- **422** Ecological Security and Global Politics **(4)** (Enroll in IR 422)

- **430** Air Quality Policy and Health (4, 2 years, Fa) Presents an overview of issues related to air quality policy and health at the local, state, and national level. *Recommended preparation:*
- **436 Environmental Politics (4)** (Enroll in POSC 436)

ENST 100.

440 Environmental Risk Assessment (4, Sp)

Assesses various potential environmental risks and examines how science, government, business, and industry measure and prepare for environmental risks. *Recommended preparation:* ENST 100.

- **477 Water Resources (4)** (Enroll in GEOG 477)
- **487** Resource and Environmental Economics **(4)** (Enroll in ECON 487)
- **490x Directed Research (2-8, max 8, FaSpSm)** Individual research and readings. Not available for graduate credit. *Prerequisite:* departmental approval.
- **495 Senior Seminar in Environmental Studies (4, Sp)** Students form multidisciplinary teams and are asked to study and resolve a major environmental problem facing a particular region or target population.
- **499** Special Topics (2-4, max 8) Selected topics dealing with environmental issues and problems.
- **500** Introduction to Environmental Studies **(4, Fa)** This course introduces students to the major environmental issues and problems society faces today. Business, industry, and government actions concerning these issues and problems are examined.
- **501 Environmental Science I (2, Fa)** Exposes students to critical scientific principles, concepts, and issues related to pollution control, remediation, and ecology. *Corequisite*: ENST 502.
- **502** Environmental Science Seminar I (1, Fa) A series of biweekly guest lectures on critical scientific principles, concepts, and issues related to pollution control, remediation, and ecology.
- **503** Environmental Science II (2, Sp) A continuation of ENST 501. Exposes students to critical scientific principles, concepts, and issues related to pollution control, remediation, and ecology. *Prerequisite:* ENST 501; *corequisite:* ENST 504.

**504** Environmental Science Seminar II (1, Sp) A continuation of ENST 502. A series of biweekly guest lectures on critical scientific principles, concepts, and issues related to pol-

lution control, remediation, and ecology.

- **505ab Advanced Environmental Science Seminar (2-2, FaSp)** Ties together science, technology, and finance with risk assessment and policy.
- 510 Statistics for Environmental Analysis (4)

This course introduces graduate students to the various quantitative techniques and methodological approaches used in pollution control, natural resources management, and environmental protection.

520 Environmental Law and Policy (4, Sp)

Introduces students to the central issues, concepts, and theories in environmental law and policy and analyzes present environmental laws and regulations. Major court cases are reviewed.

- **530 Environmental Risk Analysis (4, Fa)** Analyzes various potential environmental risks and examines how science, government, and business measure and prepare for environmental risks.
- **536** The Landscape Planning Process **(4)** (Enroll in ARCH 536)
- **590 Directed Research (1-12)** Research leading to the master's degree. Maximum units which may be applied to the degree to be determined by the department. Graded CR/NC.
- **594abz Master's Thesis (2-2-0)** Credit on acceptance of thesis. Graded IP/CR/NC.
- **595** Graduate Seminar in Environmental Studies (4, Sp) Addresses the obstacles to environmental policymaking and management by examining the interrelationships between science, technology, and social science. *Recommended preparation:* ENST 500, ENST 501, ENST 502, ENST 503, ENST 504.
- **599** Special Topics (2-4, max 8) Subjects specifically relevant to an environmental studies field, sometimes conducted as intensive short courses. *Prerequisite:* departmental approval.