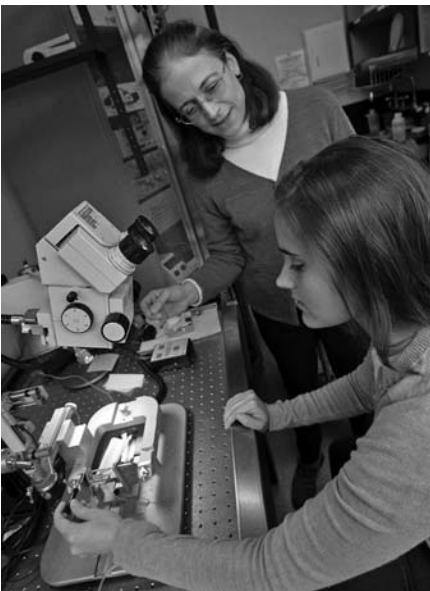

USC College of Letters, Arts and Sciences



Working with Sarah Bottjer in her lab gives undergraduate students the opportunity to research brain function – including speech acquisition in children and the brain's response to injury, disease and aging. The professor of biological sciences and psychology's study of young songbirds has revealed how early experience affects the development of neural networks.

USC 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

Howard Gillman, Ph.D., *Dean, College of Letters, Arts and Sciences*

Michael Quick, Ph.D., *Executive Vice Dean, Academic Affairs*

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

David Houser, M.B.A., *Senior Associate Dean, Business and Financial Affairs*

John Keates, M.A., *Senior Associate Dean, Advancement*

Elinor Accampo, Ph.D., *Vice Dean, Graduate Programs*

Dani Byrd, Ph.D., *Vice Dean, Research Advancement*

Steven Lamy, Ph.D., *Vice Dean, Undergraduate Programs*

Edwin McCann, Ph.D., *Vice Dean, Faculty Affairs*

Jane M. Cody, Ph.D., *Associate Dean, Academic Programs*

Richard Fliegel, Ph.D., *Associate Dean, Undergraduate Programs*

Mark Todd, Ph.D., *Associate Dean, Graduate Programs*

Susan H. Kamei, J.D., *Associate Dean, Advanced and Professional Programs*

Robert C. Lum, J.D., *Associate Dean, Faculty Affairs*

Kathleen Speer, B.S., *Associate Dean, Research Administration*

Steven Wagner, M.B.A., *Associate Dean, Business and Financial Affairs*

Karen Rowan-Badger, B.S., *Assistant Dean, Admission*

James R. McElwain, A.I.A., *Senior Administrator, Facilities*

Departments and Programs

American Studies and Ethnicity

Anthropology

Art History

Biological Sciences

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

International Relations

Judaic Studies

Kinesiology

Liberal Studies

Linguistics

Mathematics

Neuroscience

Ocean Sciences

Philosophy

Physics and Astronomy

Political Science

Professional Writing

Psychology

Religion

Slavic Languages and Literatures

Sociology

Spanish and Portuguese

Additional Programs Administered by the College

American Language Institute

Freshman Seminars

General Education

Interdisciplinary Major Program

Joint Educational Project

Learner Centered Curricula

Learning Communities

Overseas Studies

Postbaccalaureate Premedical Program

Resident Honors Program

Sophomore Seminars

Supplemental Instruction Program

Thematic Option Program

Writing Program

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

USC 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 Office of College Advising or the Office of Academic Records and Registrar in John Hubbard Hall. The form must be completed and returned to the Office of Academic Records and Registrar. When a major is changed, the new department advisor must 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.

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.

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 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, 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.

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 graduate dual degrees can be found on page 89. The student receives two diplomas.

Progressive Degree Program

A progressive degree program enables a USC College undergraduate to begin work on a master's degree while completing requirements for the bachelor's degree. The progressive degree may be in the same or different departments, but should be in a closely-related field of study. Students in a progressive degree program must fulfill all requirements for both the bachelor's degree and the master's degree except for the combined number of units for the two separate degrees. The master's degree may be awarded at the same time as, but not prior to, the bachelor's degree. The student receives two diplomas. Further details about progressive degrees can be found on page 82.

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 percent. 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 undergraduate programs.

Minors

USC 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 USC 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 undergraduate 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 56).

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 B (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 curricula into a meaningful educational experience. Academic advisors work closely with students to help familiarize them with 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 encouraged 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 extra-curricular 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 advisors also support students as they consider general education courses, majors, minors and the optimal use of electives. Pre-health students are 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 maintains an email listserv and a Web site for pre-health students.

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. Pre-law advisors assist students in crafting an undergraduate academic program designed to lead to law school admission and success. Pre-law students are supported in all aspects of 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 listserv sponsored by the Office of College Advising in order to connect with pre-law resources.

Pre-Graduate School Advising

The pre-graduate school advisor assists USC undergraduates and alumni interested in applying to all graduate programs other than law and medicine. The advisor helps students determine when and if they should apply to graduate school and guides students in the process of researching and choosing appropriate schools and programs. Students can

expect support in such areas as navigating the admissions process, writing statements of purpose, requesting letters of recommendation, exploring test preparation resources, and identifying and pursuing sources of funding.

Studying Abroad

The Office of Overseas Studies provides opportunities for students to study in other countries. Eligible students can choose between 51 academic programs in 29 countries and study for one or two semesters. The Office of Overseas Studies is located in the College House, Room 201. For more information, call (213) 740-3636, email overseas@usc.edu or visit www.usc.edu/overseas.

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 in addition to 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
Email: postbacc@usc.edu
www.usc.edu/dept/chemistry/premed.html

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 five principal goals:

- (1) to teach students the skills needed for critical thinking, writing and reading;
- (2) to teach these skills in a specific context, i.e., social issues, cultures and traditions, science and society;

- (3) to teach students how to apply these skills so that they can find, evaluate and use the vast amount of information now available via the media, the Internet, new technologies and traditional forms of knowledge;

(4) to teach students to discern and assess the values that underlie various critical positions, and to articulate their own coherence and integrity; and

(5) to encourage a passion for learning.

To achieve these 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 six categories.

Foundations:

- | | | |
|------|---------------------------------|------------|
| I. | Western Cultures and Traditions | one course |
| II. | Global Cultures and Traditions | one course |
| III. | Scientific Inquiry | one course |

Case Studies:

- | | | |
|-----|------------------------------|------------|
| IV. | Science and Its Significance | one course |
| V. | Arts and Letters | one course |
| VI. | Social Issues | one course |

General Education Categories

Part One: Foundations

Courses in these categories help students locate themselves culturally, historically and intellectually in an increasingly complex world. The foundations categories are intended to give students a broad conceptual base for their further studies and their roles as informed citizens in the world of the future, training them to think critically and analytically about ideas and events, sharpening their ability to assess arguments and information, and engaging them with the principles of scientific inquiry and primary works of culture and civilization.

Category I. Western Cultures and Traditions

Courses in this category introduce students to an area of academic inquiry traditionally perceived to be central to general education. They stress concepts, values and events in Western history that have shaped contemporary American and European civilization. Courses are distinguished by their historical sweep, which allows students to become aware of the continuing legacies of the past in contemporary culture. Students learn to situate contemporary society in a broad historical context and to think critically about the past and its relationship to the present, while becoming acquainted with the most significant analytic methods by which we attempt to understand the meaning of history. Comparative insights may also be offered with the non-Western cultural traditions studied in Category II.

Category II. Global Cultures and Traditions

Courses in this category introduce students to cultures and civilizations associated with Africa, Asia, Latin America, the Middle East, Native America and Russia. Each course examines distinctive qualities of the cultures studied and seeks to engage and explain those characteristics on their own terms. Students learn to understand the impact of historical development on cultures that interact in the contemporary geopolitical scene and to articulate the role that cultural differences play in those interactions. As a result, they are better prepared to participate actively in an increasingly global cultural and political landscape. Courses in this category are distinguished by their breadth of perspective over a substantial period of time. Comparative insights may also be offered between these cultures and those studied in Category I.

Category III. Scientific Inquiry

In this category, students learn about the process and methods of scientific inquiry, examining the principles underlying a body of scientific knowledge and how those principles were developed. Students learn to evaluate the soundness of scientific arguments and appreciate how current ideas might change in response to new data. Students engage in scientific inquiry through field experiences or a practical component. A section of laboratory or field experience is required.

As a result, all students should acquire substantive knowledge in science and technology; understand the processes by which scientists investigate and answer scientific questions; and be able to articulate the basic principles used to explain natural phenomena.

Part Two: Case Studies

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

Category IV. Science and Its Significance

In this category, students learn why science is important in people's lives. Through a concentrated study of a single area of research or small set of related areas, students learn to articulate the relationships among observed phenomena, the scientific principles those observations inform, their technological applications and their societal implications. Scientific inquiry is understood in the context of its historical setting and philosophical assumptions, as well as its material consequences. A section of laboratory, field experience, and/or discussion and writing is required.

As a result, all students should be able to: connect science and technology to real-world problems and issues, including personal and societal needs; discriminate unsound from well-supported scientific claims about those issues; and talk about science cogently in articulating scientific concepts and their significance for other areas of their lives.

Category V. Arts and Letters

In this category students develop their skills for critical analysis through intense engagement with works of literature, philosophy, visual arts, music and film. The works studied may be associated with a particular country, time period, genre or theme. Students will learn to use techniques of literary and artistic analysis. At the same time they will become familiar with disciplinary and interdisciplinary methods of argument and persuasion. Because intensive reading and writing is demanded in these courses, they will generally be capped at 30 students.

Category 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 apply them to understand a broad range of social and political phenomena. Students learn to assess the validity of arguments and discern the connections between data cited and conclusions drawn.

Students completing this category develop the basic critical skills needed to evaluate and use the vast amount of information concerning social issues now available via the Internet, media and traditional scholarship. They acquire the concepts and confidence necessary to discuss contemporary social issues in an informed manner and develop a passion for learning that will allow them to engage complex questions about human beings and society.

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.

Course Listing

For a complete list of general education courses, see the USC Core section, page 57.

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 USC students. 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 full-time 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 59.

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)

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.)

ARLT 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.)

UNIVERSITY OF SOUTHERN CALIFORNIA (USC)

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.

USC 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.

Advanced and Professional Programs

3501 Trousdale Parkway
Taper Hall 355
Los Angeles, CA 90089-0355

Associate Dean: Susan H. Kamei, J.D.

The USC College Office of Advanced and Professional Programs administers the College multidisciplinary graduate programs not housed in traditional departments or units.

Master of Liberal Studies
(213) 740-1349
FAX: (213) 740-5002
Email: mls@college.usc.edu
www.usc.edu/college/mls

Director: Susan H. Kamei, J.D. (*Associate Dean, Advanced and Professional Programs*)

A multidisciplinary degree program, the Master of Liberal Studies (M.L.S.) is designed for motivated, college-educated individuals who wish to further their intellectual growth and pursue graduate work part-time in the evenings. See page 382 for course requirements.

Master of Professional Writing
(213) 740-3252
FAX: (213) 740-5775
Email: mpw@college.usc.edu
www.usc.edu/dept/LAS/mpw

Acting Director: Jane M. Cody, Ph.D. (*Associate Dean, Academic Programs*)

The program is designed for individuals pursuing writing as a career in fiction, nonfiction, screenwriting, television writing and theatre. See page 432 for course requirements.

Energy, Technology and Society Certificate
(213) 740-1384
Email: kaylor@college.usc.edu

Director: Jennifer Wolch (*Geography*)

This multidisciplinary program is open to USC students pursuing graduate degrees in many disciplines including architecture, biology, chemistry, communication, earth sciences, economics, education, engineering, geography, international relations, political

science, public policy, sociology and urban planning. See Interdisciplinary Programs, page 106, for course requirements.

Sustainable Cities Graduate Certificate
(213) 740-1384
FAX: (213) 740-5002
Email: kaylor@college.usc.edu
www.usc.edu/dept/geography/ESPE

Director: Jennifer Wolch, Ph.D. (*Geography*)

This multidisciplinary certificate program provides USC master's and doctoral students with a specialization in urban sustainability problems resulting from the growth of cities caused by natural population increase and massive rural-to-urban population flows. See Interdisciplinary Programs, page 107, for course requirements.

American Language Institute

Jefferson Building 206
(213) 740-0079
FAX: (213) 740-8549
Email: ali@usc.edu
ali.usc.usc.edu

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 in a degree program. 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 immediately prior to 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 (Hubbard Hall 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*.

ALI 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.

ALI 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.

ALI 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.

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

ALI 224 Low Intermediate Oral Skills (4, FaSpSm)

Required for international students whose oral skills are assessed to be at the low intermediate level by the International Student English Examination (ISE) or previous ALI course. (Duplicates credit in former ALI 210.) Graded CR/NC.

ALI 225 Low Intermediate Writing Skills (4, FaSpSm)

Required for international students whose writing skills are assessed to be at the low intermediate level by the International Student English Examination (ISE) or previous ALI course. (Duplicates credit in former ALI 210.) Graded CR/NC.

ALI 234 Intermediate Oral Skills (3, FaSpSm)

Required for international students whose oral skills are assessed to be at the intermediate level by the International Student English Examination (ISE) or previous ALI course. (Duplicates credit in former ALI 220.) Graded CR/NC.

ALI 235 Intermediate Writing Skills (3, FaSpSm)

Required for international students whose writing skills are assessed to be at the intermediate level by the International Student English Examination (ISE) or previous ALI course. (Duplicates credit in former ALI 220.) Graded CR/NC.

ALI 244 High Intermediate Oral Skills (3, FaSpSm)

Required for international students whose oral skills are assessed to be at the high intermediate level by the International Student English Examination (ISE) or previous ALI course. (Duplicates credit in former ALI 230 and ALI 240.) Graded CR/NC.

ALI 245 High Intermediate Writing Skills (3, FaSpSm)

Required for international students whose writing skills are assessed to be at the high intermediate level by the International Student English Examination (ISE) or previous ALI course. (Duplicates credit in former ALI 231 and ALI 240.) Graded CR/NC.

ALI 254 Advanced Oral Skills (2, FaSpSm)

Required for international students whose oral skills are assessed to be at the advanced level by the International Student English Examination (ISE) or previous ALI course. (Duplicates credit in former ALI 259.) Graded CR/NC.

ALI 255 Advanced Writing Skills (2, FaSpSm)

Required for international students whose writing skills are assessed to be at the advanced level by the International Student English Examination (ISE) or previous ALI course. (Duplicates credit in former ALI 258.) Graded CR/NC.

ALI 270 Oral Skills for International Teaching Assistants (3, FaSpSm)

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.

ALI 271 Language Tutorial for International Teaching Assistants (2, FaSpSm)

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
FAX: (213) 821-0409
Email: aseinfo@usc.edu
www.usc.edu/schools/college/ase

Chair: Ruth Wilson Gilmore, Ph.D.

Director, Graduate Studies: Viet Nguyen, Ph.D.*

Director, Undergraduate Studies: George J. Sánchez, Ph.D.*

Director, American Studies: John Carlos Rowe, Ph.D.

Director, African American Studies: Robin D.G. Kelley, Ph.D.

Director, Asian American Studies: Lon Kurashige, Ph.D.

Director, Chicano/Latino Studies: Laura Pulido, Ph.D.

Professors: Rosa-Linda Fregoso, Ph.D. (*Cinematic Arts*); Karen Halttunen, Ph.D. (*History*); Robin D.G. Kelley, Ph.D. (*History*); Dorinne Kondo, Ph.D. (*Anthropology*); Manuel

Pastor, Jr., Ph.D. (*Geography*); Laura Pulido, Ph.D.; David Román, Ph.D.* (*English*); John Carlos Rowe, Ph.D. (*English*); George J. Sánchez, Ph.D.*

Associate Professors: Sarah Banet-Weiser, Ph.D.* (*Communication*); Judith Jackson Fossett, Ph.D.* (*English*); Ruth Wilson Gilmore, Ph.D.; Thomas Gustafson, Ph.D.* (*English*); Stanley Huey, Jr., Ph.D. (*Psychology*); Lanita Jacobs-Huey, Ph.D.* (*Anthropology*); Joshua David Kun, Ph.D. (*Communication*); Lon Kurashige, Ph.D. (*History*); Teresa McKenna, Ph.D. (*English*); Viet Nguyen, Ph.D.* (*English*); Leland Saito, Ph.D. (*Sociology*);

Francille Rusan Wilson, Ph.D.; Janelle Wong, Ph.D.* (*Political Science*)

Assistant Professors: Macarena Gómez-Barris, Ph.D. (*Sociology*); Sarah Gualtieri, Ph.D.* (*History*); Jane Iwamura, Ph.D.* (*Religion*); Alexandra Isfahani-Hammond, Ph.D.* (*Spanish and Portuguese*); Kara Keeling, Ph.D. (*Cinematic Arts*); Roberto Lint-Sagarena, Ph.D. (*Religion*); Ricardo Ramirez, Ph.D. (*Political Science*)

*Recipient of university-wide or college teaching award.

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 department offers four separate majors in American Studies and Ethnicity, African American Studies, Asian American Studies, and Chicano/Latino Studies; and minors in American Studies and Ethnicity, American Popular Culture and 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.

Honors Program

The program offers a two-semester honors program for qualified students, first identified in AMST 350 or by the program advisor. Students spend their first semester in the program in an honors senior seminar, AMST 492, focused on developing their research and methods for the honors thesis. During the second semester, all honors students are required to take AMST 493 in which each completes a thesis project on a topic of his or her own choosing under faculty direction. Contact the program advisor for further information. To graduate with honors, program majors must successfully complete an honors thesis and have a minimum GPA of 3.5 in their major course work.

Undergraduate Degrees

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 and Ethnicity 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 and Ethnicity will be particularly appropriate for students interested in pursuing careers in law, journalism, government, foreign service, social work, international business, public administration and education.

American Studies and Ethnicity is administered by an executive committee comprising the chair, directors of the four majors and other faculty members. In addition to the college academic advisor, the directors of the majors serve as advisors to majors and minors, providing, in conjunction with the sequence of courses, the opportunity for students to undertake an interdisciplinary concentration under close faculty supervision. It is recommended that students meet with the appropriate major director to plan a coherent set of courses to fulfill the major or minor requirements.

Bachelor of Arts, American Studies and Ethnicity

Program Major Requirements

Ten courses in American Studies and Ethnicity or courses certified for American Studies and Ethnicity credit are required. The 10 courses must be distributed as follows: the three core requirement courses of AMST 200, AMST 350 and AMST 498; one course from each of the following three lists: *History*, *Literature and Culture*, and *Social and Political Issues*; and additional elective courses for a total of 16 units chosen from the courses certified in American Studies and Ethnicity at the 300 level or above.

CORE REQUIREMENTS		UNITS
AMST 200	Introduction to American Studies and Ethnicity	4
AMST 350	Junior Seminar in American Studies and Ethnicity: Theories and Methods	4
AMST 498*	Senior Seminar in American Studies and Ethnicity	4

*Honors students will substitute AMST 492 Research Methods in American Studies and Ethnicity.

200/300/400-LEVEL REQUIRED COURSES		UNITS
One course from each of the following categories:		
<i>History</i>		
AMST 250	The African Diaspora	4
AMST 373	History of the Mexican American	4
AMST 378	Introduction to Asian American History	4
AMST 379	Arabs in America	4

HIST 200	The American Experience	4
HIST 354	Mexican Migration to the United States	4
HIST 355	The African-American Experience	4
HIST 380	American Popular Culture	4
HIST 457	The American West	4
HIST 458	History of California	4

Literature and Culture

AHIS 365	African American Art	4
AHIS 465	Studies in American Art	4
AHIS 475	Blackness in American Visual Culture	4
AMST 285	African American Popular Culture	4
AMST 377	Legacies of Viet Nam	4
AMST 385	African American Culture and Society	4
AMST 448	Chicano and Latino Literature	4
AMST 449	Asian American Literature	4
COMM 458	Race and Ethnicity in Entertainment and the Arts	4
ENGL 263	American Literature	4
ENGL 392	Visual and Popular Culture	4
ENGL 442	American Literature, 1920 to the Present	4
ENGL 445	The Literatures of America: Cross-Cultural Perspectives	4
ENGL 446	African-American Poetry and Drama	4
REL 336	Re-viewing Religion in Asian America	4
REL 483	Religion and Popular Culture in the United States	4

Social and Political Issues

AMST 202	Interethnic Diversity in the West	4
AMST 206	The Politics and Culture of the 1960s	4
AMST 220	The Making of Asian America	4
AMST 274	Exploring Ethnicity through Film	4
AMST 285	African American Popular Culture	4
AMST 301	America, the Frontier, and the New West	4
AMST 320	Social Construction of Race and Citizenship	4
AMST 357	Latino Social Movements	4
AMST 365	Leadership in the Community–Internship	4
AMST 395	African American Humor and Culture	4
AMST 446	Cultural Circuits in the Americas	4
AMST 466	The Psychology of African Americans	4
ANTH 240	Collective Identity and Political Violence: Representing 9/11	4
GEOG 340	Latino L.A.	4
GEOG 350	Race and Environmentalism	4
JOUR 466	People of Color and the News Media	4
POSC 320	Urban Politics	4
POSC 328	Asian American Politics	4
POSC 421	Ethnic Politics	4
POSC 424	Political Participation and American Diversity	4
POSC 427	Black Politics in the American Political System	4
POSC 428	Latino Politics	4
PSYC 462	Minority Mental Health	4
REL 333	Religion in the Borderlands	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
SOCI 375	Asian Americans: Ethnic Identity	4
SOCI 376	Contemporary Issues in Asian American Communities	4
SOCI 432	Racial and Ethnic Relations in a Global Society	4

UPPER DIVISION ELECTIVE COURSES

UNITS

Additional courses for a total of 16 units from the lists above or below, 300 level or higher. No more than two total courses in the major may be taken outside the college.

AMST 490x	Directed Research	2-8, max 8
AMST 493	Senior Honors Thesis in American Studies and Ethnicity	4
AMST 499	Special Topics	2-4, max 8

Bachelor of Arts, American Studies and Ethnicity (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 Ethnicity 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.

African American Studies is administered by an executive committee comprising the chair, directors of the four majors and other faculty members. In addition to the college academic advisor, the directors of the majors serve as advisors to majors and minors, providing, in conjunction with the sequence of courses, the opportunity for students to undertake an interdisciplinary concentration under close faculty supervision. It is recommended that students meet with the appropriate major director to plan a coherent set of courses to fulfill the major or minor requirements.

Program Major Requirements

Ten courses in African American Studies, or courses certified for African American Studies credit, are required. The 10 courses must be distributed as follows: the three core requirement courses of AMST 200, AMST 350 and AMST 498; one course from each of the following three lists: *History, Literature and Culture*, and *Social and Political Issues*; and additional elective courses for a total of 16 units chosen from the courses certified in African American Studies at the 300 level or above.

CORE REQUIREMENTS

UNITS

AMST 200	Introduction to American Studies and Ethnicity	4
AMST 350	Junior Seminar in American Studies and Ethnicity: Theories and Methods	4
AMST 498*	Senior Seminar in American Studies and Ethnicity	

*Honors students will substitute AMST 492 Research Methods in American Studies and Ethnicity.

200/300/400-LEVEL REQUIRED COURSES

UNITS

One course from each of the following categories:

History

AMST 250	The African Diaspora	4
HIST 355	The African-American Experience	4
HIST 455	Advanced Topics in African-American History	4

Literature and Culture

AHIS 365	African American Art	4
AHIS 475	Blackness in American Visual Culture	4
AMST 285	African American Popular Culture	4
AMST 385	African American Culture and Society	4
CTCS 407	African American Cinema	4
ENGL 446	African-American Poetry and Drama	4
ENGL 447	African-American Narrative	4

Social and Political Issues

AMST 206	The Politics and Culture of the 1960s	4
AMST 330	Jazz and the Political Imagination	4
AMST 365	Leadership in the Community–Internship	4
AMST 395	African American Humor and Culture	4
AMST 466	The Psychology of African Americans	4
GEOG 350	Race and Environmentalism	4
POSC 421	Ethnic Politics	4
POSC 427	Black Politics in the American Political System	4
PSYC 462	Minority Mental Health	4
REL 469	Black Religion in America	4

UPPER DIVISION ELECTIVE COURSES

UNITS

Additional courses for a total of 16 units from the lists above or below, 300 level or higher. No more than two courses in the major may be taken outside the college.

AMST 274	Exploring Ethnicity through Film	4
AMST 301	America, the Frontier, and the New West	4

AMST 320	Social Constructions of Race and Citizenship	4	16 units chosen from the courses certified in Asian American Studies at the 300 level or above.
AMST 490x	Directed Research	2-8, max 8	
AMST 493	Senior Honors Thesis in American Studies and Ethnicity	4	
AMST 499	Special Topics	2-4, max 8	
COMM 458	Race and Ethnicity in Entertainment and the Arts	4	
POSC 424	Political Participation and American Diversity	4	
SOCI 432	Racial and Ethnic Relations in a Global Society	4	

Bachelor of Arts, American Studies and Ethnicity (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 Ethnicity 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.

Asian American Studies is administered by an executive committee comprising the chair, directors of the four majors and other faculty members. In addition to the college academic advisor, the directors of the majors serve as advisors to majors and minors, providing, in conjunction with the sequence of courses, an opportunity for students to undertake an interdisciplinary concentration under close faculty supervision. It is recommended that students meet with the appropriate major director to plan a coherent set of courses to fulfill the major or minor requirements.

Program Major Requirements

Ten courses in Asian American Studies, or courses certified for Asian American Studies credit, are required. The 10 courses must be distributed as follows: the three core requirement courses of AMST 200, AMST 350 and AMST 498; one course from each of the following three lists: *History*, *Literature and Culture*, and *Social and Political Issues*; and additional elective courses for a total of

200/300/400-LEVEL REQUIRED COURSES		UNITS
One course from each of the following categories:		
<i>History</i>		
AMST 378	Introduction to Asian American History	4
<i>Literature and Culture</i>		
AMST 377	Legacies of Viet Nam	4
AMST 449	Asian American Literature	4
REL 336	Re-viewing Religion in Asian America	4
<i>Social and Political Issues</i>		
AMST 220	The Making of Asian America	4
AMST 365	Leadership in the Community-Internship	4
POSC 328	Asian American Politics	4
SOCI 375	Asian Americans: Ethnic Identity	4
SOCI 376	Contemporary Issues in Asian American Communities	4
UPPER DIVISION ELECTIVE COURSES		UNITS
Additional courses for a total of 16 units from the lists above or below, 300 level or higher. No more than two total courses for the major may be taken outside the college.		
AMST 301	America, the Frontier, and the New West	4
AMST 320	Social Construction of Race and Citizenship	4
AMST 374	Exploring Ethnicity through Film	4
AMST 490x	Directed Research	2-4, max 8
AMST 493	Senior Honors Thesis in American Studies and Ethnicity	4
AMST 499	Special Topics	2-4, max 8
COMM 458	Race and Ethnicity in Entertainment and the Arts	4
GEOG 350	Race and Environmentalism	4
POSC 424	Political Participation and American Diversity	4
SOCI 432	Racial and Ethnic Relations in a Global Society	4

Bachelor of Arts, American Studies and Ethnicity (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 Ethnicity 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.

Chicano/Latino Studies is administered by an executive committee comprising the chair, directors of the four majors, and other faculty members. In addition to the college academic advisor, the directors of the majors serve as advisors to majors and minors, providing, in conjunction with the sequence of courses, an opportunity for students to undertake an interdisciplinary concentration under close faculty supervision. It is recommended that students meet with the appropriate major director to plan a coherent set of courses to fulfill the major or minor requirements.

Program Major Requirements

Ten courses in Chicano/Latino Studies, or courses certified for Chicano/Latino Studies credit, are required. The 10 courses must be distributed as follows: the three core requirement courses of AMST 200, AMST 350 and AMST 498; one course from each of the following three lists: *History*, *Literature and Culture*, and *Social and Political Issues*; and additional elective courses for a total of 16 units chosen from the courses certified in Chicano/Latino Studies at the 300 level or above.

CORE REQUIREMENTS		UNITS
AMST 200	Introduction to American Studies and Ethnicity	4
AMST 350	Junior Seminar in American Studies and Ethnicity: Theories and Methods	4
AMST 498*	Senior Seminar in American Studies and Ethnicity	4

*Honors students will substitute AMST 492 Research Methods in American Studies and Ethnicity.

200/300/400-LEVEL REQUIRED COURSES **UNITS**

One course from each of the following categories:

History

AMST 373	History of the Mexican American	4
HIST 354	Mexican Migration to the United States	4

Literature and Culture

AMST 448	Chicano and Latino Literature	4
SPAN 413	Social and Geographic Varieties of Spanish	4

Social and Political Issues

AMST 357	Latino Social Movements	4
AMST 365	Leadership in the Community—Internship	4
AMST 446	Cultural Circuits in the Americas	4
GEOG 340	Latino L.A.	4
POSC 428	Latino Politics	4
PSYC 462	Minority Mental Health	4
REL 333	Religion in the Borderlands	4
SOCI 356	Mexican Immigrants in a Diverse Society	4
SOCI 366	Chicana and Latina Experiences	4

UPPER DIVISION ELECTIVE COURSES **UNITS**

Additional courses for a total of 16 units from the lists above or below, 300 level or higher. No more than two total courses for the major may be taken outside the college.

AMST 274	Exploring Ethnicity through Film	4
AMST 301	America, the Frontier, and the New West	4
AMST 320	Social Construction of Race and Citizenship	4
AMST 490x	Directed Research	2-8, max 8
AMST 493	Senior Honors Thesis in American Studies and Ethnicity	4
AMST 499	Special Topics	2-4, max 8
COMM 458	Race and Ethnicity in Entertainment and the Arts	4
GEOG 350	Race and Environmentalism	4
POSC 424	Political Participation and American Diversity	4
SOCI 432	Racial and Ethnic Relations in a Global Society	4

American Studies and Ethnicity Minor*Course Requirements*

For the minor in American Studies and Ethnicity, five courses in American Studies and Ethnicity, or courses certified for American Studies and Ethnicity credit, are

required. The five courses must be distributed as follows: two core requirement courses and three additional elective courses chosen from the courses certified in American Studies and Ethnicity at the 300 level or above.

CORE REQUIREMENTS **UNITS**

AMST 200	Introduction to American Studies and Ethnicity	4
AMST 350	Junior Seminar in American Studies and Ethnicity: Theories and Methods	4

UPPER DIVISION ELECTIVE COURSES **UNITS**

Three courses from the American Studies and Ethnicity major lists, at the 300 level or higher. No more than one course in the minor may be taken outside the college.

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 course (4 units)

AMST 206	The Politics and Culture of the 1960s	4
AMST 285	African American Popular Culture	4

UPPER DIVISION REQUIREMENTS **UNITS**

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

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

AMST 301	America, the Frontier, and the New West	4
COLT 365	Literature and Popular Culture	4
COMM 384	Interpreting Popular Culture	4
ENGL 392	Visual and Popular Culture	4
HIST 380	American Popular Culture	4

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
AMST 448	Chicano and Latino Literature	4
AMST 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		UNITS
AMST 202	Interethnic Diversity in the West	4
JS 300	American Jewish History	4
Three courses from the following:		
AMST 301	America, the Frontier, and the New West	4
AMST 350	Junior Seminar in American Studies and Ethnicity: Theories and Methods	4
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 362.

Minor in Race, Ethnicity and Politics

See the Department of Political Science, page 424.

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.

Master of Arts

The department 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., although in some cases students may be invited to attempt a terminal M.A.

After completing at least 30 units, taking AMST 500 and at least one research seminar, maintaining a GPA of at least 3.0, making successful academic progress and taking the qualifying exam, students will either be granted a transitional master's degree and continue on towards the Ph.D. or be granted a terminal master's 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.

Application deadline: December 1

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 American Studies and Ethnicity department. 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 department of 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*.

AMST 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. *Concurrent enrollment:* WRIT 140

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

AMST 135gm Peoples and Cultures of the Americas (4, FaSp) An introduction to cultures and people in the Americas; the social, historical, economic and cultural formations that together make up the Latino/a American imaginary.

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

AMST 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.

AMST 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.

AMST 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.

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

AMST 250gm The African Diaspora (4, FaSp) History, political-economy and aesthetics of the African Diaspora with emphasis on Latin America, the Caribbean, Europe and Africa.

AMST 252g Black Social Movements in the U.S. (4) This course examines black social movements for freedom, justice, equality, and self-determination. Beginning with Reconstruction, movements include labor, civil rights, radical feminism, socialism, reparations, Black Nationalism, prisoners' rights, and Hip Hop.

AMST 274gm Exploring Ethnicity Through Film (4, FaSpSm) Examination of the constructions of American ethnicity/race in film. (Duplicates credit in former AMST 374m).

AMST 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. *Concurrent enrollment:* MDA 140.

AMST 301g America, the Frontier, and the New West (4, FaSp) Introduction to the interdisciplinary study of American political, cultural, and social life with a particular emphasis on the Western United States as a region. *Recommended preparation:* HIST 200, ENGL 263.

AMST 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.

AMST 330m Jazz and the Political Imagination (4) Explores the changing political meanings of "jazz" throughout the 20th century, from freedom to a threat to civil order, from racial integration to Black liberation.

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

AMST 333 Religion in the Borderlands (4) (Enroll in REL 333)

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

AMST 342m Law and Identities (4) Examines the complex and contested interaction between the law and racial, gender, religious, ethnic, and sexual identities using historical and contemporary cases.

AMST 348m Race and Environmentalism (4, Irregular) (Enroll in GEOG 350m)

AMST 350 Junior Seminar in American Studies and Ethnicity: Theories and Methods (4, FaSp) Advanced study in interdisciplinary theories and methods for analyzing race and ethnicity in the United States, including a comparative study of topics such as inequality, gender, and class.

AMST 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.

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

AMST 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.

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

AMST 373 History of the Mexican American (4, FaSp) Racial and cultural background of Mexico; immigration and conquest; the Mexican in California and the southwest; the rise of contemporary Mexican-American consciousness. (Duplicates credit in former HIST 472).

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

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

AMST 377m 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.

AMST 378m Introduction to Asian American History (4, FaSp) Comparative examination of the social, economic, and political experiences of Asian immigrants and their descendants in the U.S., 1840s-present. (Duplicates credit in former HIST 378).

AMST 379 Arabs in America (4, FaSp) Arab immigration and acculturation in the U.S. from late 19th century to present; emphasis on community formation, race, religion and gender.

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

AMST 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.

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

AMST 392 Undergraduate Research Methods (2, Sp) Examines processes of scholarly research; quantitative and qualitative research methods; faculty mentorship; experiential learning; research proposal writing; careers in research. Sophomore or junior standing in the major. Graded CR/NC.

AMST 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.

AMST 420 Sociology of Violence (4, FaSp) (Enroll in SOCI 420)

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

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

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

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

AMST 444m Native American Literature (4, FaSp) (Enroll in ENGL 444m)

AMST 446 Cultural Circuits in the Americas (4, FaSp) How does culture move within and across the Americas? What are the relationships between new global media conglomerates, "national cultural industries," and local cultural practices?

AMST 448m Chicano and Latino Literature (4, FaSp) Development of 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. (Duplicates credit in former ENGL 448m).

AMST 449m Asian American Literature (4, FaSp) Survey of Asian American literature from the earliest time to the present; development of prose, poetry and novel.

AMST 456m People of Color and the News Media (4) (Enroll in JOUR 466m)

AMST 458m Race and Ethnicity in Entertainment and the Arts (4, FaSp) (Enroll in COMM 458m)

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

AMST 466m The Psychology of African Americans (4, FaSp) Provides an introduction to the study of health, mental health, and social behavior among African Americans.

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

AMST 483 Religion and Popular Culture in the United States (4, Sp) (Enroll in REL 483)

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

AMST 492 Research Methods in American Studies and Ethnicity (4, Fa) Develop the research proposal and methods for completing a senior honors thesis; for students in one of the four PASE majors.

AMST 493 Senior Honors Thesis in American Studies and Ethnicity (4, Sp) Writing the honors thesis; for students in one of the four PASE majors and PASE Honors Program.

AMST 498 Senior Seminar in American Studies and Ethnicity (4, FaSp) Capstone course for majors, highlighting interdisciplinary study of race and ethnicity in a comparative context. *Prerequisite:* AMST 200.

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

AMST 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.

AMST 509 Key Topics in Linguistic Anthropology (4, FaSp) (Enroll in ANTH 509)

AMST 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.

AMST 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.

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

AMST 530 Readings in African American Studies (4, max 8, FaSp) Seminar exploring crucial theoretical, methodological and historical issues in the development of African American Studies.

AMST 543 Critical Studies in Whiteness (4, max 8, FaSp) Examines meaning of "whiteness" from historical and other disciplinary perspectives; focus is on how whiteness operates within specific racial regimes to perpetuate inequality.

AMST 552 Archives and Subcultures (4, FaSm) Introduction to the practice of archival research with an emphasis on the literary and historical methods of documenting subcultural groups, particularly racial and sexual minorities.

AMST 554 Readings in Chicano/Latino History (4, FaSp) Readings, analyses, and discussion of various approaches, topics, and genres in the field of Chicano/Latino history.

AMST 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.

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

AMST 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.

AMST 572 Quantitative Methods for a Diverse Society (4, FaSp) Diversity and empirical social research; conceptualization, design and measurement; conducting, analyzing and evaluating surveys and experiments; focus on obstacles in the empirical study of diversity.

AMST 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.

AMST 585 Topics in Cultural Theory (4, max 8, FaSp) Introduction to key texts on post-structuralism and its theorizing of the body, power, and historical trauma.

AMST 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.

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

AMST 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.

AMST 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.

AMST 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.

AMST 700 Theories and Practices of Professional Development (4, FaSpSm)

Offers students a structured environment in which to write their dissertation proposals and focuses on professional development. Completion of qualifying exam. Graded CR/NC.

AMST 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.

AMST 794abcdz Doctoral Dissertation

(2, 2, 2, 2, 0) Credit on acceptance of dissertation. Graded IP/CR/NC.

Anthropology

Grace Ford Salvatori 120

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FAX: (213) 747-8571

Email: anthro@usc.edu

Chair: Nancy Lutkehaus, 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: Lanita Jacobs-Huey, Ph.D.; Nancy Lutkehaus, Ph.D.; Gary Seaman, Ph.D.

Assistant Professors: Nayuta Yamashita, Ph.D., Roberto Delgado, Ph.D.

Distinguished Adjunct Professor: Jane Goodall, Ph.D.

Adjunct Professor: John Scott Allen, Ph.D.

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

Joint Faculty: Caleb E. Finch, Ph.D.; Gelya Frank, Ph.D.; Peter Mancall, Ph.D.; Lawrence A. Palinkas, Ph.D.; Alison Renteln, Ph.D.

The Department of Anthropology offers a B.A. in Anthropology with concentrations in visual anthropology and urban applied anthropology; a B.A. in Interdisciplinary Archaeology; minor programs in cultural

anthropology and medical 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 a major with 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 Humanity	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 Perspective	4
ANTH 460	Economic Anthropology	4
One world area specialization course		4
Electives	two courses	8
Total upper division units		32

Major in Anthropology**(Visual Anthropology) Requirements**

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

REQUIRED COURSES, LOWER DIVISION		UNITS
ANTH 200L	The Origins of Humanity	4
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
ANTH 475	Ethnographic Film Analysis	4
ANTH 476	Ethnographic Film Theory from an Historical Perspective	4

ONE COURSE TO BE SELECTED FROM: UNITS

ANTH 470	Multidisciplinary Seminar in Visual Anthropology	4
ANTH 472	Visual Techniques in Anthropology: Stills	4

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.

REQUIRED COURSES, LOWER DIVISION UNITS

ANTH 200L	The Origins of Humanity	4
ANTH 263	Exploring Culture Through Film, or	
ANTH 201	Introduction to Social Anthropology	4

REQUIRED COURSES, UPPER DIVISION UNITS

ANTH 355	Urban Anthropology	4
ANTH 371	Cross-Cultural Research on Urban Gangs	4
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 Perspective	4
ANTH 375	Applied Anthropology	4
ANTH 407	Peasant Society	4
ANTH 460	Economic Anthropology	4
One world area specialization course	4	
Total upper division units	32	

Bachelor of Arts in Interdisciplinary Archaeology

Students are given broad-based exposure to a range of methods by which archaeological data are retrieved and analyzed and theoretical paradigms and intellectual foci by and from which archaeologists interpret the past's material culture.

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

REQUIRED COURSES, LOWER DIVISION UNITS

ANTH 202	Introduction to Archaeology, or	
CLAS 212L	Archaeology: Interpreting the Past	4
AHIS 201	Digging into the Past: Material Culture and the Civilization of the Ancient Mediterranean, or	
LING 295	The Ancient Near East: Culture, Archaeology, Texts	4

Total lower division units 8

REQUIRED COURSES, UPPER DIVISION UNITS

Theory and Methods
(any two of the following three courses) 8

AHIS 425	Interdisciplinary Studies in Classical Art and Archaeology: Research and Methodology	
REL 494	Advanced Near Eastern and Mediterranean Archaeology	
REL 495	Field Methods in Archaeology	

Interdisciplinary Perspectives

AHIS 321	Greek Art and Archaeology, or	
AHIS 322	Roman Art and Archaeology, or	
AHIS 384	Early Chinese Art, or	
AHIS 420	Studies in Ancient Art	4
ANTH 310	Archaeology of the Americas, or	
ANTH 311	Old World Archaeology	4
CLAS 323	Aegean Archaeology	4
REL 394	Near Eastern and Mediterranean Archaeology, or	
REL 493	The Art and Archaeology of Religion: Beginnings	4
Elective	Any 300 or 400 level course offered by the Anthropology, Art History, Classics, Linguistics or Religion departments	4

Capstone course

CLAS 465	Archaeology and Society	4
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Total upper division units 32

Minor in Cultural Anthropology**REQUIRED COURSES, LOWER DIVISION UNITS**

ANTH 201	Introduction to Social Anthropology, or	
ANTH 263	Exploring Culture Through Film	4

REQUIRED COURSE, UPPER DIVISION UNITS

ANTH 440	History of Anthropological Theory	4
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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 460	Economic Anthropology	4
One world area specialization course	4	

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 UNITS

ANTH 101	Body, Mind and Healing	4
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ONE COURSE (4 UNITS) TO BE SELECTED FROM: UNITS

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
ANTH 273	Shamans, Spirits and Ancestors: Non-Western Religious Traditions	4

UPPER DIVISION COURSES: FOUR OF THE FOLLOWING (16 UNITS): 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	Evolutionary Medicine	4
ANTH 440	History of Anthropological Theory	4
OT 375	The Narrative Structure of Social Action: Narrative, Healing and Occupation	4
SWMS 336	Health, Gender and Ethnicity	4
SWMS 420	Woman, Nature, Culture: The Behavioral Ecology of Women	4

Minor in Southeast Asia and its People

This minor allows students to supplement more narrowly defined departmental majors with a multidisciplinary focus on an area of great importance both to global developments and to cultural heritage issues in California and the United States. There is no language requirement and no required courses, but students must take one lower and four upper division courses dealing with Southeast Asian cultures and people of Southeast Asian heritage in the United States. The focus of this new minor is on transnational connections and the new area of global culture.

LOWER DIVISION		UNITS
Choose one class (4 units)		
ANTH 250	Race and Sexual Politics in Southeast Asia	4
ANTH 273	Shamans, Spirits and Ancestors: Non-Western Religious Traditions	4
AMST 220	The Making of Asian America	4

POSC 120	Comparative Politics	4
REL 131	Religions of Asia	4
REL 150	Religion and Immigration	4
HIST 265	Understanding Race and Sex Historically	4

UPPER DIVISION

Choose four classes (16 units), including at least one class from each list

Southeast Asia		UNITS
ANTH 322	Anthropology of Bali	4
ANTH 373	Magic, Witchcraft, and Healing	4
COLT 379	Nationalism and Postcolonialism in Southeast Asian Cinema	4
GEOG 306	Asia and the Global Economy	4
IR 315	Ethnicity and Nationalism in World Politics	4
POSC 352	Politics of Southeast Asia	4

POSC 377	Asian Political Thought	4
REL 330	Religions of India	4
REL 334	Religion and Colonial Encounter	4

Southeast Asia and the United States

AMST 377	Legacies of Viet Nam	4
HIST 344	The Vietnam War, 1945-1975	4
IR 424	Citizenship and Migration in International Politics	4
POSC 328	Asian American Politics	4
REL 336	Re-viewing Religion in Asian America	4

Note: Courses have no prerequisites.

Interdisciplinary Law and Society Minor

See the Department of Political Science, page 423.

Master of Arts in Anthropology

Degree Requirements

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		UNITS
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 graduate-level courses in anthropology		16
		32

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.

These include Super 8 systems and high-band 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 Cinematic Arts. 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 Cinematic Arts. 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		UNITS
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

Students may apply online for graduate study in the doctoral program at www.usc.edu/admission/graduate/apply. 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 Foundations 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 graduate electives		20

Completion of the program requires 60 units.

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*.

ANTH 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.

ANTH 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.

ANTH 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.

ANTH 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 enrollment:* WRIT 140.

ANTH 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 enrollment:* WRIT 140.

ANTH 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.

ANTH 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.

ANTH 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.

ANTH 202 Introduction to Archaeology (4, Sp) How archaeological research is conceived, planned, and carried out, from survey and excavation to analysis of finds and final reconstruction of ancient cultural systems.

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

ANTH 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. *Concurrent enrollment:* MDA 140.

ANTH 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; *concurrent enrollment:* WRIT 140.

ANTH 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.

ANTH 263g Exploring Culture Through Film (4, FaSpSm) Concepts of social anthropology using filmic representations of societies throughout the world in contrast to written ethnography.

ANTH 273g Shamans, Spirits and Ancestors: Non-Western Religious Traditions (4, Fa) 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.

ANTH 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.

ANTH 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.

ANTH 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.

ANTH 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, IQ, human ecology.

ANTH 310 Archaeology of the Americas (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.

ANTH 311 Old World Archaeology (4, Irregular) Neolithic revolution and origins of civilization in major culture centers such as Mesopotamia, Egypt, India, or China.

ANTH 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.

ANTH 315g North American Indians (4, Fa) North American Indian societies, their major cultural themes, ethnological significance, and comparability with Western European cultural forms; lectures, visuals, and indigene demonstrations.

ANTH 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.

ANTH 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.

ANTH 320 Male and Female in Pacific Society (4, Sp) Cultural variations in gender systems and historical changes due to colonialism and development in Polynesia, Melanesia, Indonesia, and other Pacific Rim cultures.

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

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

ANTH 324 Regional Ethnology: China (4, 2 years, Sp) Anthropological perspective of the ordinary citizens of the Peoples' Republic of China: peasants, workers, bureaucrats, students, and women.

ANTH 326 Ethnography of European Culture (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.

ANTH 327 Anthropology of the Middle East and Islam (4, Sp) Explores written and visual ethnography for study of Middle East community, sociopolitical forms and religious life. Examines scriptural and living Islam and dynamics of contemporary Islamic revival.

ANTH 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.

ANTH 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.

ANTH 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.

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

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

ANTH 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.

ANTH 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.

ANTH 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.

ANTH 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.

ANTH 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.

ANTH 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.

ANTH 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.

ANTH 374 Asian Americans: Ethnic Identity (4, FaSp) (Enroll in SOCI 375)

ANTH 375 Applied Anthropology (4, 2 years, Sp) Evaluation of cultural impact of policy and program designed to stimulate change in traditional communities. Fieldwork assignments in education, health, and development.

ANTH 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.

ANTH 385m Men and Masculinity (4) (Enroll in SWMS 385m)

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

ANTH 395m African American Humor and Culture (4) (Enroll in AMST 395m)

ANTH 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.

ANTH 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.

ANTH 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.

ANTH 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.

ANTH 420 Woman, Nature, Culture: The Behavioral Ecology of Women (4, FaSp) (Enroll in SWMS 420)

ANTH 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.

ANTH 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.

ANTH 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.

ANTH 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.

ANTH 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.

ANTH 470 Multidisciplinary Seminar in Visual Anthropology (2 or 4, Irregular) Application of broadcast journalism, cinema, and anthropology to ethnographic film making.

ANTH 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.

ANTH 475 Ethnographic Film Analysis (4, Irregular) Analysis of film as a tool for investigating primitive and modern cultures and societies.

ANTH 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.

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

ANTH 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 201g plus 8 units of upper division anthropology courses.

ANTH 499 Special Topics (2-4, max 8, Irregular) Current literature: social change, comparative institutions, urbanization, ideology.

ANTH 501 History and Foundations of Anthropology (4, Fa) An historical survey of the development of theory and methods in social anthropology.

ANTH 502 Contemporary Theory in Anthropology (4, Sp) Continuation of ANTH 501, focusing on current models, methods, and issues in social anthropology.

ANTH 503 Regional Ethnography (4, Sp) An intensive analysis of the anthropology of a major culture area.

ANTH 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.

ANTH 509 Key Topics in Linguistic Anthropology (4, FaSp) Introduction to key topics in linguistic anthropology with special focus on interrelations between language, identity, culture, gender, and power in the U.S. and beyond.

ANTH 510 Urban Anthropology (4, Fa) Intensive ethnographic analysis of specialized urban niches, microsettings, ethnicity, community studies.

ANTH 554 Women in Global Perspective (4) (Enroll in SWMS 554)

ANTH 562 The Practice of Ethnography (4, Sp) Major approaches to ethnographic fieldwork are explored in classic cases.

ANTH 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.

ANTH 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.

ANTH 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.

ANTH 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.

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

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

ANTH 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.

ANTH 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.”

ANTH 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.”

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

ANTH 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.

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

ANTH 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.

ANTH 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.

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

Art History

Von KleinSmid Center 351
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Administration

Chair: Eunice Howe, Ph.D.

Faculty

Professors: Selma Holo, Ph.D.; Eunice Howe, Ph.D.*; John Pollini, Ph.D.; Nancy Troy, Ph.D.

Associate Professors: Karen Lang, Ph.D.; Carolyn M. Malone, Ph.D.; Richard Meyer, Ph.D.

Assistant Professors: Daniela Bleichmar, Ph.D.; Sonya Lee, Ph.D.; Megan O'Neil, Ph.D.; Anne Porter, Ph.D. (*Religion*); Ann Marie Yasin, Ph.D. (*Classics*)

*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 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.

Undergraduate Degree

Bachelor of Arts in Art History

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 and Diversity Requirements

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

Major Requirements

The major requires 48 units as follows.

REQUIRED COURSES, LOWER DIVISION		UNITS
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.

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 32 units of the required 128 unit total may be taken as electives.

Art History Honors Program

Candidates for the B.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 upper-division 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.

Bachelor of Arts in Interdisciplinary Archaeology

See Anthropology, page 252, for a complete listing.

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		UNITS
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, 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, 1977-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

<i>(2) Popular Culture</i>			ENGL 392	Visual and Popular Culture	4	COLT 480	Dada and Surrealism	4	
AHIS 370	Modern Art III: 1940-present	4	ENGL 471	Literary Genres and Film	4	COMM 395	Gender, Media and Communication	4	
COLT 365	Literature and Popular Culture	4	ENGL 481	Narrative Forms in Literature and Film	4	COMM 465	Gender in Media Industries and Products	4	
COMM 384	Interpreting Popular Culture	4	HIST 380	American Popular Culture	4	CTCS 192	Race, Class, and Gender in American Film	4	
COMM 450	Visual Culture and Communication	4	PAS 400	Contemporary Public Art	4	CTCS 412	Gender, Sexuality and Media	4	
COMM 455	Advertising and Society	4	PHIL 446	Aesthetics and the Film	4	ENGL 476	Images of Women in Contemporary Culture	4	
COMM 458	Race and Ethnicity in Entertainment and the Arts (prerequisite: COMM 300)	4	<i>(3) Gender and Sexuality</i>			ENGL 478	Sexual/Textual Diversity	4	
CTCS 392	History of the American Film, 1925-1950	4	AHIS 304	Italian Renaissance Art: Old Masters and Old Mistresses	4	HIST 245	Gender and Sexualities in American History	4	
CTCS 393	History of the American Film, 1946-1975	4	AHIS 363	Race, Gender, and Sexuality in Contemporary Art	4	SOCI 437	Sexuality and Society	4	
CTCS 394	History of the American Film, 1977-Present	4	ARCH 442	Women's Space in History: "Hussies," "Harems" and "Housewives"	4	*32 units if students select FA 309 Photography with 8 units of prerequisites			
CTCS 404	Television Criticism and Theory	4							
						Total units required			24

Graduate Degrees

Admission

Admission to all programs is granted through the Graduate School in conjunction with the Department of Art History; all applicants must meet the requirements of both. Interviews are strongly encouraged.

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, Latin American art and art of the ancient Americas.

Master of Arts, Art History

The Master of Arts in Art History is a two-year 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 seven 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 COURSES	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.

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	UNITS
AHIS 501 Problems in the History and Theory of Collecting and Display	4
AHIS 504 Museum Research Assistantship	1
Two of the following 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

Graduate Certificate in Visual Studies

The field of visual studies encompasses a diverse range of images and artifacts as well as the history, processes and technologies of vision itself. This certificate will provide Ph.D. students with the tools necessary to think critically about visual objects and experience and to apply that thinking to their ongoing scholarly work and doctoral research. Students will combine the sustained analysis of specific representations with attention to broader philosophical frameworks and historical conditions.

Graduate students intending to concentrate in visual studies must be admitted to a Ph.D. program at USC. While fulfilling all the requirements for their departmental graduate degree, they may also earn a certificate of competency in visual studies. To receive this certificate, students must take MDA 501 Introduction to Visual Studies: Methods and Debates, a team-taught MDA 599 course, and two other graduate seminars from an approved list of relevant courses, 500 level and above, for a total of at least 16 units. Directed research may not be taken toward certificate requirements.

In addition to the completion of these course requirements, students must demonstrate a focus on visual studies as part of their doctoral dissertation. Alternatively, they may take an oral examination based on three research papers they have written within the context of their visual studies course work. The oral exam will be administered by faculty members affiliated with the visual studies graduate certificate. Faculty will be responsible for judging the adequacy of the visual studies component in the student's dissertation or oral examination.

CERTIFICATE REQUIREMENTS (8 UNITS)		UNITS
MDA 501	Introduction to Visual Studies: Methods and Debates	4
MDA 599	Special Topics	2-4, max 8
APPROVED CERTIFICATE COURSES (8 UNITS)		
AHIS 501	Problems in the History and Theory of Collecting and Display	4
AHIS 505	Seminar in Feminist Theory and Visual Culture	4
AHIS 515	Seminar in Contemporary Art	4, max 16
COLT 640	Seminar in Literature and Visual Culture	4, max 12
COMM 544	The Arts and New Media	4
COMM 584	Seminar: Interpreting Popular Culture	4

CTCS 511	Seminar: Non-Fiction Film/Video	4
CTCS 518	Seminar: Avant-Garde Film/Video	4
CTCS 677	Cultural Theory	4
EALC 535	Proseminar in Chinese Visual Culture	4
ENGL 502	Contemporary Literature and Cultural Theory	4
ENGL 620	Literature and Interdisciplinary Studies	4, max 12
FA 551	Fine Art and Interdisciplinary Studies	4, max 12
GERM 581	Weimar Culture	4
HIST 520	Modernity and its Visual Cultures	4
HIST 620	Research Seminar on Modern Visual Culture	4
PAS 575	Practice of Public Art	2-6, max 12
PAS 585	Public Space, the Public Realm and Public Art	3
SLL 665	Seminar in Russian Culture and the Arts	3, max 9
THTR 525	Seminar in Contemporary Theatre	4
THTR 535	Seminar in Aesthetics of the Theatre	4

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.

Application deadline: December 1.

Course Requirements

Master of Arts and Doctor of Philosophy units total 60. Up to 32 master of arts units from USC or 16 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*.

AHIS 001x Web Site Authoring and Design (2, FaSp) 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.

AHIS 100 Introduction to Visual Culture (4, Sp) The description and analysis of various forms of visual culture, including both mass media and "high" art representations, both Western and non-Western images.

AHIS 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.

AHIS 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.

AHIS 123 Introduction to Art History: Form, Culture, and Communication (4) 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.

AHIS 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.

AHIS 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.

AHIS 127g Arts and Civilizations of Ancient Middle and South America (4, Fa) A survey of the art, architecture, and archaeology of the diverse array of peoples and cultures in ancient Mesoamerica and the South American Andean Mountains.

AHIS 128g Arts of Latin America (4, Sp) Survey of the art, architecture, and visual culture of Latin America from the colonial period to the present, focusing on connections to culture and society.

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

AHIS 220g Medieval Visual Culture (4, Fa) 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.

AHIS 230 Art and Culture in Early Modern Europe (4) 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.

AHIS 250m Modernity and Difference: Critical Approaches to Modern Art (4, Fa) Consideration of various categories of "The Modern" as they have been constructed in Western art of the late 19th and 20th centuries.

AHIS 255g Culture Wars: Art and Social Conflict in the USA, 1900-Present (4) Examination of social conflicts and political controversies in American culture through the lens of visual art and photography. *Concurrent enrollment:* WRIT 140

AHIS 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.

AHIS 282 Korean Art (4) 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.

AHIS 284g Art in Context: Introduction to the Chinese Visual World (4) 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.

AHIS 304m Italian Renaissance Art: Old Masters and Old Mistresses (4) An introduction to Italian Renaissance art with emphasis on the role of gender and sexuality in the creation of "masterpieces."

AHIS 318 Arts of the Ancient Andes (4) Survey of the art and architecture of the ancient cultures of the Andes in South America.

AHIS 319 Mesoamerican Art and Culture (4) Introductory survey of painting, sculpture, and architecture of Mesoamerica before the Spanish conquest presented in their social, cultural, and political contexts.

AHIS 320 Aegean Archaeology (Enroll in CLAS 323)

AHIS 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.).

AHIS 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.).

AHIS 330 Medieval Art (4) Introductory survey of art and architecture of Christianity from 300-1300; biblical themes and classical traditions; cultural and historical analysis of medieval art.

AHIS 343 Renaissance Art (4) 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.

AHIS 344 Baroque Art (4) Painting, sculpture and architecture in 17th century Europe, north and south. (Duplicates credit in former AHIS 353 and AHIS 356.)

AHIS 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.

AHIS 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.)

AHIS 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.

AHIS 364m Myths, Arts, Realities: Visual Culture in California, 1849 to the Present (4) Diverse interpretations of “the California experience and lifestyle” in paintings, sculpture, photography, cinema, public art and popular culture of the last 150 years.

AHIS 365m African American Art (4) 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.

AHIS 368 Modern Art I: 1700-1850 (4) 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.)

AHIS 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.

AHIS 370 Modern Art III: 1940 to the Present (4, Sp) Questions of social engagement and political address structure this examination of major movements in art since 1940. (Duplicates credit in former AHIS 372.)

AHIS 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.

AHIS 376 Introduction to African Art (4) 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.

AHIS 377 Spanish Colonial Art and Architecture (4) 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.

AHIS 378 Modern Russian Art (4) (Enroll in SLL 378)

AHIS 384 Early Chinese Art (4) A survey of Chinese architecture, ceremonial bronzes, sculpture, ceramics and painting from antiquity through the T’ang Dynasty.

AHIS 385 Later Chinese Art (4) A survey of Chinese painting from 900 to the present, emphasizing the role of painting within the context of Chinese intellectual history.

AHIS 386 Early Japanese Art (4) A survey of Japanese Buddhist and secular architecture, sculpture and painting from antiquity to 1333, stressing the relation of art to cultural context.

AHIS 387 Later Japanese Art (4) A survey of Japanese architecture, garden design, ceramics, and painting from 1333 to the present, stressing the role of art within cultural context.

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

AHIS 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.

AHIS 411 Studies in Arts of the Ancient Americas (4, max 16) In-depth exploration of a specified topic in the arts of the ancient Americas, which includes North, Central, and South America.

AHIS 420 Studies in Ancient Art (4, max 16, Irregular) In-depth exploration of specified topics within the area of Ancient art and architecture.

AHIS 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.

AHIS 430 Studies in Renaissance Art (4) In-depth 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.

AHIS 433 Studies in Medieval Art (4, max 16) In-depth exploration of specified topics within the area of Medieval art and architecture.

AHIS 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.

AHIS 453 Studies in Baroque Art (4, max 16) In-depth exploration of specified topics within the area of 17th century art and architecture. *Recommended preparation:* AHIS 230 or AHIS 344.

AHIS 460 Studies in 18th and 19th Century Art (4, max 8) In-depth exploration of specified topics within the area of 18th and 19th century art and architecture.

AHIS 465 Studies in American Art (4, max 8) In-depth exploration of a specified topic in the history of American art.

AHIS 466 Studies in the Decorative Arts and Design (4) Exploration of a specified topic in the history of the decorative arts and design in Europe and America.

AHIS 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.

AHIS 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.

AHIS 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.

AHIS 470 Studies in Contemporary Art (4) In-depth exploration of specified topics within the area of contemporary art and architecture.

AHIS 475m Blackness in American Visual Culture (4) A historical overview of how people of African descent have been represented visually in American culture.

AHIS 477 Studies in Visual and Material Culture (4, max 16) In-depth exploration of selected topics in visual and material culture.

AHIS 481 Studies in Japanese Art (4, max 16) In-depth exploration of specified topics within the area of Japanese art and architecture.

AHIS 484 Studies in Chinese Art (4, max 16) In-depth exploration of specified topics within the area of Chinese art and architecture.

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

AHIS 494 Undergraduate Proseminar in Art History (4, FaSp) Historiography and methodology: introduction to techniques of research and writing. Required of all art history majors, preferably in the junior year.

AHIS 495ab Undergraduate Honors Thesis (2-2, FaSp) Research and writing of original thesis under guidance of faculty member. Departmental approval.

AHIS 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.

AHIS 499 Special Topics (2-4, max 8) Comprehensive exploration of particular aspects of the history of art.

AHIS 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.

AHIS 501 Problems in the History and Theory of Collecting and Display (4) Explores the history of patronage, collecting and display in the private and the public spheres (e.g., salons, galleries, museums, and international expositions).

AHIS 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.

AHIS 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.

AHIS 504 Museum Research Assistantship (1, FaSp) Working within an institution with a collection and reflecting, in class meetings, upon how collections are formed, shaped and used.

AHIS 505 Seminar in Feminist Theory and Visual Culture (4) 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.

AHIS 509 Seminar in Arts of the Ancient Americas (4, max 16) In-depth exploration of a specified topic in the arts of the ancient Americas, which includes North, Central, and South America.

AHIS 510 Seminar in Ancient Art (4, max 16)

AHIS 511 Seminar in Medieval Art (4, max 16)

AHIS 512 Seminar in Renaissance Art (4, max 16) *Recommended preparation:* relevant languages.

AHIS 513 Seminar in Baroque Art (4, max 16)

AHIS 514 Seminar in 18th and 19th Century European Art (4, max 16)

AHIS 515 Seminar in Contemporary Art (4, max 16)

AHIS 517 Seminar in Korean Art (4, max 8) In-depth exploration of a specified topic in the history of Korean art.

AHIS 518 Seminar in Chinese Art (4, max 16)

AHIS 519 Seminar in Japanese Art (4, max 16)

AHIS 520 Seminar in Modern Art (4, max 16) In-depth exploration of a specified topic within the area of European art of the late 19th and early 20th centuries.

AHIS 521 Seminar in Modern German Art (4, max 8) In-depth exploration of a specific topic in modern German art of the 19th and early 20th centuries.

AHIS 522 Writing (and) the History of Art (4) 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.

AHIS 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.

AHIS 525 Seminar in American Art (4) In-depth exploration of a specified topic in the history of American art.

AHIS 550 Art, Business and the Law (4) 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.

AHIS 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.

AHIS 594abz Master's Thesis (2-2-0) Credit upon acceptance of thesis. Graded IP/CR/NC.

AHIS 599 Special Topics (2-4, max 8, Irregular) Comprehensive exploration of particular aspects of the history of art.

AHIS 794abcdz Doctoral Dissertation (2-2-2-2-0, 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.

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 107
(213) 740-5774
FAX: (213) 740-8123
Email (undergraduate programs):
biodept@usc.edu
Email (graduate programs):
marinebio@usc.edu, molecule@usc.edu,
neurosci@usc.edu

Chair: Douglas Capone, 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 A. 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 Professor of Biological Sciences: Larry W. Swanson, Ph.D.

Paxson H. Offield Professor of Fisheries Ecology: Dennis Hedgecock, Ph.D.

Gabilan Assistant Professor of Biological Sciences: Michelle Arbeitman, Ph.D.

Professors: Michael A. Arbib, Ph.D. (*Computer Science*); Norman Arnheim, Ph.D.; Robert F. Baker, Ph.D.; Gerald Bakus, Ph.D.; Michel Baudry, Ph.D.; Sarah Bottjer, Ph.D.; Douglas G. Capone, Ph.D.; David Caron, Ph.D.; Xiaojiang Chen, Ph.D.; Susan Forsburg, Ph.D.; Jed A. Fuhrman, Ph.D.*; Myron F. Goodman, Ph.D.; Dennis Hedgecock, Ph.D.; Albert A. Herrera, Ph.D.* (*Vice Chair*); David Hutchins, Ph.D.; Dale Kiefer, Ph.D.; Chien-Ping Ko, Ph.D.; Donal T. Manahan, Ph.D. (*Wrigley Director*); William O. McClure, Ph.D.*; Anthony F. Michaels, Ph.D.; James W. Moffett, Ph.D.; Sergey Nuzhdin, Ph.D.; John A. Petruska, Ph.D.; Michael Quick, Ph.D. (*Executive Vice Dean*); Cornelius W. Sullivan, Ph.D.; Fengzhu Sun, Ph.D.; Miriam M. Susskind, Ph.D.; Larry W. Swanson, Ph.D.; Simon Tavaré, Ph.D.; Michael S. Waterman, Ph.D.; Alan Watts, Ph.D.; Sergio Sanudo-Wilhelmy, Ph.D.

Associate Professors: Oscar M. Aparicio, Ph.D.; Donald Arnold, Ph.D.; Lin Chen, Ph.D.; Ting Chen, Ph.D.; Suzanne Edmands, Ph.D.; Katrina J. Edwards, Ph.D.; Steven Finkel, Ph.D.; John F. Heidelberg, Ph.D.; Judith

Hirsch, Ph.D.; Lei Li, Ph.D.; Emily R. Liman, Ph.D.; Magnus Nordborg, Ph.D.; Peter M. Shugarman, Ph.D.*; John Tower, Ph.D.

Assistant Professors: Frank Alber, Ph.D.; Michelle N. Arbeitman, Ph.D.; Samantha Butler, Ph.D.; Tansu Celikel, Ph.D.; Liang Chen, Ph.D.; Andrew Gracey, Ph.D.; Karla B. Heidelberg, Ph.D.; David D. McKemy, Ph.D.; Eric A. Webb, Ph.D.; Xuelin Wu, Ph.D.; Xianghong Zhou, Ph.D.; Wiebke Ziebis, Ph.D.

Adjunct Professors: Luis Chiappe, Ph.D.; Kirk Fitzhugh, Ph.D.; Gordon Hendler, Ph.D.; Joel W. Martin, Ph.D.

Adjunct Associate Professors: Richard Pieper, Ph.D.; Christine Thacker, Ph.D.

Adjunct Assistant Professors: Angel Valdes, Ph.D.; Regina Wetzer, 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.; Peter Calabrese, Ph.D.; Fei-Xue Fu, Ph.D.; Myrna Jacobson, Ph.D.; Hussam Jourdi, Ph.D.; Arshad Khan, Ph.D.; Judy D. Lemus, Ph.D.; William Nelson, Ph.D.; Phuong Pham, Ph.D.; Astrid Schnetzer, Ph.D.; Rick Thompson, Ph.D.

Emeriti Professors: Bernard C. Abbott, Ph.D.*; Michael Appleman, Ph.D.; James W. Bartholomew, Ph.D.; Robert Bils, Ph.D.; Richard Deonier, 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.; Russel Zimmer, Ph.D.

*Recipient of university-wide or college teaching award.

Academic Program Staff

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

Programs

The Department of Biological Sciences has research faculty with specialties in three disciplines: marine environmental biology, molecular and computational biology, and neuroscience. 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 a Ph.D. in biology (with options in either marine environmental biology, neuroscience or integrative and evolutionary biology), a Ph.D. in molecular and computational biology and computational biology and bioinformatics, and an M.S. in marine environmental biology. The department no longer accepts applicants for the terminal master's programs.

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

The Biological Sciences Department in conjunction with the USC Wrigley Institute for Environmental Studies (WIES) sponsors two, semester-long programs at USC's Phillip K. Wrigley Marine Sciences Center (WMSC) on Santa Catalina Island. Each of the semesters consists of a 16 unit program

with three upper division lab courses and a special 4-unit independent research course (BISC 490).

The spring program is focused on population biology and animal physiology, and the fall semester on microbial ecology and the interactions of microbes and the global environment. The program is open to all biology majors as well as students in other departments and other institutions with a strong biology background. Students are primarily in their junior or senior years and may participate in either or both semesters.

All the courses are taught by USC faculty and supported by USC graduate student teaching assistants. The classes are specialized to take advantage of the unique facilities and setting of Santa Catalina Island.

Students live on Catalina Island for the entire semester. Rates for room and board at the USC Wrigley Marine Science Center are comparable to those on campus. The program follows the same calendar schedule as the University Park campus. For those wishing to return to the mainland on the weekend – free transportation is provided each Friday to leave and each Monday to return.

For more information, students should contact Dr. Linda Duguay, program coordinator, Hancock 209F, duguay@usc.edu or catsem@usc.edu or Cindy Joseph, program assistant, cjoseph1107@gmail.com or (213) 740-6780 in the Wrigley Offices on the fourth floor of Hancock. Additional information can also be found at wrigley.usc.edu/spotlight/catalina_semester.html.

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.

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 COURSES, LOWER DIVISION		UNITS
BISC 120L	General Biology: Organismal Biology and Evolution, or	
BISC 121L	Advanced General Biology: Organismal Biology and Evolution	4
BISC 220L	General Biology: Cell Biology and Physiology, or	
BISC 221L	Advanced General Biology: 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		UNITS
CHEM 105aLbL	General Chemistry, or	
CHEM 115aLbL	Advanced General Chemistry	4-4
CHEM 322abL	Organic Chemistry, or	
CHEM 325abL	Organic Chemistry	4-4
MATH 125	Calculus I	4
MATH 208x	Elementary Probability and Statistics, or	
BISC 305	Introduction to Statistics for Biologists	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

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. All major core courses must be taken on a letter grade basis.

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 COURSES, LOWER DIVISION		UNITS
BISC 120L	General Biology: Organismal Biology and Evolution, or	
BISC 121L	Advanced General Biology: Organismal Biology and Evolution	4
BISC 220L	General Biology: Cell Biology and Physiology, or	
BISC 221L	Advanced General Biology: 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	4-4
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 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 Courses

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. All major core courses must be taken on a letter grade basis.

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, four-unit 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		UNITS
BISC 120L	General Biology: Organismal Biology and Evolution, or	
BISC 121L	Advanced General Biology: Organismal Biology and Evolution	4
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 403	Advanced Molecular Biology	4
BISC 435	Advanced Biochemistry	4
CHEM 105aLbL	General Chemistry, or	
CHEM 115aLbL	Advanced General Chemistry	4-4

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 the	
	Life Sciences	4
MATH 125	Calculus I	4
MATH 126	Calculus II	4
BISC 305	Introduction to Statistics	
	for Biologists, or	
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

Eight units of upper division, non-core course work available for major credit in biological sciences or chemistry are required. Students enrolled in BISC 490 are limited to 4 units, while students enrolled in CHEM 490 may complete up to 8 units. No more than two seminars (BISC 460 to BISC 462), totaling 4 units, may be applied to the upper division elective requirement.

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/biotechnical 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.

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		UNITS
<i>Biological Sciences</i>		
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: BISC 300L, BISC 403, BISC 450L

Chemistry

CHEM 105aLbL	General Chemistry	4-4
CHEM 322aL	Organic Chemistry	4

Recommended: CHEM 322bL, CHE 489

Business

ACCT 410x	Accounting for Non-Business 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 Craniofacial and Dental Biotechnology

For a complete listing of course requirements, see the School of Dentistry, page 502.

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 (22 UNITS)		UNITS
Any five courses from among:		
BISC 120L	General Biology: Organismal Biology and Evolution, or	
BISC 121L	Advanced General Biology: Organismal Biology and Evolution	4
BISC 220L	General Biology: Cell Biology and Physiology, or	
BISC 221L	Advanced General Biology: 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 course:

BISC 321x	Science, Technology and Society	2
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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 five programs of study within the Department of Biological Sciences at the time of their admission to graduate study, all of which lead to a Ph.D. degree: marine environmental biology and neurobiology/cell biology (Ph.D. in biology with emphasis in either chosen area); molecular biology; computational biology and bioinformatics; and integrative evolutionary biology. The five programs emphasize different levels of biological organization and consequently may require somewhat different undergraduate preparation. The department no longer accepts applicants for the terminal master's degree programs.

Biology

The graduate programs in biology with emphases in marine environmental biology and neuroscience provide education and training of biologists interested in living systems ranging from cellular to ecosystem levels of organization, investigated by laboratory or fieldwork. 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 from other institutions, including the Los Angeles County Museum of Natural History, Childrens Hospital Los Angeles and the House Ear Institute. 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) from an accredited four year college or university, or in mathematics or engineering; required background 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 interest. 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.

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.

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 8 units of biology graduate core courses (BISC 582, BISC 584 and BISC 585) or neurobiology courses (NEUR 524 and either NEUR 531 or NEUR 532), 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.

Master of Science in Marine and Environmental Biology

The Master of Science degree in Marine and Environmental Biology (MEB) is designed to provide admitted students with a rigorous, quantitative and focused introduction to the burgeoning fields and breadth of topics in marine environmental biology/chemistry, geobiology, oceanography, conservation biology and population dynamics (depending upon the concentration selected). MEB provides students with independent research experiences that satisfy their own specific interests. The program is intended to position and stimulate students for possible advanced study leading to a Ph.D. in one of the areas stated above, and/or provide a unique facet to the background of a prospective medical student. The program will also provide fundamental tools and expertise for entry into a master's level position in academic, government or private sector research laboratories. It will prepare students interested in governmental and non-government (NGO) environmental regulatory science and forge career pathways into private sector positions in environmental consulting and business.

Applicants must possess a cumulative and science GPA of 3.0 or higher and have the following courses completed prior to admission: one year of introductory biology, one semester of molecular biology, one semester of biochemistry, one year of general chemistry, and one year of organic chemistry. All of the above must carry labs and be available for major credit in the natural sciences at a four-year college or university.

Applicants interested in using course work completed while an undergraduate may apply for the progressive master's degree as early as their junior year.

CORE COURSES		UNITS
BISC 582	Advanced Biological Oceanography	4
BISC 585	Scientific Writing and Reviewing	2
BISC 590	Directed Research	4
Completion of two semesters of:		
BISC 529	Seminar in Marine Biology	1-1

CORE SEMINAR ELECTIVE		UNITS
Completion of one advanced seminar from among BISC 530, BISC 531, BISC 532, BISC 533, BISC 534, BISC 535, BISC 536		2

GRADUATE ELECTIVE REQUIREMENT		UNITS
Eighteen units chosen from the following list, of which 8 units must be within the Department of Biological Sciences (BISC), and no more than 8 units can be at the 400-level.		
BISC 403	Advanced Molecular Biology	4
BISC 419	Environmental Microbiology	4
BISC 431L	Aquatic Microbiology – Catalina Semester	4
BISC 435	Advanced Biochemistry	4
BISC 437L	Comparative Physiology of Animals	4
BISC 445L	Fundamentals of Vertebrate Biology	4
BISC 447L	Island Biogeography and Field Ecology	4
BISC 450L	Principles of Immunology	4
BISC 455L	Molecular Approaches to Microbial Diversity – Catalina Semester	4
BISC 460	Seminar in Marine and Environmental Biology	2, max 4
BISC 469L	Marine Biology	4
BISC 473L	Biological Oceanography	4
BISC 474L	Ecosystem Function and Earth Systems	4

BISC 483	Geobiology and Astrobiology	4	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.
BISC 502ab	Molecular Genetics and Biochemistry	4-4	
BISC 510ab	Integrative and Evolutionary Biology	4-4	
BISC 530	Advanced Seminar in Plankton Biology	2	
BISC 531	Advanced Seminar on the Physiology of Marine Organisms	2	
BISC 532	Advanced Seminar in Molecular and Microbial Ecology	2	
BISC 533	Advanced Seminar in Remote Sensing and Modeling	2	
BISC 534	Advanced Seminar in Population Genetics of Marine Organisms	2	
BISC 536	Advanced Seminar in Marine/Global N Cycle	2	
BISC 584	Faculty Lecture Series	2	
CE 443	Environmental Chemistry	3	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.
CE 463L	Water Chemistry and Analysis	3	
CE 503	Microbiology for Environmental Engineers	3	
CE 513L	Instrumental Methods for Environmental Analysis	3	
GEOG 571	Fundamentals of Sediment Transport	4	
GEOG 575	Coastal Geomorphology	4	
GEOG 587	GPS/GIS Field Techniques	4	
GEOG 592	Quantitative Methods in Geography	4	
GEOG 593	Field Techniques for Environmental Monitoring	4	
GEOL 412	Oceans, Climate, and the Environment	3	
GEOL 460L	Geochemistry and Hydrogeology	3	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 529 (4), BISC 582 (4), BISC 584 (2), BISC 585 (2), four advanced graduate seminars (8) and a statistics course approved by the student's advisor.
GEOL 500	Marine Paleocology	3	
GEOL 501	Paleobiology	3	
GEOL 514	Marine Geology	3	
GEOL 555	Paleoceanography	3	
GEOL 560	Marine Geochemistry	3	
GEOL 564	Isotope Geochemistry	3	
GEOL 567	Stable Isotope Geochemistry	3	
GEOL 577	Micropaleontology	3	
OS 512	Introduction to Chemical and Physical Oceanography	3	
PPD 694	Coastal Policy and Planning	4	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 NEUR 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.

Total required units: 32

Doctor of Philosophy in Biology

Application deadline: January 1

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

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

Application deadline: January 1

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.

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

Application deadline: December 15

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.

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.

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.

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

Application deadline: December 15

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 Examination

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*.

BISC 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.

BISC 102Lxg Humans and Their Environment (4, FaSp) 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.

BISC 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.

BISC 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.

BISC 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.

BISC 120Lxg General Biology: Organismal Biology and Evolution (4, Fa) 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 112L, BISC 113L, and BISC 121L.)

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

BISC 140 Human Impact on the Ocean Planet (4) Overview of marine biodiversity and human influence on marine biota; eutrophication in bays and estuaries; global movement of invasive species, harmful algal blooms, fishing activities and sewage/chemical pollution.

BISC 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.

BISC 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.

BISC 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 120L or BISC 121L.

BISC 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 220L or BISC 221L.

BISC 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 credit in former BISC 312Lx.) *Prerequisite:* high school biology; *recommended preparation:* BISC 120L or BISC 121L.

BISC 220L General Biology: Cell Biology and Physiology (4, Sp)

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 110L, BISC 111L, and BISC 221L.) *Recommended preparation:* high school chemistry; BISC 120L or BISC 121L.

BISC 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 110L, BISC 111L, and BISC 220L) *Prerequisite:* BISC 120L or BISC 121L; *corequisite:* CHEM 105bL or CHEM 115bL.

BISC 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.

BISC 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 120L or BISC 121L; BISC 220L or BISC 221L; CHEM 105bL or CHEM 115bL; departmental approval.

BISC 300L Introduction to Microbiology (4, Sp) 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 320L; CHEM 322aL or CHEM 325aL.

BISC 305 Introduction to Statistics for Biologists (4, Fa) Statistical methods in biological science and medicine, including populations and samples, random sampling, confidence intervals, paired samples and regression.

BISC 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.

BISC 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 220L or BISC 221L; BISC 120L or BISC 121L; *recommended preparation:* BISC 320L.

BISC 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 120L or BISC 121L.

BISC 320L Molecular Biology (4, Fa) 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 105bL or CHEM 115bL.

BISC 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 120L or BISC 121L or BISC 220L or BISC 221L; CHEM 105aL or CHEM 115aL; PHYS 135aL or PHYS 151L.

BISC 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 120L or BISC 121L; BISC 220L or BISC 221L; BISC 320L; CHEM 322aL; *corequisite:* CHEM 322bL or CHEM 325bL.

BISC 330L Biochemistry (4, Sp) Basic biochemical principles; classes of molecules — structure and function; cellular energetics. (Duplicates credit in BISC 316L.) *Prerequisite:* BISC 320L; CHEM 322aL.

BISC 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 120L or BISC 121L.

BISC 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 120L or BISC 121L; BISC 220L or BISC 221L; *recommended preparation:* BISC 320L.

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

BISC 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 320L; *recommended preparation:* BISC 313 or BISC 325.

BISC 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 120L or BISC 121L; BISC 220L or BISC 221L; *recommended preparation:* two from BISC 313, BISC 320L, BISC 325 and BISC 330L.

BISC 406L Biotechnology (4, Fa) Techniques in molecular biology and biochemistry applied to prokaryotic and eukaryotic model systems; applications of recombinant DNA and genomic technology. *Prerequisite:* BISC 320L; *recommended preparation:* BISC 313 or BISC 325.

BISC 410 Applications of Molecular Biology to Medicine (4, Sp) Advances and trends in the understanding, diagnosis and treatment of human diseases. Senior standing. *Prerequisite:* BISC 330L.

BISC 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 220L; BISC 320L.

BISC 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 330L; *recommended preparation:* BISC 300L.

BISC 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 220L or BISC 221L.

BISC 422L Neurobiology Laboratory (2, Sp) 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.

BISC 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.

BISC 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.

BISC 426 Principles of Neural Development (4, Sp) Basic phenomena and principles of neural development, their relation to functional development of neural circuits, behavior, and disease. General concepts and experimental approaches are emphasized. *Prerequisite:* BISC 421.

BISC 427 The Global Environment (4, Sp) Earth's development as a habitable planet, from origin to human impacts on global biogeochemical cycles in the ocean, land, atmosphere. Discussion of environmental alternatives. *Prerequisite:* BISC 120L or BISC 121L; CHEM 105bL or CHEM 115bL.

BISC 431L Aquatic Microbiology – Catalina Semester (4, Fa) Introduction to the habitat, phylogenetic, physiological and metabolic diversity of microbial life in aquatic environments. (Duplicates credit in BISC 419.) *Prerequisite:* BISC 330L.

BISC 435 Advanced Biochemistry (4, Sp) Macromolecular structure and function; enzymology; metabolic regulation. Lecture, 3 hours; discussion, 2 hours. *Prerequisite:* BISC 330L.

BISC 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 120L or BISC 121L; BISC 220L or BISC 221L; *recommended preparation:* two from BISC 313, BISC 320L, BISC 325 and BISC 330L.

BISC 445L Fundamentals of Vertebrate Biology (4, Sp) Evolution and comparative anatomy of vertebrates. Lecture, 3 hours; laboratory, 3 hours. Junior standing. *Prerequisite:* BISC 120L or BISC 121L; BISC 220L or BISC 221L; *recommended preparation:* two from BISC 313, BISC 320L, BISC 325 and BISC 330L.

BISC 447L Island Biogeography and Field Ecology (4, Sp) Biogeography, geology, ecology, climate, flora, and fauna of terrestrial and marine environments of Catalina and the Channel Islands including laboratory and field techniques of ecology. Taught on Catalina Island. *Prerequisite:* BISC 120L or BISC 121L.

BISC 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.

BISC 455L Molecular Approaches to Microbial Diversity – Catalina Semester (4, Fa) Overview and practical application of genetic and immunological techniques for examining diversity and community structure of natural microbial assemblages in aquatic ecosystems. *Prerequisite:* BISC 320L; *corequisite:* BISC 431L.

BISC 456L Conservation Genetics (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. (Duplicates credit in BISC 373L.) *Prerequisite:* BISC 120L or BISC 121L; BISC 220L or BISC 221L; *recommended preparation:* BISC 320L; BISC 313 or BISC 325.

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

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

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

BISC 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 120L or BISC 121L.

BISC 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 120L or BISC 121L; BISC 220L or BISC 221L; *recommended preparation:* two from BISC 313, BISC 320L, BISC 325 and BISC 330L.

BISC 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 120L or BISC 121L.

BISC 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 320L.

BISC 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.

BISC 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 other planets. *Prerequisite:* BISC 120L, CHEM 105bL.

BISC 490x Directed Research (2-8, max 8, FaSp5m) Individual research and readings. Not available for graduate credit.

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

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

BISC 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 220L or BISC 221L; *recommended preparation:* two from BISC 313, BISC 320L, BISC 325 and BISC 330L.

BISC 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.

BISC 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.

BISC 505 Genomics and Molecular Genetics (4, Sp) 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 502b.

BISC 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.

BISC 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.

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

BISC 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.

BISC 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.

BISC 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.

BISC 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.

BISC 534 Advanced Seminar in Population Genetics of Marine Organisms (2) 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.

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

BISC 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.

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

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

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

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

BISC 572 Systems Physiology and Disease I (4, Fa) (Enroll in INTD 572)

BISC 574 Systems Physiology and Disease II (4, Sp) (Enroll in INTD 573)

BISC 577ab Computational Molecular Biology Laboratory (a: 2, Sp; b: 2, Fa) Practical experience in computational molecular biology applications. Mathematical and statistical software packages relevant to genomic analysis. Retrieval and analysis of genomic data from databases. (Duplicates credit in former MATH 577ab.) *Recommended preparation:* higher level programming language.

BISC 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.

BISC 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.

BISC 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.

BISC 584 Faculty Lecture Series (2, Sp) Multi-instructor 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.

BISC 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.

BISC 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.

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

BISC 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.

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

Chemistry

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Chair: Mark E. Thompson, Ph.D.

Faculty

Lloyd Armstrong, Jr. *Chair for Science and Engineering*: Hanna Reisler, Ph.D.

Ray R. Irani, *Chairman of Occidental Petroleum Corp., 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 Organic Polymer Chemistry*: Nicos Petasis, Ph.D.

George A. and Judith A. Olah *Nobel Laureate Chair in Hydrocarbon Chemistry*: G.K. Surya Prakash, Ph.D.

Professors: Robert Bau, Ph.D.*; Xiaojiang Chen, Ph.D. (*Biological Sciences*); Thomas C. Flood, Ph.D.; Myron F. Goodman, Ph.D. (*Biological Sciences*); Thieo E. Hogen-Esch, 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.

Associate Professors: Stephen E. Bradforth, Ph.D.; Lin Chen, Ph.D. (*Biological Sciences*); Kyung Woon Jung, Ph.D.; Anna Krylov, Ph.D.; Daniel A. Lidar, Ph.D.; Richard W. Roberts, Ph.D.

Assistant Professors: Richard L. Brutchey, Jr., Ph.D.; Stephen B. Cronin, Ph.D. (*Electrical Engineering/Electrophysics*); Peter Z. Qin, Ph.D.; Clay C. Wang, Ph.D. (*Pharmaceutical Sciences*); Travis J. Williams, Ph.D.; Chongwu Zhou, Ph.D. (*Electrical Engineering*)

Adjunct Professor: Karl O. Christe, Ph.D.

Emeritus Professors: Robert A. Beaudet, Ph.D.; Sidney W. Benson, Ph.D.; Otto Schnepf, Ph.D.; Gerald A. Segal, Ph.D.; Howard S. Taylor, Ph.D.; James C. Warf, Ph.D.; William P. Weber, 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		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.)

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 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

		UNITS
CHEM 300L	Analytical Chemistry	4
CHEM 325aLbL	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
Chemistry elective*		4
Earth Sciences elective*		4
Physics elective*		4
Three additional electives from these fields*		4

*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 266.

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 267, 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 266.

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

Application deadline: January 1

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 CHEM 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)

Application deadline: January 1

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*.

CHEM 050x General Chemistry Tutorial (2, FaSp) Weekly tutorial for selected students in CHEM 105aL. Strong emphasis on chemical mathematics and key concepts in general chemistry. Topics parallel lectures in CHEM 105aL. Not available for degree credit. Graded CR/NC. Discussion, 2 hours. *Concurrent enrollment*: CHEM 105aL.

CHEM 102Lx 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.

CHEM 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 105aLg or CHEM 115aL. (Duplicates credit in CHEM 115aL or CHEM 115bL.)

CHEM 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.)

CHEM 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.

CHEM 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.

CHEM 290abcd Special Laboratory (1-1-1-1, FaSpSm) Laboratory component for CHEM 105a, 105b, 322, or 322b for students with equivalent lecture credit from another institution. *Prerequisite*: consent of department head.

CHEM 300L Analytical Chemistry (4, FaSp) 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 105bL or CHEM 115bL.

CHEM 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 pre dental students and some categories of biology majors and engineers. *Prerequisite for aL*: CHEM 105bL or CHEM 115bL; *for bL*: CHEM 322aL.

CHEM 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.

CHEM 332L Physical Chemical Measurements (4, Sp) Experimental study of topics discussed in 430ab; adsorption, magnetic susceptibility; electron spin resonance, kinetics, equilibria, molecular spectra and structure, viscosity, dielectric properties. Discussion, 1 hour; laboratory, 9 hours. *Corequisite*: CHEM 430b.

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

CHEM 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 300L, CHEM 322bL or CHEM 325bL.

CHEM 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.

CHEM 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 300L, CHEM 322bL or CHEM 325bL; MATH 225 or MATH 226 or MATH 245; PHYS 152; *for b*: CHEM 430a and PHYS 153.

CHEM 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 300L, CHEM 322bL or CHEM 325bL; MATH 126; PHYS 135bL or PHYS 152L.

CHEM 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 105bL or CHEM 115bL and CHEM 322bL or CHEM 325bL.

CHEM 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.

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

CHEM 499 Special Topics (2-4, max 8) Lectures and discussions on specialized topics in chemistry. *Prerequisite*: CHEM 300L; CHEM 322abL or CHEM 325abL.

CHEM 510x Alternative Energy Technologies and Options (4, Fa) Introduce the essential scientific background to understand complex issues involving energy use and its environmental consequences. Critically analyze energy issues that will shape policy decisions. Not available for credit for doctoral students in chemistry.

CHEM 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.

CHEM 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.

CHEM 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.

CHEM 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.

CHEM 527 Synthetic Organic Chemistry (4) A survey of representative groups of widely used synthetic organic reactions; emphasis on scope, limitations, and stereochemical consequences.

CHEM 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.

CHEM 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.

CHEM 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.

CHEM 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.

CHEM 540 Introduction to Statistical Mechanics (4) Study of macroscopic systems from molecular viewpoint using statistical mechanics: ensembles, fluctuations, gases, gas-solid interfaces, crystals, polymers, critical phenomena, non-equilibrium systems.

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

CHEM 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.

CHEM 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.

CHEM 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.

CHEM 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.

CHEM 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 presentations of current research topics. *Recommended preparation:* some research experience and familiarity with literature search.

CHEM 575 Modern Trends in Physical Chemistry (2, FaSp) Emerging research areas in physical and theoretical chemistry through a thorough discussion of seminal research articles and presentations of current research topics. *Recommended preparation:* some research experience and familiarity with literature search.

CHEM 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 588a before *b*.

CHEM 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.

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

CHEM 599 Special Topics (2-4, max 8) Special topics in chemistry.

CHEM 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.

CHEM 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.

CHEM 661 Selected Topics in Polymer Synthesis (2-4, max 8) Advanced level study in selected areas of polymer synthesis. Critical evaluation of recent advances. Topic examples: ionic polymerization; stereo chemistry of polymers; silicon polymers; ladder polymers.

CHEM 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.

CHEM 794abcdz Doctoral Dissertation (2-2-2-2-0, 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.*);
 Thomas N. Habinek, Ph.D.*; Claudia Moatti,
 Ph.D.; William G. Thalmann, Ph.D.*

Associate Professors: Vincent Farenga, Ph.D.;
 Susan Lape, Ph.D.

Assistant Professors: Anne Porter, Ph.D.
 (*Religion*); Kevin van Bladel, Ph.D.; Daniel
 Richter, Ph.D.; Ann Marie Yasin, Ph.D. (*Art*
History)

Associate Professor Emerita: Jane Cody, Ph.D.

*Recipient of university-wide or college teaching award.

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.

Classics Major Requirements for the Bachelor of Arts

All classics majors are required to take the following introductory courses: CLAS 150 *The Greeks and the West* and CLAS 151 *Civilization of Rome*. 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.

Bachelor of Arts in Interdisciplinary Archaeology

See Anthropology, page 252, for a complete listing.

Classics Minor

The classics department minor requires one language course at the 100-level or above.

One course from either A or B:

A.		
CLAS 150	<i>The Greeks and the West</i>	4
CLAS 151	<i>Civilization of Rome</i>	4
CLAS 280	<i>Classical Mythology</i>	4
B.		
Second and third semester Latin or Greek courses:		
GR 150	Greek II	4
GR 220	Greek III	4
LAT 150	Latin II	4
LAT 222	Latin III	4
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 442, for course requirements.

Minor in Critical Approaches to Leadership

See the Department of Interdisciplinary Studies, page 362, for course requirements.

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.

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 4-unit 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

Application deadline: January 1

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 Latin Literature	4
CLAS 565	Seminar in Theoretical Approaches to Roman Culture and Literature	4
CLAS 570	Seminar in Imperial Latin Literature	4
CLAS 575	Seminar in Roman History, Culture, and Society	4
THEORY, SKILLS, METHODS 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.

CLAS 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.

CLAS 151g Civilization of Rome (4, Sp)

Studies of Roman civilization through the major literary works of ancient Rome. All reading in translation.

CLAS 202 Introduction to Archaeology (4) (Enroll in ANTH 202)

CLAS 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.

CLAS 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.

CLAS 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.

CLAS 280g Classical Mythology (4, FaSp) Origin, development, and transmission of mythology in Greek and Latin literature, with parallels from other traditions.

CLAS 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.

CLAS 301abcd Cross Registration with UCLA (2½-2½-2½-2½)

CLAS 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.

CLAS 310 Pagans and Christians (4) The Christian reception and transformation of pagan religious and philosophical thought.

CLAS 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.

CLAS 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.

CLAS 321 Greek Art and Archaeology (4, Fa) (Enroll in AHIS 321)

CLAS 322 Roman Art and Archaeology (4, Sp) (Enroll in AHIS 322)

CLAS 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.

CLAS 325 Ancient Epic (4) Representative epics of the Greek and Roman world; development of the character of the hero; later influences.

CLAS 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.

CLAS 337 Ancient Drama (4) Tragedies and comedies of the ancient world; later influences.

CLAS 348 The Athenian Century (4) Democratic concepts and values of fifth century B.C. Athens utilizing rhetorical, historical, dramatic, and biographical sources.

CLAS 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.

CLAS 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.

CLAS 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.

CLAS 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.

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

CLAS 401abcd Cross Registration with UCLA (2½-2½-2½-2½)

CLAS 425 Interdisciplinary Studies in Classical Art and Archaeology: Research and Methodology (4, max 8, Irregular) (Enroll in AHIS 425)

CLAS 465 Archaeology and Society (4) The interaction of archaeology and contemporary societies through political and moral claims; archaeologists' role as stewards and interpreters of ancient cultures and their remains. Capstone course for the Interdisciplinary Archaeology major. *Recommended preparation:* background in archaeology, classics, or related field.

CLAS 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.

CLAS 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.

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

CLAS 495x Honors Research (4) Individual research for honors in the major leading to a substantial paper or other project. Not open to graduate students.

CLAS 499 Special Topics (2-4, max 8)

All of the following courses require a knowledge of Greek or Latin.

CLAS 500 Proseminar (2, Sp) Introduction to classical scholarship; research methods; bibliography.

CLAS 501abcd Cross Registration with UCLA (2½-2½-2½-2½) Special studies in selected areas of classical civilization and literature.

CLAS 510 Seminar in Classical Philology (4, 3 years, Fa) Close study of the Greek and Latin languages and linguistic theory.

CLAS 511 Sanskrit I (4) Introduces the student to the fundamentals of Sanskrit grammar, the ancient Indo-European language most closely related to Greek.

CLAS 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.

CLAS 515 Topics in Classical Scholarship (4, 3 years, Fa) Intensive study of individual authors, genres, periods, or areas of classical scholarship.

CLAS 520 Approaches to Antiquity (4, 3 years, Sp) Study in the history and theory of classical scholarship.

CLAS 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.

CLAS 540 Seminar in Early Greek Literature (4, 3 years, Fa) Homer through Aeschylus.

CLAS 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.

CLAS 550 Seminar in Classical and Hellenistic Literature (4, 3 years, Sp) Tragic poetry, comic poetry, Hellenistic poetry.

CLAS 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.

CLAS 560 Seminar in Republican Latin Literature (4, 3 years, Fa) Early Latin literature through Virgil.

CLAS 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.

CLAS 570 Seminar in Imperial Latin Literature (4, 3 years, Sp) Latin literature from the Augustan period to that of the Antonines.

CLAS 575 Seminar in Roman History, Culture, and Society (4, 3 years, Sp) Introduces students to research in Roman history and historiography.

CLAS 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.

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

CLAS 599 Special Topics (2-4, max 8, FaSpSm) Special topics in classical language, literature and culture.

CLAS 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.

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

GREEK (GR)

GR 120 Greek I (4, FaSp) Essentials of classical Greek grammar and vocabulary.

GR 150 Greek II (4, FaSp) Essentials of classical Greek grammar and vocabulary, continued. Basic reading skills. *Prerequisite:* GR 120.

GR 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.

GR 321 Greek Art and Archaeology (4, Fa) (Enroll in AHIS 321)

GR 322 Roman Art and Archaeology (4, Fa) (Enroll in AHIS 322)

GR 345 Greek Tragic Poets (4) Selected plays of Aeschylus, Sophocles, and Euripides. (Duplicates credit in former GR 445.)

GR 353 Plato (4) Readings from the Republic or other dialogues.

GR 354 Greek Historians (4) Selections from such representative historians as Herodotus and Thucydides.

GR 355 Aristophanes (4) A study of at least three comedies. (Duplicates credit in former GR 455.)

GR 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.)

GR 365 Greek Lyric Poetry (4) Readings from Archilochus, Sappho, Alcaeus, Pindar, and other lyric poets. *Prerequisite:* GR 220.

GR 375 Plutarch (4) Readings of selected works by the Greek author Plutarch. *Prerequisite:* GR 220.

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

GR 425 Interdisciplinary Studies in Classical Art and Archaeology: Research and Methodology (4, max 8, Irregular) (Enroll in AHIS 425)

GR 450 Readings in Greek Literature (4, max 12) Readings in various authors and genres of Greek literature. *Prerequisite:* 300-level Greek course.

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

GR 499 Special Topics (2-4, max 8)

LATIN (LAT)

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.

LAT 120 Latin I (4, FaSp) Essentials of Latin grammar and vocabulary.

LAT 150 Latin II (4, FaSp) Essentials of Latin grammar and vocabulary, continued. Basic reading skills. *Prerequisite:* LAT 120.

LAT 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.

LAT 310 Latin Elegiac Poetry (4, Irregular) Selected poems of Catullus, Tibullus, Propertius, and Ovid; meter, style, and themes. (Duplicates credit in former LAT 410.) *Prerequisite:* LAT 313, LAT 314, LAT 315, or LAT 316.

LAT 312 Roman Satire (4, Irregular) Selected satires of Horace and Juvenal; history of the genre. (Duplicates credit in former LAT 412.)

LAT 313 Ovid and Classical Mythology (4) Selections from the *Metamorphoses* and *Fasti*; collateral reading on classical mythology.

LAT 314 Catullus and Horace (4) Selected poems of Catullus and Odes of Horace.

LAT 315 Cicero (4) Representative philosophical, oratorical, and rhetorical works; selected letters.

LAT 316 Roman Comedy (4) Selected plays of Plautus and Terence.

LAT 320 Vergil (4) Studies in the *Aeneid* or *Eclogues* and *Georgics*. (Duplicates credit in former LAT 413.)

LAT 322 Lucretius' *De Rerum Natura* (4) The didactic epic as a vehicle of Epicurean philosophy. (Duplicates credit in former LAT 414.)

LAT 325 Roman Historians (4) Readings from Sallust, Livy, and Tacitus. *Prerequisite:* LAT 222 or satisfactory completion of placement test.

LAT 365 Latin Literature of the Silver Age (4) Readings in Seneca, Martial, Pliny, and other representative writers. (Duplicates credit in former LAT 465.)

LAT 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.)

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

LAT 450 Readings in Latin Literature (4, max 12, FaSp) Readings in various authors and genres of Latin literature. *Prerequisite:* 300-level Latin course.

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

LAT 499 Special Topics (2-4, max 8)

Comparative Literature

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college.usc.edu/colt

Chair: Peggy Kamuf, Ph.D.

Faculty

Marion Frances Chevalier Professor of French: Peggy Kamuf, Ph.D.* (*French and Italian*)

Professors: Dagmar Barnouw, Ph.D.* (*German*); Dominic C.N. Cheung, Ph.D. (*East Asian Languages and Cultures*); Moshe Lazar, Ph.D.; Akira Mizuta Lippit, Ph.D. (*East Asian Languages and Cultures and Cinematic Arts*); Gloria Orenstein, Ph.D.; Karen Elyse Pinkus, Ph.D. (*French and Italian*); Peter Starr, Ph.D. (*French and Italian*); Xiaobing Tang, Ph.D. (*East Asian Languages and Cultures*); William G. Thalmann, Ph.D.* (*Classics*); Daniel Tiffany, Ph.D. (*English*)

Associate Professors: Roberto Ignacio Diaz, Ph.D. (*Spanish and Portuguese*); Vincent Farenga, Ph.D. (*Classics*); Heather James, Ph.D. (*English*); Panivong Norindr, Ph.D. (*French and Italian*)

Assistant Professors: Gabriel Giorgi, Ph.D. (*Spanish and Portuguese*); Edwin Hill, Ph.D. (*French and Italian*); Anne McKnight, Ph.D. (*East Asian Languages and Cultures*); Antonia Szabari, Ph.D. (*French and Italian*); Boris Wolfson, Ph.D.* (*Slavic Languages and Literatures*)

Emeritus Professors: David Malone, Ph.D.; Albert Sonnenfeld, Ph.D.* (*French and Italian*)

Associated Faculty

Professors: Joseph A. Boone, Ph.D. (*English*); David E. James, Ph.D. (*Cinematic Arts*); James R. Kincaid, Ph.D. (*English*); Marsha Kinder, Ph.D. (*Cinematic Arts*); Tania Modleski, Ph.D. (*English*); Hilary M. Schor, Ph.D. (*English*)

and Gender Studies); David St. John, M.F.A. (*English*); Alexander Zholkovsky, Ph.D. (*Slavic Languages and Literatures*)

Associate Professors: David Bialock, Ph.D. (*East Asian Languages and Cultures*); Janet Johnson, Ph.D. (*Music*); Margaret Rosenthal, 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 include: Western (European and American) and East Asian.

Undergraduate Degrees

Comparative Literature Major

Students may earn the B.A. in Comparative Literature by satisfying the requirements for either of two tracks.

The Literature/Media/Critical Thought Track allows students to focus their study in one of three concentrations while also taking courses in the other two. Together, these three concentrations represent the broad range of interests in the discipline: (1) literature considered comparatively and transnationally;

(2) the media of other arts and modes of communication (photography, film, music, painting and digital media); (3) modes of critical thought that inform and shape theoretical reflection on the arts and society.

This track offers the opportunity to pursue a major that is broadly based in the liberal arts. Students on this track might consider extending their concentration with a double major or minor. For example, the literature concentration could be extended with a second major or minor in a national literature (French,

Spanish, Italian, Russian, English, German, classics or an East Asian literature); the media concentration by another major or minor in cinematic arts, art history or communication; and the critical thought concentration by a second major or minor in philosophy, religion, history, sociology or anthropology.

The Foreign Language Track incorporates the study of at least one literature in a foreign language into the comparative perspective of the comparative literature major.

Students who intend to pursue a graduate degree in either comparative literature or a foreign literature are strongly advised to choose this track, 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.

The requirements for both tracks of the major accommodate very well semesters of study abroad. Students are helped and encouraged to plan their programs in advance to allow for that experience.

Requirements for the Major

Literature/Media/Critical Thought Track

Students earn a B.A. in Comparative Literature and are required to complete at least 40 units (10 courses) as follows:

- (1) COLT 302 and COLT 303
- (2) At least four additional COLT courses in one of the three concentrations.

Literature Concentration:

CLAS 360, COLT 101, COLT 102, COLT 250, COLT 251, COLT 264, COLT 311, COLT 312, COLT 324, COLT 335, COLT 345, COLT 346, COLT 348, COLT 351, COLT 374, COLT 382, COLT 420, COLT 426, COLT 435, COLT 445, COLT 448, COLT 472, COLT 475, COLT 485, EALC 454, EALC 460

Media Concentration:

COLT 354, COLT 357, COLT 365, COLT 373, COLT 379, COLT 451, COLT 452, COLT 462, COLT 470, COLT 480

Critical Thought Concentration:

CLAS 370, COLT 375, COLT 377, COLT 381, COLT 385, COLT 391, COLT 454, COLT 471, COLT 474, COLT 478, COLT 486, COLT 487

- (3) At least four additional COLT courses. No more than two of these courses may be at the 100 or 200 level.

Foreign Language Track

Students earn a B.A. in Comparative Literature and are required to complete 40 units (10 courses) as follows:

- (1) COLT 302 and COLT 303
- (2) At least five additional COLT courses, of which no more than two may be at the 100 or 200 level.
- (3) At least three courses in the literature or culture of one or more foreign languages (other than English), with all readings in that language.

Honors Program

Students who satisfy the following requirements of the honors program receive the B.A. in Comparative Literature with Honors. To be admissible to the honors program, an overall GPA of at least 3.0 and at least 3.5 in courses counted for major credit is required. The decision to enter the Honors Program should be made and discussed with the departmental undergraduate adviser at least one year (two semesters) before graduation.

To be awarded honors, majors in comparative literature on the literature/media/critical thought track must complete 4 units of COLT 490x Directed Research and 4 units of COLT 495 Senior Honors Thesis. These courses replace two of the COLT courses required beyond the four-course concentration. Majors in comparative literature on the foreign language track must complete, in place of two of the five required COLT courses, an additional course in the literature or culture of a language other than English and COLT 495 Senior Honors Thesis.

The director of the senior honors thesis must be a member of the comparative literature faculty. The second reader may be any regular USC faculty. To qualify for the award of honors, the director and second reader must both approve the thesis.

Minor in Comparative Literature

Students can minor in one of three tracks: the literature/media/critical thought track, the foreign language track or the global cultures track.

Literature/Media/Critical Thought Track

Students are required to complete at least 24 units (six courses) as follows:

- (1) COLT 302 and COLT 303
- (2) At least three additional COLT courses in one of the three concentrations.
- (3) At least one additional COLT course in any of the three concentrations.

No more than one of these courses may be at the 100 or 200 level.

Foreign Language Track

Students are required to complete at least 24 units (six courses) as follows:

- (1) COLT 302 and COLT 303
- (2) At least three additional COLT courses, of which no more than one may be at the 100 or 200 level.
- (3) At least one course in the literature or culture of a foreign language (other than English), with all readings in that language.

Global Cultures Track

Students are required to complete at least 24 units (six courses) as follows:

- (1) COLT 302 and COLT 303
- (2) At least two additional COLT courses, of which no more than one may be at the 100 or 200 level, to be chosen from the following list:

COLT 101, COLT 102, COLT 250, COLT 264, COLT 360, COLT 374, COLT 375, COLT 379, COLT 385, COLT 445, COLT 448, COLT 470, COLT 474

- (3) At least two other courses in a relevant College department to be decided in conjunction with the advisor according to the following guidelines:

A. Students may choose a region of the world and take two upper-division courses related to that region in relevant departments.

B. Students may choose a national/linguistic tradition and take two upper-division courses related to that tradition in relevant departments.

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 on undergraduate or previous M.A. course work; a written statement of at least 500 words indicating the applicant's interests in comparative literature, proposed areas of study and competence in languages other than English; 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 possess the ability to do graduate work in two languages other than English.

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.

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, (3) three courses in comparative literature, including COLT 502. 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.

Major Field Examination

The major field examination is a written examination on the student's major literary tradition. For this examination the student will prepare, in consultation with the graduate advisor, an individual reading list based on COLT reading lists. It is normally taken at the end of the semester in which course work is completed and after language requirements have been met.

Foreign Language Requirement

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.

Doctor of Philosophy in Comparative Literature

Application deadline: December 1

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 and a minimum of B must be earned on the final exam in that course.

Students may transfer up to 30 units toward the Ph.D.

The Department's Graduate Studies Committee periodically reviews the progress of all students in the program and may recommend to the department that a student not be allowed to continue if examinations, grades, or other forms of evaluation indicate inadequate performance.

Foreign Language Requirements

Students must successfully complete at least three advanced courses (400-level or higher) in the original languages of two literary traditions other than Anglophone (two courses in one language and one in the other). In rare circumstances, 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 third literary tradition. 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 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).

Students will also complete a literary analysis exercise in their strongest non-native language outside their major literary tradition. This exercise is normally done in conjunction with the major field examination.

Screening Procedure

The department conducts a thorough review of the course work of all first-year students at the end of the second semester. To be permitted to continue doctoral work, students must receive a satisfactory evaluation in this review.

Major Field Examination

The major field examination is a written examination on the student's major literary tradition. For this examination the student will prepare, in consultation with the graduate advisor, an individual reading list based on departmental reading lists. It is normally taken at the end of the fourth semester (for students entering with a B.A.) or at the end of the second semester (for students entering with an M.A. earned in their major literary tradition).

Comparative Field Exercise

This exercise, which is normally completed in the year following the major field examination, consists of a 30-40 page paper with bibliography in a comparative field related but not central to the major literary tradition in which the student plans to write his or her dissertation. The paper is evaluated by a three-member committee chosen by the student. There is an oral defense of the comparative field paper with the designated committee.

Guidance Committee

Upon successful completion of the comparative field exercise, 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 department faculty; at least one member must come from outside the Comparative Literature Department. The committee will advise the student on the compilation of a reading list that will be the basis for the written part of the qualifying exam.

Qualifying Examination

When all required courses or units, all language requirements, the major field examination and the comparative field exercise have been completed, the student must pass an examination on the area of his or her proposed dissertation. The examination consists

of a six-hour written examination and an oral examination. Both the written and oral portions of the exam cover the proposed dissertation topic as defined by a reading list and a dissertation prospectus that are prepared for this exam in consultation with the guidance committee.

Upon successful completion of the qualifying examination, the student will form his or her dissertation committee.

Dissertation Defense

An oral defense of the dissertation, in the presence of the dissertation committee, must be satisfactorily completed before the dissertation can be filed with the Graduate School.

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*.

COLT 101g Masterpieces and Masterminds: Literature and Thought of the West (4, Fa)

A broad introduction to the great works of Western culture from antiquity to 1800. (Duplicates credit in former COLT 150xg.)

COLT 102g On Location: The Place of Literature in Global Cultures (4, Sp)

Comparative study of works from a broad range of cultural traditions that originate from, and provide insight into, vital global locations outside the Western sphere.

COLT 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.

COLT 251g Modern Literature and Thought of the West Since 1800 (4) Survey of literary and other cultural texts from the 19th to the 21st centuries, with emphasis on the individual and social change. (Duplicates credit in former COLT 151xg.)

COLT 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.

COLT 302 Introduction to Literary Theory (4) Introduction to general forms of reflection on literary discourse.

COLT 303 Globalization: Culture, Change, Resistance (4) Cultural dimensions of issues in globalization: migration, diaspora, terrorism, communications, climate change, collectives, production and technology, money and exchange.

COLT 311 Epic (4) Formation and development of epic poetry from Near Eastern and Greco-Roman antiquity through the Renaissance to the present. Emphasis on relation to political and cultural change.

COLT 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).

COLT 324 Women in Medieval and Renaissance Europe (4) Study of literary, social and cultural lives of women during the European Middle Ages and Renaissance. Reading and analysis of texts written by and about women.

COLT 335 Decadence and Modernity (4)

Study of the notion of "decadence" and its impact on modern and contemporary literary/cultural production, with a comparatist focus on different linguistic traditions.

COLT 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.

COLT 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.

COLT 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.

COLT 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.)

COLT 354 Revolutions in Theater (4) Comparative study of groundbreaking contributions to modern theories of theater and performance in the context of other 20th century revolutions — aesthetic, cultural, and social.

COLT 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.

COLT 360 Classical Arabic Literature in Translation (4, Irregular) (Enroll in CLAS 360)

COLT 365 Literature and Popular Culture (4) Study of mass-reproduced verbal and visual art forms, such as graphic novels, comics, animation, popular music, video, graffiti, advertising.

COLT 370 Leaders and Communities: Classical Models (4, FaSp) (Enroll in CLAS 370)

COLT 373 Literature and Film (4) Examines literature and film as distinct modes of representation, narration, and structuring of time, language, memory, and visibility.

COLT 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.

COLT 375 Latin American Cultural and Literary Theory (4) Survey of cultural critique focused on Latin America as a cultural region and on Latin Americanism as a transnational academic practice.

COLT 377 Literature, Theory, Gender (4) Literary representations and theories of gender difference. Examines questions of gendered voice in writing and the cultural construction of gender in various periods and cultures.

COLT 379 Nationalism and Postcolonialism in Southeast Asian Cinema (4) Cinema from Cambodia, Indonesia, Laos, Malaysia, the Philippines, Singapore, Thailand, and Vietnam in local and global cultural contexts.

COLT 381 Psychoanalysis and the Arts (4) Introduction to psychoanalytic literature on the arts, including classic texts by Freud, Jones, Lacan, Derrida, and others. Readings of theoretical and fictional works.

COLT 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.

COLT 385 Literature and Justice (4) Examination of literary and autobiographical texts that raise questions of justice in multicultural societies; links to theories of justice in historical, political, or philosophical contexts.

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

COLT 391 Literary Criticism from Plato to Postmodernism (4) Survey of major texts in the literary criticism of the West from the Greeks to postmodern theories.

COLT 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.

COLT 426 Utopias (4) Examination of selected utopias in their historical context as “no places” whose projections of alternate cultures always comment on their own.

COLT 435 Poetry and Poetics of the Everyday (4) Relations between poetry of the dominant tradition in various languages and vernacular forms of poetry, such as riddles, nursery rhymes, ballads, and poems in dialect or slang.

COLT 445m Europe and the Writing of Others (4) Analysis of European texts – literary, musical, philosophical, visual – that focus on other cultures, as well as of non-European texts dealing with Europe or European cultural forms.

COLT 448 Multilingual Encounters (4) Exploration of multilingual encounters in literary works, films, and theoretical texts. Topics may include immigrant languages, dialects, jargons, imaginary or hybrid languages, theories of translation.

COLT 451 Opera and Cultural Theory (4) Study of the words and plots of operas from the viewpoint of gender, postcolonial, and psychoanalytical theory. Special attention to contemporary stagings and film versions.

COLT 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.

COLT 453 Bildungsroman in Modern East Asia (4, Sp) (Enroll in EALC 454)

COLT 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.

COLT 460 Love, Self and Gender in Japanese Literature (4) (Enroll in EALC 460)

COLT 462 Soundtracks of Our Lives (4) The reciprocal, ideological relations between modes of listening, sounds, music; and literature, film, culture. Examines a range of issues in auditory culture across a broad historical span.

COLT 470 Literature and Media in Latin America (4) Study of the relations between Latin American literature and different mass-media genres.

COLT 471 Literature, Theory, History (4) Examines the relation between historical and theoretical approaches to literary works.

COLT 472 Los Angeles Crime Fiction (4) The noir tradition in books and films set in Los Angeles. Emphasis on generic conventions, representations of the city, and discourses of class, gender, race.

COLT 474 Desire, Literature, Technology (4) Relations between technology, desire, power and literature through contemporary philosophers, theorists and literary critics. Examines literature and philosophy in relation to global technological planning.

COLT 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).

COLT 478 Family in Theory and Literature (4) Representations of the family in literary works and films across different cultures and historical periods. Readings in anthropology, philosophy, psychoanalysis, and feminist and gender theory.

COLT 480 Dada and Surrealism (4) A comparative study of Dada and Surrealism in literature in relation to painting, sculpture, photography and cinema.

COLT 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).

COLT 486 Deconstructive Thought (4) Deconstructive analysis of theories of language, representation, selfhood, the human, art and technology, politics and ethics. Study of works by Derrida and others.

COLT 487 Critical Image (4) Introduction to critical reflection on the image. Analysis of criticism, fiction, film, and visual artifacts.

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

COLT 495 Senior Honors Thesis (4) Writing of an honors thesis under individual faculty supervision.

COLT 499 Special Topics (2-4, max 8) Intensive study of selected author or authors in the context of a major literary tradition.

COLT 502 Introduction to Literary Theory (4) Major developments in 20th-century literary criticism, with special attention to theoretical work of the past three decades.

COLT 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.

COLT 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.

COLT 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.

COLT 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.

COLT 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.

COLT 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.

COLT 565 Studies in Literatures of East Asia (4) Advanced study of major cultural paradigms and their divergent influences in East Asian literature.

COLT 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.

COLT 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.

COLT 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.

COLT 600 Topics in Comparative Literary Analysis (4, max 12) Intensive study of fictional or poetic language, with emphasis on techniques of literary analysis.

COLT 601 Professional Development I: Applying for Positions (2, Fa) Familiarizes students with the process of seeking an academic position, from assembling a dossier to interviews and on-campus visits. Open to graduate students only. Graded CR/NC. *Prerequisite:* admission to candidacy.

COLT 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.

COLT 603 Professional Development II: Publication (2, Sp) Preparation of book and article manuscripts for publication and placement in presses and journals; revising dissertations for publication; preparing papers for conferences. Students produce an article manuscript ready for submission to a journal. Open to graduate students only. Graded CR/NC. Major Field Exam must be passed prior to taking this course.

COLT 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.

COLT 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.

COLT 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.

COLT 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.

COLT 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.

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

Earth Sciences

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www.usc.edu/dept/earth

Chair: David J. Bottjer, 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.

Professors: J. Lawford Anderson, Ph.D.*; Yehuda Ben-Zion, Ph.D.; David J. Bottjer, Ph.D.; Gregory A. Davis, Ph.D.*; Douglas E. Hammond, 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.; Frank A. Corsetti, Ph.D.; James F. Dolan, Ph.D.*

Assistant Professors: Thorsten Becker, Ph.D.; Sarah J. Feakins, Ph.D.

Research Professor: Robert G. Douglas, 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.; Andrea Donnellan, Ph.D.; Robert Rye, Ph.D.; Daniel Schorlemmer, Ph.D.

Emeritus Professors: Alfred G. Fischer, Ph.D.; Donn S. Gorsline, Ph.D.; Thomas L. Henyey, Ph.D.; Teh-Lung Ku, 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, paleo-oceanography 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 USC Viterbi 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.

Two minors are available. The geohazards minor is recommended for those who wish to broaden their background in natural hazards, global change or environmental problems. It is accessible to both non-science and science majors. The geobiology minor is recommended for those interested in interdisciplinary work in earth and biological sciences.

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-the-art 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
Introduction: Any one of (4 units):	
GEOL 105L Planet Earth	4
GEOL 107Lx Oceanography	4
GEOL 108L Crises of a Planet	4
GEOL 125Lx Earth History: A Planet and its Evolution	4
GEOL 130Lx The Nature of Scientific Inquiry	4
GEOL 150Lx Climate Change	4
GEOL 240Lx Earthquakes	4

Required (12 units):

GEOL 315L Minerals and Earth Systems	4
GEOL 385 Research Methods in the Earth Sciences	2
GEOL 494x Senior Thesis	2
GEOL 465 Summer Field Geology, or	
GEOL 490x Directed Research	4
Electives: choose seven of the following (28 units)*:	
BISC 474 Ecosystem Function and Earth Systems	4
BISC 483 Geobiology and Astrobiology	4
GEOL 316L Petrologic Systems	4
GEOL 320L Surficial Processes and Stratigraphic Systems	4
GEOL 321L Structural Geology and Tectonics	4

GEOL 412 Oceans, Climate, and the Environment	4
GEOL 433L Paleontology and Evolution in Deep Time	4
GEOL 440L Geophysics and Geoengineering	4
GEOL 450L Geosystems	4
GEOL 460L Geochemistry and Hydrogeology	4
GEOL 470 Environmental Hydrogeology	4
MATH 225 Linear Algebra and Linear Differential Equations	4
MATH 226 Calculus III	4

*Up to two upper division courses from other science departments may be substituted for any two in this group, on approval of the departmental undergraduate advisor.

Required courses from other departments (24 units):		GEOL 450L	Geosystems	4	Other courses:		
CHEM 105aLbL	General Chemistry, or	GEOL 460L	Geochemistry and		MATH 125	Calculus I	4
CHEM 115aLbL	Advanced General		Hydrogeology	4	MATH 126	Calculus II	4
	Chemistry	GEOL 465	Summer Field Geology	4	MATH 226	Calculus III	4
MATH 125	Calculus I	GEOL 470	Environmental		Total units:		64
MATH 126	Calculus II		Hydrogeology	4			
PHYS 135abL	Physics for the Life	Required courses in other departments (8 units):					
	Sciences, or	CHEM 105aL	General Chemistry	4			
PHYS 151L	Fundamentals of	MATH 118x	Fundamental				
	Physics I: Mechanics and		Principles of the				
	Thermodynamics, and		Calculus, or				
PHYS 152L	Fundamentals of	MATH 125	Calculus I	4			
	Physics II: Electricity and						
	Magnetism, or	Choose any one of the following (4 units):					
BISC 120Lx	General Biology:	BISC 120L	General Biology:				
	Organismal Biology and		Organismal Biology and				
	Evolution, and		Evolution	4			
BISC 220L	General Biology:	CHEM 105bL	General Chemistry	4			
	Cell Biology and	PHYS 135aL	Physics for the Life				
	Physiology, or		Sciences	4			
BISC 121L	Advanced General	Total units		48			
	Biology: Organismal						
	Biology and Evolution, and						
BISC 221L	Advanced General						
	Biology: Cell Biology						
	and Physiology						
Total units							

*Upper division courses must be applicable to majors in their respective departments.

Minor in Geobiology

The minor in geobiology is designed to allow students majoring in biology to incorporate interdisciplinary courses in earth sciences into their program or to allow students majoring in geology to incorporate interdisciplinary courses in biology into their program. This field represents the intersection of what have been traditional disciplines and is valuable for understanding evolution, environmental contaminant behavior and ocean sciences. Students with majors offered by biological or earth or geological sciences will be able to complete this minor with 16 to 24 units of course work beyond their major requirements. Other students may need to complete up to 48 units of course work beyond their major requirements. For example, students majoring in biological sciences might take an introductory GEOL course; GEOL 315L; GEOL 433L or BISC 483; and two additional upper-division elective courses from the list below. Students majoring in earth or geological sciences must take BISC 120L and BISC 220L; GEOL 433L or BISC 483; and three additional elective courses. Courses selected must include at least 16 units unique to the minor and at least 16 units in a department outside the major.

Department Major Requirements for the Bachelor of Arts in Earth Sciences

REQUIRED COURSES		UNITS
Introduction: any one of (4 units):		
GEOL 105L	Planet Earth	4
GEOL 107Lx	Oceanography	4
GEOL 108L	Crises of a Planet	4
GEOL 125Lx	Earth History: A Planet and its Evolution	4
GEOL 130Lx	The Nature of Scientific Inquiry	4
GEOL 150Lx	Climate Change	4
GEOL 240Lx	Earthquakes	4
Required:		
GEOL 315L	Minerals and Earth Systems	4
Electives: choose seven of the following (28 units):		
BISC 474	Ecosystem Function and Earth Systems	4
BISC 483	Geobiology and Astrobiology	4
GEOL 316L	Petrologic Systems	4
GEOL 320L	Surficial Processes and Stratigraphic Systems	4
GEOL 321L	Structural Geology and Tectonics	4
GEOL 385	Research Methods in the Earth Sciences, and	2
GEOL 494x	Senior Thesis	2
GEOL 412	Oceans, Climate, and the Environment	4
GEOL 433L	Paleontology and Evolution in Deep Time	4
GEOL 440L	Geophysics and Geoengineering	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	
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
Upper division:		
Astronomy elective*		4
Chemistry elective*		4
Earth Sciences elective*		4
Physics elective*		4

Three additional electives from these fields* 12

REQUIRED COURSES		UNITS
BISC 120Lx	General Biology: Organismal Biology and Evolution	4
BISC 220L	General Biology: Cell Biology and Physiology	4
CHEM 105aLbL	General Chemistry	4-4
GEOL 315L	Minerals and Earth Systems	4
ELECTIVE COURSES		UNITS
One introductory GEOL course: GEOL 105L, GEOL 107Lx, GEOL 108L, GEOL 125L, GEOL 130L, GEOL 150L or GEOL 240L		4
BISC 483*	Geobiology and Astrobiology, or	
GEOL 433L	Paleontology and Evolution in Deep Time	4
Three upper-division BISC courses**		12

Two courses from the following (8 units):	8
BISC 474L*	Ecosystem Function and Earth Sciences
BISC 483*	Geobiology and Astrobiology
GEOL 320L	Surficial Processes and Stratigraphic Systems
GEOL 412	Oceans, Climate and the Environment
GEOL 433L	Paleontology and Evolution in Deep Time
GEOL 450L	Geosystems
GEOL 460L	Geochemistry and Hydrogeology
GEOL 470	Environmental Hydrogeology

*Indicates BISC course that is also cross-listed under GEOL

**Must carry credit for a biology major

Minor in Geohazards

The geohazards minor allows students who are not geology majors to pursue a course of study that will lead to greater understanding of geohazards such as earthquakes, volcanic eruptions, floods, climate change, environmental contamination and availability of natural resources. These issues are examined in a number of upper division geology courses, and each student can select from the list below depending on the particular area of interest and whether previous coursework has been completed to meet prerequisites for

some of the choices. The minor requires an introductory class, an upper-division course in the formation of minerals and three elective courses from the list below. The minimum number of units to complete the minor is 24, including the introductory course CHEM 105aL (a corequisite for GEOL 315L) and three of the group: GEOL 316L, GEOL 320L, GEOL 321L and GEOL 433L. The remaining courses listed have additional prerequisites.

REQUIRED COURSES		UNITS
CHEM 105aL	General Chemistry	4
GEOL 315L	Minerals and Earth Systems	4

ELECTIVE COURSES		UNITS
One introductory GEOL course: GEOL 105L, GEOL 107Lx, GEOL 108L, GEOL 125L, GEOL 130L, GEOL 150L or GEOL 240Lx		4

Three of the following (12 units):		
GEOL 316L	Petrologic Systems	4
GEOL 320L	Surficial Processes and Stratigraphic Systems	4
GEOL 321L	Structural Geology and Tectonics	4
GEOL 412	Oceans, Climate, and the Environment	4

GEOL 433L	Paleontology and Evolution in Deep Time	4
GEOL 440L	Geophysics and Geoengineering	4
GEOL 450L	Geosystems	4
GEOL 460L	Geochemistry and Hydrogeology	4
GEOL 470	Environmental Hydrogeology	4

Progressive Degree Program in Geological Sciences

This program permits exceptional students to receive both a B.S. and M.S. in geological sciences in not more than 10 semesters. It is intended for students with extraordinary geological sciences preparation and performance who demonstrate a superior level of overall scholarship, including a GPA of 3.5 or better. Students may apply on completion of 64 units of course work but not later than the end of the junior year (or the completion of 96 units). The application for admission to a progressive degree program must be accompanied by an approved course plan proposal and letters of recommendation from two USC faculty members in the Department of Earth Sciences. The requirements for both the B.S. and M.S. degrees must be satisfied. Further details about progressive degree programs can be found on page 82.

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, and interdisciplinary options. Degrees in ocean sciences (through the Graduate Program in Ocean Sciences) are available; see page 403.

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

Application deadline: January 1

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.

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 micro-paleontologic, 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*

GEOL 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.

GEOL 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.

GEOL 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.

GEOL 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.

GEOL 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.

GEOL 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.

GEOL 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. *Concurrent enrollment:* MDA 140.

GEOL 290L Special Laboratory (1, FaSp)

Laboratory component for GEOL 105L, GEOL 107Lx, GEOL 108L, GEOL 125Lx, GEOL 130Lx, GEOL 150Lx, or GEOL 240Lx for students with equivalent lecture credit from another institution.

GEOL 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 sciences majors.

GEOL 315L Minerals and Earth Systems (4, Fa)

Minerals and their formation in Earth geosystems; includes discussions of mineral properties, crystal structures, uses and biogeochemical importance. Lecture, 3 hours; laboratory, 6 hours; required field trips. (Duplicates credit in former GEOL 215aL.) *Corequisite:* CHEM 105aLg or CHEM 115aLg; *recommended preparation:* any introductory GEOL course.

GEOL 316L Petrologic Systems (4, Sp) Formation and identification of igneous, metamorphic and sedimentary rocks; interpretation of tectonic and environmental settings based on rock type and chemistry. Lecture, 3 hours; laboratory, 6 hours; required field trips. (Duplicates credit in former GEOL 215bL.) *Prerequisite:* GEOL 315L.

GEOL 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 334L, GEOL 451L.) *Corequisite:* GEOL 315L.

GEOL 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 320L.

GEOL 385 Research Methods in the Earth Sciences (2, Fa) Nature of scientific inquiry and history of physical sciences; strategies and methodologies for research in earth sciences; introduction to science writing and quantitative methods. Lecture, 1.5 hours; attend one seminar per week. (Duplicates credit in former GEOL 485ab.) *Recommended preparation:* any introductory GEOL course.

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

GEOL 412 Oceans, Climate, and the Environment (4, Sp) Survey of physical, chemical, and geological oceanography emphasizing the role of the oceans in modulation of climate, atmospheric composition and biogeochemical cycles; paleoceanography and paleoclimate. *Corequisite:* CHEM 105bL, MATH 126; *recommended preparation:* PHYS 151Lg or PHYS 135abL.

GEOL 427 The Global Environment (4, Sp) (Enroll in BISC 427)

GEOL 433L Paleontology and the Evolution in Deep Time (4, Fa) Origin and evolution of life; Precambrian life; evolutionary history of major groups during the Phanerozoic; mass extinctions; deep time and evolutionary processes. Lecture, 3 hours; laboratory, 3 hours; required field trips. (Duplicates credit in former GEOL 333L.) *Recommended preparation:* any introductory GEOL course.

GEOL 440L Geophysics and Geoengineering (4, Sp) Plate tectonics, magnetic and gravity fields, earthquakes, seismic waves, reflection and refraction seismics, heat transport, mantle convection, deep Earth structure, data analysis. Includes field trip. *Prerequisite:* MATH 126; *corequisite:* PHYS 135bL or PHYS 152L.

GEOL 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.

GEOL 450L Geosystems (4, Sp) Geosystems, such as mantle convection, active faults, climate, and the carbon cycle, will be studied using numerical models and concepts such as chaos, universality, emergence, and intermittency. Lecture, 3 hours; laboratory, 2 hours. *Prerequisite:* MATH 125; *recommended preparation:* MATH 126.

GEOL 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 105bL or CHEM 115bL and MATH 126.

GEOL 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.

GEOL 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.

GEOL 474 Ecosystem Function and Earth Systems (4) (Enroll in BISC 474L)

GEOL 483 Geobiology and Astrobiology (4) (Enroll in BISC 483)

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

GEOL 494x Senior Thesis (2, FaSp) Writing of a thesis under individual faculty supervision. Not available for graduate credit.

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

GEOL 500 Marine Paleoecology (3, 2 years, Sp) Principles of marine paleoecology; interrelationships between marine organisms and their environment in geologic time. *Prerequisite:* GEOL 433L; *recommended preparation:* GEOL 577L.

GEOL 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 433L.

GEOL 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.

GEOL 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.

GEOL 512 Introduction to Chemical and Physical Oceanography (3, Fa) (Enroll in OS 512)

GEOL 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.

GEOL 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 433L.

GEOL 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.

GEOL 525 The Science of Climate Change (4, Sp) Introduction to the fundamental aspects and the factors that influence ocean and atmospheric behavior, and how the earth's climate has varied in the past.

GEOL 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.

GEOL 531 Plate Interactions: Geological Aspects (3, 2 years, Sp) Principles and geometries of plate tectonics; geologic characteristics of modern plate boundaries of divergent, convergent, transform type; ocean basin and orogen development from worldwide examples. Field trip.

GEOL 532 Advanced Geologic Mapping (3, Fa) Principles of mapping geologically complex terranes of different structural style. Fieldwork will be coordinated with seminar review of diverse structural phenomena. Field trips. *Recommended preparation:* GEOL 321L, GEOL 465.

GEOL 533 Structural Evolution of Arcs (3, 3 years, Fa) Examination of the physical characteristics 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 316L, GEOL 321L.

GEOL 534L Mechanics of Lithospheric Deformation (3, Fa) The mechanical description of deformational processes at both crustal and lithospheric scales, and the interpretation of geological and geophysical data in terms of these processes.

GEOL 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; prophyroblast-matrix relationships; interpretation of kinematic indicators. Laboratory. *Prerequisite:* GEOL 321L.

GEOL 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-polar-wander paths, and applications to stratigraphic and geotectonic studies. *Recommended preparation:* GEOL 440.

GEOL 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.

GEOL 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 321L.

GEOL 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.

GEOL 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.

GEOL 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 460L.

GEOL 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.

GEOL 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.

GEOL 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.

GEOL 555 Paleoclimatology (3) Mesozoic and Cenozoic paleoclimatology; 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 460L.

GEOL 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 321L.

GEOL 560 Marine Geochemistry (3, 2 years, Sp) Principles of chemical sedimentology and aquatic chemistry; diagenesis, authigenesis, and the geochemical cycle. *Prerequisite:* GEOL 460L.

GEOL 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.

GEOL 566 Geochemistry Seminar (1-4) Current topics in geochemistry.

GEOL 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.

GEOL 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.

GEOL 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.

GEOL 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.

GEOL 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 fieldwork, 6 hours. *Recommended preparation:* GEOL 433L.

GEOL 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.

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

GEOL 599 Special Topics (2-4, max 9, Irregular)

Special topics in the earth sciences. Field trip required when appropriate to the topic. *Prerequisite:* second-year graduate standing normally required.

GEOL 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.

GEOL 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.

GEOL 650 Recent Advances in Paleontology (3)

Selected review of recent ideas in paleobiology, evolution, and paleoecology related to examining the current frontiers in paleontology.

GEOL 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.

GEOL 794abcdz Doctoral Dissertation (2-2-2-0)

Credit on acceptance of dissertation.

East Asian Area Studies

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Associated Faculty

Professors: Jonathan Aronson (*Communication and International Relations*); Robert F. Campany (*Religion*); Baizhu Chen (*Finance and Business Economics*); Dominic Cheung (*East Asian Languages and Cultures*); Iris Chi (*Social Work*); Eugene Cooper (*Anthropology*); Robert Dekle (*Economics*); Eric Heikkila (*Policy, Planning, and Development*); Velina Hasu Houston (*Theatre*); David James (*Cinematic Arts*); Carl A. Johnson (*Medicine*); Douglas Joines (*Finance and Business Economics*); Nam-Kil Kim (*East Asian Languages and Cultures*); Dorinne Kondo (*Anthropology and American Studies and Ethnicity*); Yen-hui Audrey Li (*East Asian Languages and Cultures and Linguistics*); Akira Mizuta Lippit (*East Asian Languages and Cultures, Comparative Literature and Cinematic Arts*); Qingyun Ma (*Architecture*); Jeffrey B. Nugent (*Economics*); C.W. Park (*Business*); Joan Piggott (*History*); Stanley Rosen (*Political Science*); Ellen Seiter (*Cinematic Arts*); Jean Shih (*Pharmacy*); Andrew Simpson

(*Linguistics and East Asian Languages and Cultures*); James Steele (*Architecture*); John Strauss (*Economics*); Guofu Tan (*Economics*); Shui Yan Tang (*Policy, Planning, and Development*); Yan Xiao (*Engineering*); Xiaobing Tang (*East Asian Languages and Cultures*)

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*); Ruth Gim Chung (*Education*); Yongheng Deng (*Policy, Planning, and Development*); Jo Ann Farver (*Psychology*); Joshua Goldstein (*History*); Yasushi Hamao (*Finance and Business Economics*); George A. Hayden (*East Asian Languages and Cultures*); Hajime Hoji (*Linguistics and East Asian Languages and Cultures*); Kyung Moon Hwang (*History*); Saori Katada (*International Relations*); Lon Kurashige (*History and American Studies and Ethnicity*); Daniel Lynch (*International Relations*); Roger Moon (*Economics*); Lawrence Pryor (*Communication*); Gary Seaman (*Anthropology*); Brett Sheehan (*History*)

Assistant Professors: Yong Jin Kim (*Economics*); Kwanmin Lee (*Communication*); Sonya Lee (*Art History*); Anne Kirstin McKnight (*East Asian Languages and Cultures and Comparative Literature*); Lori Meeks (*Religion and East Asian Languages and Cultures*); Apichai Shipper (*Political Science and International Relations*)

Adjunct and Research Faculty: Hisako Asano (*Adjunct Professor, Fine Arts*); Richard Drobnick (*Research Professor, Management and Organization; Director, CIBEAR*); Jack Lewis (*Associate Dean, IBEAR MBA and International MBA Alumni Outreach*); Jehoon Lee (*Research Associate Professor, Social Work; Director, Center for Asian Pacific Leadership*); Koichi Mera (*Adjunct Professor, Management and Organization, Business*)

Librarians: Tomoko Bialock (*Japanese Studies Librarian*); Joy Kim (*Curator, Korean Heritage Library*); Kenneth Klein (*Head, East Asian Library*); Sun-Yoon Lee (*Korean Studies Librarian*); Lillian Yang (*Chinese Bibliographer*)

Emeritus Professors: Peter A. Berton (*International Relations*); Roger Dingman (*History*); Murray Fromson (*Journalism*); William Rideout (*Education*); Otto Schnepf (*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 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 the consortium partner with UCLA's Asia Institute to form 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.

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 Freshman Leadership Program. See the Marshall School of Business section of this catalogue (page 140) 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 153. 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	4, max 16
AHIS 519	Seminar in Japanese Art	4, max 16
EALC 501	History of Chinese Literature	4
EALC 506	Selections from Classical Chinese Literature	4
EALC 515	Classical Japanese Poetics	4
EALC 531	Proseminar in Chinese Cultural History	4
EALC 532	Proseminar in Korean Cultural History	4
EALC 533	Proseminar in Japanese Cultural History	4
EALC 541	Seminar: Japan	4
EALC 543	Seminar: Japanese Literature	4
EALC 551	Seminar: China	4
EALC 553	Seminar: Chinese Literature	4
EALC 610	Seminar: Buddhism and the Literary Arts in Japan	4
HIST 535	Studies in Japanese History	4
HIST 536	Studies in Chinese History	2 or 4
HIST 540	Studies in Modern East Asian History	4, max 8
HIST 630	Seminar in Japanese History	2 or 4
HIST 635	Seminar in Chinese History	2 or 4

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, College House 101, University of Southern California, Los Angeles, CA 90089-0127.

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*.

EASC 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.

EASC 160gm China and the World (4, Sp)

Advanced-level introduction to China and its relations with the wider world in historic and contemporary perspective.

EASC 499 Special Topics (2-4, max 8, Irregular) Interdisciplinary examination of various areas of East Asian studies.

EASC 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.

EASC 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).

EASC 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.

EASC 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.

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

EASC 599 Special Topics (2-4, max 8, FaSpSm) Special topics in East Asian Area Studies.

East Asian Languages and Cultures

Taper Hall of Humanities 356

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Chair: Xiaobing Tang, Ph.D.

Faculty

Professors: Dominic C.N. Cheung, Ph.D.; Nam-Kil Kim, Ph.D.; Yen-hui Audrey Li, Ph.D.; Akira Mizuta Lippit, Ph.D. (*Comparative Literature*); Andrew Simpson, Ph.D. (*Linguistics*); Xiaobing Tang, Ph.D.

Associate Professors: David Bialock, Ph.D. (*Comparative Literature*); Bettine Birge, Ph.D.; George A. Hayden, Ph.D.; Hajime Hoji, Ph.D. (*Linguistics*)

Assistant Professors: Sonya Lee, Ph.D. (*Art History*); Anne Kirstin McKnight, Ph.D.; Lori Meeks, Ph.D. (*Religion*)

Emeritus Professor: Henry H.Y. Tsee, Ph.D.

Associated Faculty: Robert F. Company, Ph.D. (*Religion*); Joan Piggott, Ph.D. (*History*)

East Asian Languages and Cultures offers undergraduate, master's and doctoral programs in Chinese, Japanese and Korean studies, and a progressive degree in East Asian Languages and Cultures. The department fosters original approaches in East Asian studies. With an emphasis on interdisciplinary and innovative

research, the program provides students with systematic training in East Asian languages, literatures and cultures.

The faculty is committed to intra-regional and interdisciplinary studies of East Asia, which includes critical interaction among the cultures of China, Japan and Korea, as well as integration of modern and pre-modern studies. The department engages the arts, languages, linguistics, literatures, histories, media, religions, visual and material cultures of East Asia.

Undergraduate Degree

Bachelor of Arts 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 units of upper division courses must also include one civilization course, one literature

course and four upper division elective courses (16 units) in Chinese, Japanese or Korean. One lower division course may be counted toward the 16 units of upper division electives. One East Asian course from another department may be included in the 32 unit requirement, if approved by an advisor.

Honors Program

Candidates for the B.A. in the Department of East Asian Languages and Cultures may receive a designation on their transcripts of departmental honors. Admission to the honors program is required.

Prerequisites: 3.33 overall GPA, 3.5 GPA or better in courses in the major, completion of at least one upper-level EALC course requiring a seminar paper 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 EALC 495ab Undergraduate Honors Thesis.

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, one literature course and two upper division elective courses in Chinese, Japanese or Korean are required.

Cultures and Politics of the Pacific Rim Minor Requirements

This interdisciplinary minor introduces students to the cultural heritage and political contexts of the United States' most important trading partners on the Pacific Rim. Students study East Asia and Latin America, and the cultural, economic and political dimensions of international trade. It is intended for students who are interested in or considering diplomatic or commercial careers that require knowledge about the people and cultures of the Pacific Rim.

As with all minors, students must choose at least four classes dedicated to this minor and four classes outside their major department, which may be the same four courses.

REQUIREMENTS (FIVE COURSES, 20 UNITS)

International Trade (choose one course from the list below)

ECON 450	International Trade (prerequisite: ECON 303 or BUAD 351)	4
IR 325	Rich and Poor States in the World Political Economy	4
IR 330	Politics of the World Economy	4
IR 470	Comparative Regionalism (prerequisite: IR 210)	4
POSC 345	International Law	4
POSC 451	Politics of Resources and Development	4

Area Studies (choose two courses, each from a different list below)

Latin America:		
AHIS 319	Mesoamerican Art and Culture	4
ANTH 314	The Nature of Maya Civilization	4
ANTH 328	Culture Change and the Mexican People	4
ANTH 425	Peoples and Cultures of Latin America	4

GEOG 335	Geography of Latin America	4
HIST 372	Modern Latin America	4
HIST 374	History of Mexico	4
HIST 451	The Mexican Revolution	4
HIST 473	Colonial Latin America Seminar	4
IR 364	The Political Economy of Latin American Development	4
IR 365	Politics and Democracy in Latin America	4
POSC 350	Politics of Latin America	4
SPAN 320	Iberian and Latin American Cultures: Readings on Society (in Spanish)	4
SPAN 321	Iberian and Latin American Cultures: Readings on the Arts (in Spanish)	4
SPAN 372	Modern and Contemporary Latin American Fiction (in Spanish)	4
SPAN 380	Literature of Mexico (in Spanish)	4
East Asia:		
ANTH 323	Regional Ethnology: Southeast Asia	4
ECON 343	Economic Development of East Asia (prerequisite: ECON 203 or ECON 205)	4
GEOG 306	Asia and the Global Economy	4
IR 358	The Asia Pacific in World Affairs	4
IR 360	International Relations of the Pacific Rim	4
IR 361	South and Southeast Asia in International Affairs	4
IR 384	Introduction to Asian Security	4
POSC 352	Politics of Southeast Asia	4
POSC 355	Politics of East Asia	4
POSC 377	Asian Political Thought	4
POSC 453	Political Change in Asia	4
REL 331	Religions of East Asia	4

Country Study (choose two courses from the lists below)

China:		
AHIS 384	Early Chinese Art	4
AHIS 385	Later Chinese Art	4
ANTH 324	Regional Ethnology: China	4
EALC 350	Chinese Civilization	4
EALC 352	Chinese Literature and Culture	4
EALC 354	Modern Chinese Literature in Translation	4
EALC 355	Studies in Chinese Thought	4
EALC 375	Women and Gender in China: Past and Present	4
HIST 338	China to 960 A.D.	4
HIST 339	China, 960-1800 A.D.	4
HIST 340	History of China since 1800	4

IR 333	China in International Affairs	4
POSC 356	Politics in the People's Republic of China	4
Japan:		
AHIS 386	Early Japanese Art	4
AHIS 387	Later Japanese Art	4
EALC 340	Japanese Civilization	4
EALC 342	Japanese Literature and Culture	4
EALC 365	Studies in Japanese Thought	4
EALC 460	Love, Self and Gender in Japanese Literature	4
HIST 335	History of Japan to 1550	4
HIST 336	History of Japan, 1550-1945	4
HIST 337	Japan since 1945	4
HIST 438	Seminar in Pre-Modern Japanese History	4
HIST 464	Culture, Money, and Power: Japanese-American Relations since 1853	4
IR 442	Japanese Foreign Policy	4
POSC 354	Japanese Politics	4
Korea:		
EALC 332	Korean Literature in English Translation	4
EALC 335	Literature of the Korean People	4
EALC 345	Korean Civilization	4
HIST 333	Korea: The Modern Transformation	4

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 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/schools/college/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.

Chinese Summer Program in Beijing

The Department of East Asian Languages and Cultures offers its Chinese language summer courses in Beijing. Participants will be able to transition seamlessly to the next level courses upon returning to campus. Cultural visits and excursions will be included in the tuition fee. All courses count toward a major and minor in East Asian Languages and Cultures.

Bachelor of Arts with a Combined Major in Linguistics/East Asian Languages and Cultures

See Department of Linguistics, page 384.

Progressive Degree Program in East Asian Languages and Cultures

The progressive degree program permits exceptional undergraduate students to receive both a Bachelor of Arts and a Master of Arts in East Asian Languages and Cultures within five years. It is intended for students

with extraordinary EALC preparation and performance who demonstrate a superior level of overall scholarship.

Admission

Applicants may apply after the completion of 64 units of course work applicable to their undergraduate degree since graduating from high school. (AP units, IB units and course work taken prior to high school graduation are excluded). Applicants must submit their applications before completing 96 units of course work. Normally, the application is submitted in the fall semester of the third year of enrollment at USC. The application for admission to a progressive degree program must be accompanied by a departmentally approved course plan proposal and two letters of recommendation from USC faculty members in the Department of East Asian Languages and Cultures.

Awarding of Degrees

Progressive degree program students must fulfill all of the requirements for both the bachelor's degree and the master's degree, including a master's thesis. The unit requirement for the master's degree can be reduced by as much as one-third. The degrees may be awarded separately, but the master's degree will not be awarded before the undergraduate degree.

Time Limits

The time limit for completing a progressive degree program is 12 semesters.

Further details about progressive degrees can be found on page 82.

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 with specialties in Chinese, Japanese and Korean. 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 Chinese, Japanese or Korean.

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 East Asian language of his or her area.

Doctor of Philosophy in East Asian Languages and Cultures

Course Requirements

A student's total graduate course work must be at least 60 units including 4 units of doctoral dissertation (794ab) and the following courses:

CORE COURSES		UNITS
EALC 505	Introduction to East Asian Languages and Cultures	4
COLT 601	Professional Development I: Applying for Positions	2
COLT 603	Professional Development II: Publication	2

A theory and methodology course in EALC or an equivalent course in a related program.

Four courses on East Asian languages and literatures.

Four courses on East Asian cultures and civilizations.

Three additional courses in a target discipline or field.

No more than four courses at the 400-level may be applied to the total requirement of 60 units. The fulfillment of the course requirements is determined by the Graduate Studies Committee in EALC.

Screening Procedure

A screening procedure will be conducted before the student completes 24 units of course work, which typically means by the end of the first year. The Graduate Studies Committee will review the student's performance comprehensively and meet the student after a statement describing his/her research ideas is submitted.

Guidance Committee

Upon successful completion of the screening procedure, the student is encouraged to begin forming a five-member guidance committee, whose purpose is to help the student prepare for the qualifying examination. The committee must be approved by the Graduate School at the time the student applies to schedule a qualifying examination.

Qualifying Procedure

A student takes examinations in three different fields approved by the guidance committee. An oral examination based on the written exams will follow. After successful completion of the examinations, the student will submit a dissertation prospectus, which must be approved by the guidance committee and the Graduate Studies Committee in EALC.

Foreign Language Requirement

A student must have at least four years of course work or its equivalent in the language of his/her specialization. In addition, the student should acquire or demonstrate competence in a second East Asian language. This requirement may be met by two years' worth

of course work. Whether the second East Asian language should be classical or modern will be determined by the Graduate Studies Committee in consultation with a student's academic advisor.

Dissertation

Defense and presentation of the dissertation will follow regulations defined by the Graduate School.

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 459) 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*.

EALC 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.

EALC 103ab Online Chinese I (2-2, FaSpSm) Basic listening, speaking, reading and writing abilities in Mandarin Chinese. Instruction includes individual meetings and online content. (Duplicates credit in EALC 104).

EALC 104 Chinese I (4, FaSpSm) The sound system of modern Chinese; aural comprehension, oral expression, basic patterns, and writing system.

EALC 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.

EALC 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.

EALC 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.

EALC 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.

EALC 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.

EALC 120 Japanese I (4, FaSpSm) Basic Japanese conversation practice, basic grammar and building proficiency of reading and writing Hiragana and Katakana (Japanese alphabetical systems).

EALC 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.

EALC 125g Introduction to Contemporary East Asian Film and Culture (4) An introduction to and overview of the contemporary cinemas of East Asia: China (Hong Kong, the People's Republic, and Taiwan), Japan, and Korea.

EALC 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.

EALC 145g Introduction to Chinese Culture, Art and Literature (4, FaSp) Introduction to the civilization, art and literature of pre-modern China through the lens of the cultural products of identity.

EALC 204 Chinese III (4, Fa) Conversational practice: reading of stories and essays; writing of short essays. *Prerequisite:* EALC 106.

EALC 206 Chinese IV (4, Sp) Continuation of 204, with emphasis on reading and writing, frequent interaction with native speakers. *Prerequisite:* EALC 204.

EALC 215 Korean III (4, Fa) Drill to increase proficiency in dialogue, reading, and writing; intermediate level readings. *Prerequisite:* EALC 117.

EALC 217 Korean IV (4, Sp) Advanced level reading of modern Korean and exercises in written composition. *Prerequisite:* EALC 215.

EALC 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.

EALC 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.

EALC 264g Asian Aesthetic and Literary Tradition (4) (Enroll in COLT 264g)

EALC 304 Advanced Modern Chinese I (4, Fa) Reading selections from different styles of modern Chinese writings, analysis of stylistic techniques and syntactic structure, composition, and translation. *Prerequisite:* EALC 206.

EALC 306 Advanced Modern Chinese II (4, Sp) Continuation of EALC 304; composition exercises in different styles of writing. *Prerequisite:* EALC 304.

EALC 315 Advanced Korean I (4, Fa) Advanced reading in modern Korean materials; improvement of skills in conversation, composition, and translation. *Prerequisite:* EALC 217.

EALC 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.

EALC 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.

EALC 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.

EALC 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.

EALC 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.

EALC 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.

EALC 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.

EALC 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.

EALC 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.

EALC 350g Chinese Civilization (4, FaSp) Characteristics and aspects of Chinese civilization; interpretation of philosophy, literature, religion, art, music. Conducted in English.

EALC 352g Chinese Literature and Culture (4, FaSp) Readings of Chinese poetry, prose, novels and drama; influence of the West on Chinese literature and culture in modern times. Conducted in English.

EALC 354g Modern Chinese Literature in Translation (4) Readings in modern Chinese poetry, fiction, and drama since 1919.

EALC 355 Studies in Chinese Thought (4) Chinese thought, particularly as formulated in the three great traditions: Confucianism, Taoism, Buddhism.

EALC 365 Studies in Japanese Thought (4) Influence of native traditions and imported Chinese traditions on Japanese civilization; religious, ethical, aesthetic, and political aspects.

EALC 374 Language and Society in East Asia (4) The interaction of language with society in countries of East Asia: language and identity, the politicization of language, language change, language and gender.

EALC 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.

EALC 380 Cultural Topics in East Asian Literature (4) Selected themes, genres, and periods in East Asian literature, e.g., Taoism and Buddhism, women, folktales.

EALC 383 Later Chinese Art (4) (Enroll in AHIS 385)

EALC 384 Early Chinese Art (4) (Enroll in AHIS 384)

EALC 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.

EALC 387 Early Japanese Art (4) (Enroll in AHIS 386)

EALC 388 Later Japanese Art (4) (Enroll in AHIS 387)

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

EALC 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.

EALC 402 Classical Chinese II (4) Continuation of EALC 400.

EALC 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.

EALC 406 Advanced Modern Chinese IV (4, Sp) Continuation of EALC 404.

EALC 407 News and Web Chinese (4) Reading selections from newspaper articles and online reports to further develop proficiency in advanced Chinese and understanding of the society and culture. *Prerequisite:* EALC 306.

EALC 410 Chinese-English Translation (4) Structure, vocabulary, and techniques of written translation and oral interpretation; classroom and laboratory practice; English-Chinese and Chinese-English.

EALC 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 412a.

EALC 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 424.

EALC 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.

EALC 417 Advanced Korean IV (4, Sp) Continuation of EALC 415.

EALC 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.

EALC 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.

EALC 422 Advanced Japanese III (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.

EALC 424 Advanced Japanese IV (4, Sp) Continuation of EALC 422. Students continue to improve their Japanese language competence in the course of acquiring Japanese pragmatic skills and cultural knowledge. *Prerequisite:* EALC 422.

EALC 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.

EALC 428 Nature and the Environment in Japanese Literature and Culture (4, Sp) Examination of cultural perceptions about nature and how they affect attitudes toward the environment: includes comparisons to Euro-American as well as other East Asian traditions.

EALC 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.

EALC 440 Japanese for Academic Research (4, max 16, FaSp) Develop skills necessary for academic reading, writing and presentations. Topics include literature, history, and social and cultural issues. *Prerequisite:* EALC 424.

EALC 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.

EALC 454 Bildungsroman in Modern East Asia (4, Sp) Comparative study of core narratives of youth and its destiny in modern literature from China, Japan, Korea, and Taiwan. Readings include scholarship on European literature.

EALC 455 Japanese Fiction (4) Japanese fiction from early to modern times; literary, philosophical, and social aspects of tales and novels. Conducted in English.

EALC 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.

EALC 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.

EALC 481 Studies in Japanese Art (4, max 16) (Enroll in AHIS 481)

EALC 484 Studies in Chinese Art (4, max 16) (Enroll in AHIS 484)

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

EALC 494ab Honors Thesis (4, Fa; 4, Sp) Research and writing of original thesis under guidance of faculty member. Open only to EALC majors.

EALC 499 Special Topics (2-4, max 8)

EALC 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.

EALC 501 History of Chinese Literature (4) An in-depth survey of literary development concerning periods, thought, genres, and socio-cultural backgrounds in China. In English.

EALC 502 Advanced Classical Chinese II (4) Continuation of EALC 500. *Prerequisite:* EALC 500.

EALC 503 Chinese Poetry (4) Literary studies of the theory and practice of Chinese poetry from major poets. *Prerequisite:* 4th year Chinese.

EALC 504 Selections from Modern Chinese Literature (4) Literary currents and representative writings of the 20th century. *Prerequisite:* EALC 306.

EALC 505 Introduction to East Asian Languages and Cultures (4, FaSp) An in-depth introduction to East Asian studies. Open to graduate students only.

EALC 506 Selections from Classical Chinese Literature (4) Writings of the important periods and genres of Chinese literary history. *Prerequisite:* EALC 406.

EALC 510 Contemporary Japanese Cinema (4, Fa) Japanese cinema since the 1980s focusing on the works by filmmakers.

EALC 512 Japanese Literature and Film (4, FaSp) Relationship between Japanese literature and film, focusing on the transition from literary text to film text. Open to graduate students only.

EALC 515 Classical Japanese Poetics (4) An analysis of major texts of the Japanese literary tradition from the 8th to the 16th century.

EALC 520 Modern Japanese Writers (4) Selections illustrative of major literary trends and literary works since the Meiji Restoration. *Prerequisite:* EALC 422.

EALC 522 Classical Japanese Writers (4) Writings representative of important periods and genres of Japanese literary history up to the Meiji Restoration. *Prerequisite:* EALC 426.

EALC 531 Proseminar in Chinese Cultural History (4) Intensive readings in English concerning interpretive issues in the study of Chinese cultural history.

EALC 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.

EALC 533 Proseminar in Japanese Cultural History (4) Intensive readings, chronologically arranged, in interpretive issues in the study of Japanese cultural history. Readings in English.

EALC 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.

EALC 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.

EALC 541 Seminar: Japan (4) Social, economic, political, and cultural problems in modern Japan. Bibliographic and reference materials. *Prerequisite:* HIST 436.

EALC 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.

EALC 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.

EALC 547 Structure of the Japanese Language (4) Descriptive analysis of phonetic, phonological, and grammatical structure of Japanese. Conducted in English. *Prerequisite:* EALC 470.

EALC 551 Seminar: China (4) Individual research and seminar reports on selected phases of Chinese traditional civilization.

EALC 553 Seminar: Chinese Literature (4) Research in different genres of Chinese literature, traditional and modern.

EALC 555 Chinese Literary Criticism and Theory (4) Classical and modern literary theories and criticism; comparisons with literary theory and criticism in the West.

EALC 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.

EALC 557 Structure of the Chinese Language (4) Descriptive analysis of phonology, morphology, and syntax of modern Chinese. Conducted in English. *Prerequisite:* EALC 404.

EALC 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.

EALC 560 Comparative Syntax of East Asian Languages (4, max 12, FaSp) 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.

EALC 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.

EALC 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.

EALC 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.

EALC 570 Narratives of Desire in Modern Chinese Literature (4, FaSp) The study of prominent fiction women writers from the first half of the 20th century in English and original translations. Open to graduate students only. *Prerequisite:* EALC 553.

EALC 575 Literary and Artistic Movements in Modern China (4, FaSp) Introduction to literary and artistic movements in 20th century China. Open to graduate students only.

EALC 580 Readings in East Asian Linguistics (4, max 12, FaSp) 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 on Chinese, Japanese, and Korean.

EALC 588ab Directed Readings (2-2) Assigned readings according to individual needs.

EALC 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.

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

EALC 599 Special Topics (2-4, max 8, FaSpSm) Special topics in East Asian Languages and Cultures.

EALC 601 Professional Development I: Applying for Positions (2, Fa) (Enroll in COLT 601).

EALC 603 Professional Development II: Publication (2, Sp) (Enroll in COLT 603).

EALC 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.

EALC 620 Seminar in East Asian Linguistics (4, max 12, FaSp) Detailed theoretical discussions and empirical studies of the issues and development in East Asian linguistics.

EALC 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.

EALC 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
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Chair: John C. Ham, Ph.D.

Faculty

Robert R. and Kathryn A. Dockson Chair in Economics and International Relations: Todd Sandler, Ph.D. (*International Relations*)

John Elliott Chair in Economics: M. Hashem Pesaran, Ph.D.

University Professor: Richard A. Easterlin, Ph.D.*

Professors: Dominic James Brewer, Ph.D. (*Education*); Robert Dekle, Ph.D.; Thomas Gilligan, Ph.D. (*Business*); Peter Gordon, Ph.D. (*Policy, Planning, and Development*); Gillian Hadfield, Ph.D., J.D. (*Law*); John C. Ham, Ph.D.; Cheng Hsiao, Ph.D.; Ayse Imrohoroglu, Ph.D. (*Business*); Selahattin Imrohoroglu, Ph.D. (*Business*); Michael J. P. Magill, Ph.D.; John Matsusaka, Ph.D.

(*Business*); Edward J. McCaffery, J.D. (*Law*); 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.; Fernando Zapatero, Ph.D. (*Business*)

Assistant Professors: Isabelle Brocas, Ph.D.; Yong Jin Kim, Ph.D.; Guillaume Vandenbroucke, Ph.D.

Senior Lecturer: Nake Kamrany, Ph.D.*

Emeritus Professor: Richard H. Day, Ph.D.

Distinguished Visiting Professor: Simon J. Wilkie, Ph.D. (*Law*)

*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.

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).

Progressive Degree Program in Economics

The Economics department offers students who have demonstrated exceptional academic success the opportunity to earn both bachelor's and master's degrees in a progressive degree program. This program allows students to earn both the Bachelor of Arts and the Master of Arts degrees in five years.

Students may also pursue the Bachelor of Science in Economics/Mathematics and the Master of Science in Mathematical Finance. Further details about progressive degree programs can be found on page 82.

Admission

Admission is available after the completion of 64 units of course work toward the undergraduate degree. Students must apply for admission to the progressive degree program after completing 64 units of applicable course work to their undergraduate program, but prior to the completion of 96 units of course work. The application for admission to the progressive degree program must be accompanied by a course proposal plan and two letters of recommendation from USC Economics faculty.

Awarding of Degrees

The bachelor's and master's degrees may be awarded separately upon completion of all degree requirements, but the master's degree will not be awarded before the bachelor's degree. Students who elect not to complete the master's must complete 128 units to earn the bachelor's degree.

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.

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 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 for master's degrees are normally April 15 for the fall semester and November 1 for the spring. Completed doctoral fellowship and assistantship applications are due by December 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		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
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		UNITS
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 high-tech 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

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:

FINANCIAL ECONOMICS AND ECONOMETRICS		UNITS
ECON 659	Economics of Financial 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 STOCHASTIC PROCESSES UNITS

MATH 503	Stochastic Calculus for Finance	3
one course from:		
MATH 505b	Applied Probability	3
MATH 506	Stochastic Processes	3
MATH 509	Stochastic Differential Equations	3

STATISTICS (CHOOSE ONE)

ECON 614	Economic and Financial Time Series II	4
MATH 508	Filtering Theory	3
MATH 512	Financial Informatics and 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	3
MATH 650	Seminar in Statistical Consulting	3
PM 511abL	Data Analysis	3
PM 544L	Multivariate Analysis	3

NUMERICAL/OPTIMIZATION METHODS (CHOOSE ONE)

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 Mathematical 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 Labs and Practitioner Seminar)	3
MATH 590	Directed Research	1-12

The courses in statistics/numerical/optimization methods and computational and empirical 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 92 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: UNITS

ECON 500	Microeconomic Analysis and Policy	4
ECON 511	Econometric Methods, or	
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 ECON 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 58 units, including 24 units in economics and 34 units in planning. For a complete listing, see Policy, Planning, and Development, page 847.

Doctor of Philosophy in Economics

Application deadline: December 1

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 courses must be taken within the first 36 units of graduate 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 REQUIRED UNITS UNITS

A minimum of 6 units selected from the following:

ECON 690	Seminar in Economic Theory	2-8
ECON 691	Seminar in Econometrics	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
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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

Application deadline: December 1

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.

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 810.

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.

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 420.

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*.

ECON 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.

ECON 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.

ECON 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.

ECON 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.

ECON 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.

ECON 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.

ECON 322 Economic History and Modernization of the Middle East

(4, Irregular) Economic history of the Middle East from the rise of Islam to the modern era. Roles of law, religion. Processes of institutional transformation, stagnation, modernization. *Prerequisite:* ECON 203.

ECON 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.

ECON 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.

ECON 338 Political Economy and Social Issues

(4, Sp) 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.

ECON 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.

ECON 342 Economic Development of the Middle East

(4, FaSp) Contemporary economic problems of the Middle East: comparative and historical perspectives on issues of institutions, investment, oil, trade, migration, finance, inequality, labor and capital markets. *Prerequisite:* ECON 203; *recommended preparation:* ECON 205 and ECON 303.

ECON 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.

ECON 344 Economic Development of Sub-Saharan Africa

(4, FaSpSm) Contemporary economic problems of sub-Saharan African economies: policies and endowments. Focus on issues of poverty, agriculture, health, macroeconomy and political economy. *Prerequisite:* ECON 203 or ECON 205.

ECON 346 Economics of Transition and Development: China

(4, FaSpSm) A focus on the Chinese economy, its reform and transition to a market economy, its relation with East Asian countries and integration into the world economy. *Prerequisite:* ECON 203 or ECON 205.

ECON 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.

ECON 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.

ECON 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.

ECON 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.

ECON 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.

ECON 387x Economics for Natural Resources and the Environment

(4, FaSp) (Enroll in ENST 387x)

ECON 390 Special Problems

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

ECON 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.

ECON 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.

ECON 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.

ECON 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.

ECON 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.

ECON 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.

ECON 432 Economics of Happiness (4) What is happiness? How does it vary by socio-economic status and over the life cycle? This course will develop insight into the nature and determinants of subjective well-being. *Prerequisite:* ECON 303; *recommended preparation:* ECON 305.

ECON 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.

ECON 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.

ECON 451 The Politics of International Trade (4) (Enroll in IR 430.)

ECON 452 International Finance (4) Consequences of trade deficits; theories of capital and currency markets, exchange rate regimes, and international monetary coordination. *Prerequisite:* ECON 305.

ECON 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.

ECON 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.

ECON 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.

ECON 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.

ECON 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.

ECON 490x Directed Research (2-8, max 8, FaSpSm) Supervised individual research. Not available for graduate credit.

ECON 495 Honors Thesis (4) Individual research supervised by a faculty advisor. Successful completion required for departmental honors degree.

ECON 499 Special Topics (2-4, max 8, FaSpSm) Selected topics in economic theory, history, or policy.

ECON 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.

ECON 501 Macroeconomic Analysis and Policy (4, Sp) Theories of aggregate economic activity; design and use of macroeconomic models; stabilization and control of inflation, unemployment, and growth. *Prerequisite:* ECON 303, ECON 305, and ECON 401.

ECON 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.

ECON 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.

ECON 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.

ECON 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.

ECON 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.

ECON 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.

ECON 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.

ECON 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.

ECON 537 Contracts, Organizations, and Institutions (4) Information, property rights, bargaining, transaction costs, incentives, free-riding and contracting in organizations; the nature of cooperation; bureaucracies. *Prerequisite:* ECON 303.

ECON 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.

ECON 539 Political Economy (4) (Enroll in PEPP 539)

ECON 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.

ECON 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.

ECON 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.

ECON 594abz Master's Thesis (2-2-0, FaSpSm)

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

ECON 599 Special Topics (2-4, max 8, FaSpSm)

Selected topics in economics as developed by the instructor.

ECON 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.

ECON 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.

ECON 604 Game Theory (4)

Strategies and equilibrium concepts; dynamic and repeated games; incomplete information and learning in games. *Prerequisite:* ECON 500 or ECON 503.

ECON 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.

ECON 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.

ECON 610 Quantitative Analysis in Macroeconomics (4, Sp)

Dynamic economics, applied general equilibrium models, computational and calibration tools, discrete-state dynamic programming, log-linearization of Euler equations. *Prerequisite:* ECON 505, ECON 605.

ECON 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.

ECON 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.

ECON 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.

ECON 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.

ECON 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.

ECON 633 Law and Economics (4, Sp) (Enroll in LAW 633)

ECON 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.

ECON 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.

ECON 641 Empirical Analysis of Economic Development (4, FaSp)

Theory and empirics of the sources of and barriers to economic development and the micro underpinnings of macroeconomic dynamics of growth, inequality, and productivity. *Prerequisite:* ECON 503, ECON 511.

ECON 642 Poverty, Human Resources and Economic Development (4, FaSpSm)

Household production models and intra-household models of behavior and their empirical implementation, focus on poverty, human resource investments and their interaction with public policies. *Prerequisite:* ECON 501, ECON 511.

ECON 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.

ECON 645 Economic Growth (4, Fa)

Surveys theoretical and empirical developments in growth macroeconomics. To equip students to undertake frontier research and policy work to reduce global income inequality. Graduate standing. *Prerequisite:* ECON 505.

ECON 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.

ECON 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.

ECON 652 Economics of Financial Markets II (4, Sp)

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.

ECON 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.

ECON 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.

ECON 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.

ECON 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.

ECON 673 Program Evaluation (4) This course first proposes various means of evaluating an economic program. It then applies the tools to specific problems. *Prerequisite:* ECON 500 or ECON 503; ECON 511.

ECON 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.

ECON 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.

ECON 690 Seminar in Economic Theory (2, max 8, FaSp) Current research in economic theory presented by faculty, students and outside scholars. Graded CR/NC.

ECON 691 Seminar in Econometrics (2, max 8, FaSp) Current research in econometrics presented by faculty, students and outside scholars. Graded CR/NC.

ECON 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.

ECON 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.

ECON 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.

ECON 695 Internship in Mathematical Finance (4, Sm) Internship for students in the Mathematical Finance master's program. Practical training in real market environments. Real-world first-hand experience in implementing trading strategies. Application of mathematical finance to real financial markets.

ECON 696 Empirical Microeconomics Seminar (2, max 8, FaSp) Presentations on current research in empirical microeconomics by outstanding scholars from leading economics departments and faculty at USC. Open only to economics Ph.D. students.

ECON 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.

ECON 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.

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